AMERICAN RAILROAD JOURNAL

NEW YORK [ETC.]

V. 25, 1852



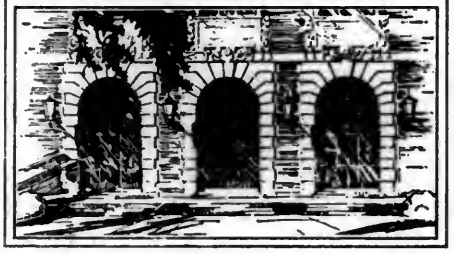
LIBRARY OF THE
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

625.05

AE

v. 25

REMOTE STORAGE



Digitized by the Internet Archive
in 2010 with funding from
University of Illinois Urbana-Champaign

http://www.archive.org/details/5088829_25

AMERICAN

RAILROAD JOURNAL.

G. A. Nicolls

Steam Navigation, Commerce, Mining, Manufactures.

HENRY V. POOR, EDITOR.

ESTABLISHED IN 1831.

Second Quarto Series, Volume VIII.,
or Volume XXV.

New-York:
J. H. SCHULTZ & CO., PUBLISHERS AND PROPRIETORS,
No. 136 Nassau Street.

1852.

625.05
AE
Y.25

INDEX.

A

Alabama, Internal Improvements of.....20, 5
Anthracite Coal Trade,.....29, 23
Arkansas Central Railroad,.....35, 29
Albany and Binghamton Railroad,.....54
Atlantic and St. Lawrence Railroad, 306. 504, 500, [362, 280, 150, 69
Alabama and Mississippi Railroad,...158, 141, 71
Albany and Schenectady Railroad, 548, 391, 265, [11
Alabama, Finances of.....124
Atlantic Steamers, St. Lawrence line of....167
Arkansas Railroads,.....502, 180
Albany and Buffalo Trains, Summer Arrangement,.....196
Atlanta and La Grange Railroad, Ga....439, 248
Alabama and Tennessee Railroad.....680, 292
Atlantic and St. Lawrence Railroad, 578, 299, 81
Anthracite, for Naval Steamers,.....355
Amazon, The River; Manry's Memorial,...371
Albany, Ship Navigation to.....423
Alabama and Tennessee River Railroad, Exhibit of.....764, 678, 615, 465
Atlantic and Camden Railroad,.....522
Anthracite, Statistics of.....540
Albany and Susquehannah Railroad 349. 228, 775, [763, 632
Albany and Eagle Bridge Railroad,.....698
American vs. English Railroads,.....29
Amherst and Belchertown Railroad,...360, 115
Alleghany Valley Railroad, 555, 541, 251, 235, 215, [138
American Manufactures at World's Fair. 645, 190
Allentown and Pottstown Railroad, Pa.,....226
Amherst and Palmer Railroad, Mass.,.....237
Axles and Wheels on Railroads,.....277
Alleghany Valley Railroad,.....315
American Steam Navigation—Speech of Gov. Seward, in Senate,.....322
Alabama,.....331
Alleghany Valley Railroad, City Subscribers to [332
Assessment of Railroad Property.....444
Aberdeen, Miss., Railroad Convention at...502
American Association for advancement of Science,.....521
American Credits,.....563
Artesian Well,.....694, 610
American Superiority at the World's Fair,..645
American Navigation,.....678
American Iron,.....725
Andrew's Report on the Commerce of the Lakes,.....801
Accidents on Railroads,.....522, 262, 234, 74
Air Engine, Ericsson's.....229
Animals on Railroads,.....533
Agriculture and Manufactures of United States, [535
Antiquities,.....567
Attica and Olean Railroad,.....812, 567
Air Line Railroad, (New York and Ruston,) 709
Atkinson, Thomas C., Esq.,.....775
Akron Branch Railroad, Ohio,.....726, 587, 186
Alton and Sangamon Railroad,.....314, 679, 247
Are we spending too much money on our Railroads?.....206
Are we building too many Railroads?...410, 395, [305
Androscoggin Railroad,.....356
Alton and Springfield Railroad,.....575
Association, American, for advancement of Science,.....521
Altoona,.....565
Alton and Terre Haute,.....526
Alton and Chicago Railroad,.....549
Alton and Jacksonville,.....587
Appointment of Steamboat Inspectors,....611
Atmospheric Railway,.....723
Androscoggin Railroad,.....776
Augusta and Waynesboro' Railroad,.....43, 42
Aurora Extension and Beloit Branch Railroad,.....45
Aurora Branch Railroad,.....508, 147
Ashuelot Railroad, N. H.,.....359, 278, 158

B

Baltic, Steamer.....11
Banks in the United States,.....24
Baltimore and Susquehanna Railroad,...587, 84
Baltimore and Ohio Railroad,..810, 759, 745, 699, [679, 675, 643, 631, 615, 598, 549, 524, 428, 427, 395, [392, 391, 375, 283, 237, 165
Baltimore, Railroad Convention in.....181
Barre and North Brookfield Railroad, Mass., 205
Bangor and Oldtown Railroad,.....222
Baltimore and Westchester Railroad,.....251
Baltimore and Boston, Line of Steamers between.....278
Brantford and Buffalo Railroad, 597, 593, 565, 300
Bangor and Lincoln Railroad,.....583
Baltimore, Carroll, and Frederick Railroad, 587
Baltimore and Philadelphia in connection with Western Roads,.....650
Banking in Illinois,.....714
Bellefontaine and Indiana Railroad. 403, 378, 25
Bellefontaine and Indianapolis Railroad...525, [279, 55
Beloit and Madison Railroad,.....535, 524
Belleville and Illinoistown Railroad,...475, 614, [587, 565
Belgian Project,.....615
Bituminous Coal, Trade of.....27
British Metals exported to British North America.....45, 44
Bridge over Ill. Cen. Railroad,.....183
Bristol, (R. I.,) Railroad to.....535, 220
Bridge building by Pneumatic process,.....234
Bridge, McCallum's Patent.....385
British North America, Railways in.....405
British Provinces,.....440, 429
Bridge at Portage, N. Y.,.....486
Bridge, Flying Railroad,.....507
Bridge, New Suspension, at Niagara Falls,..546
Bidery, a Metallic Alloy used in India,.....582
British Iron Trade,.....628
Buston and Worcester Railroad,.....56, 43
Boardman's Steam Boiler,.....150, 138
Bonds of Ohio Counties,.....198, 184, 181
Bonds, Convertibility of.....184
Board of Public Works, Ohio.....187
Boston, New Route to.....260
Baltimore and Boston, Steamers between...278
Boston, Concord, and Montreal Railroad...596, [359, 358
Boston and Providence Railroad,.....374
Boston and Lowell Railroad,.....486
Bloomington Extension Railroad,.....476
Boston, New feature in the business of...518
Blossburgh and Corning Railroad,.....555
Boston Locomotives,.....571
Boston and Maine Railroad,.....667, 616
Brown Wm. Spencer, Memoir of.....657
Buffalo and Conhocton Railroad,.....56, 43
Buffalo, Commerce of.....109
Burlington and Missouri Railroad,.....141
Blue Ridge Railroad, Va.,.....167
Buffalo and Albany trains, Summer Arrangement,.....196
Buffalo and N. Y. City Railroad,...583, 564, 550, [253, 232
Buffalo and State Line Railroad,.....251
Buffalo, Corning, and N. Y. Railroad,.....266
Buffalo and Brantford Railroad, 597, 593, 565, 300
Buffalo, Corning, and New York Railroad,..300
Buffalo and Corning Railroad,.....312
Buffalo and Brantford, and Great Western Railroad, Canada,.....328
Buffalo and Lockport Railroad,....540, 508, 359
Brunswick Canal,.....567
Brunswick and Florida Railroad,..648, 598, 552, [499, 444, 423
Buffalo and Olean Railroad,.....667

C

Chain Invented by M. Sisco,.....19
Canal to Chesapeake Bay,.....812
Canals in Ohio,.....22
Canals in N. Y.,.....24
Canals in N. Y., Commerce of.....245, 71, 44
Camden and Amboy Railroad,.....87
Champlain and St. Lawrence Railroad, 114, 88, [44
Cast Iron Tires for Locomotives,.....120
Canton and Jackson Railroad, Miss.,.....120
Canal Commissioner's Report, Penn.,.....163
Canandaigua and Niagara Falls Railroad...429, [220, 172
Canals in N. Y., Tolls on.....214, 167
Charlotte, Railroad from Rochester to.....215
Canada Railroads,.....268
Canadian view of St. Lawrence route,.....275
Canal Railroad, Conn.,.....647, 615, 425, 280
Canada, Railway Gaugein.....282
Canada West Railroad,.....300
California, Area of.....332
Canal, Pennsylvania and Ohio.....373
Crawfordaville and Wabash Railroad,..440, 409
Canada,.....472
Canadian Trade from 1844 to 1850.....486
Canadas, Population of the.....503
California, by D. K. Minor.....513, 497
Canada and England, Steam Connection between,.....550, 517
Canada, (Richmond Railroad,).....519
Camden and Atlantic Railroad,.....599, 522
Charleston and Memphis Railroad,.....725
Car Seat, New Railroad.....537
Charleston Railroad,.....539
Canal, Darien Ship.....548
Charlotte and Jonesboro' Railroad,.....548
Charlotte and South Carolina Railroad, 713, 568
Canal around St. Mary's Falls, 693, 456, 679, 618
Canada—Reciprocity and Retaliation,.....625
Canadian Canals and Commerce,.....627
Changes in the Course of Trade,.....659
Canada (Great Trunk line) Railroad,.....664
Canada—Retaliation,.....665
Canada (Northern Railroad,).....679
California, Quarts Mining in.....697
Cars, Ventilation of.....712
Canada, population of.....726
Camden and Cape May Railroad,.....739
Cattawissa Railroad,.....773
Cleveland & Wellsville Railroad connection with Baltimore and Ohio Railroad,.....471, 5
Cleveland and Wellsville Railroad,..152, 28, 508
Cleveland and Pittsburg Railroad,...59, 29, 460 [411, 216, 196, 141, 72, 68
Cherokee Railroad,.....616, 94
Cleveland and Mahoning Railroad.....658, 120
Cheshire Railroad, N. H.,.....125
Cleveland, Columbus and Cincinnati Railroad,.....228, 758, 540, 265
Cleveland and Wheeling Railroad,.....235, 247
Cleveland and Zanesville Railroad,.....806, 791
Chesapeake and Ohio Canal,..508, 489, 332, 280, 283
Chester Valley Railroad, Penn.,.....356, 264, [408, 360
Cheraw and Darlington Railroad.....407
Cleveland, Painesville and Ashtabula Railroad,.....794, 489, 350
Central Military Tract Railroad and Northern Cross Railroad,.....807, 519, 675
Cleveland, Wooster and Muskingum Valley Railroad,.....541
Chemung Railroad.....647, 548
Cleveland and Lake Shore.....550
Cleveland, Norwalk and Toledo Railroad,..551
Credits, American,.....563
Cleveland Water Works,.....568
Central Railroad, (Virginia).....818, 681
" " (New Jersey).....711
Centralization of Railroads,.....725
Champlain Railroad on west side,.....726
Cleveland, O.,.....796, 772
Central Railroad, (Ohio).....774
Chicago and Galena Railroad,.....199, 53, 45 [565, 541, 535, 251, 201
Cincinnati and St. Louis Railroad,.....51
Chicago, Commerce of.....53
Cincinnati and Hillsboro' Railroad,..55, 550, 540
Circular of General Green,.....106
Cincinnati and Marietta Railroad,.....146, 772 [631, 409, 391, 375, 359, 183
" and Lafayette Railroad,.....157
" and Dayton Railroad,...790, 711, 710 [699, 241, 172
" and Indianapolis Railroad.....189
" Wilmington and Zanesville Railroad,.....284, 647, 347, 550
Cincinnati and Louisville Railroad,.....294
Cincinnati and Marietta Railroad,....450, 300
" Hillsborough and Parkersburgh Railroad.....793, 324, 647, 587, 460
Cincinnati and Marietta Railroad.....330
" Hamilton and Dayton Railroad.567, [458, 339 412,
" and Chicago Railroad 593, 461, 424, 412
Chicago and Rock Island Railroad..760, 549, 359
City Railroads and Pavements.....450
Cincinnati Col. and Cleveland Railroad,....540
" Dayton and Greenville Railroad, 540
Chicago and Alton Railroad.....565, 549
Chicago and Aurora Railroad.....812
" and Milwaukie Railroad.....634, 565
Cincinnati and Zanesville Railroad.....587
" and Dayton (short line) Railroad [745, 603
" and its railroads.....603
" Lebanon, and Zenia Railroad,..827
Chicago and Mississipi Railroad.....683, 675
Chicago Dry Dock.....761
City of Cairo,.....796
Commerce against Revenue,.....794
Commercial Convention at Baltimore,.....822
Columbus, Urbana, and Piqua Railroad,.....5
Covington and Lexington Railroad, 775, 629, 585, [414, 375, 357, 312, 268, 230, 87, 28
Copiapo Railroad, Chili,.....46
Commerce of Chicago,.....53
Cotton exported from United States,.....73
County Subscriptions for Railroad Companies,.....82
Compound Rail for Railroads,.....90
Corporate Subscriptions to Railroads,.....97
Coal for Locomotives,.....138, 106
Commerce of Buffalo,.....109
Connecticut and Passumpsic Railroad,..307, 120
Collins and Cunard Lines of Steamers.....147
Columbus, Piqua, and Indiana Railroad....696, [492, 214, 187, 157
Copper Mining in the United States,.....166
Coal Trade of United States,.....171
Continuous Bearing,.....184
Convertibility of County Bonds,.....384
Commercial Statistics of Great Britain,...189
Commerce of Lake Ports.....189
Columbus and Xenia Railroad,.....196
Collins line of Steamers.....197 107,
Corn going East from the Mississippi,.....245
Coal Trade, Maryland.....249
Copper Mines of Lake Superior,.....280
County Securities of Ohio,.....260
Coal Trade for 1852,.....374, 261
Concord and Portsmouth Railroad,.....283
Commerce of Virginia,.....314
Covington, Lexington and Maysville Railroad,.....332
Coal Fields of Ohio,.....338
County Subscriptions for Railroads in Tennessee,.....359
Coal Company, The Dauphin.....488, 374
Clocks, Sherry & Byram's.....376
Croton Aqueduct.....380
Coal Mine near Lake Superior,.....409
Commerce on the Lakes,.....412
Coal, Geological Formation of.....455
Covington and Louisville Railroad,.....729, 461
Cotton Packing,.....489
Coal, Lackawanna and Railroad.....518
Copper Region of Lake Superior,.....519
Coal, Statistics of Anthracite and Cumberland,.....540
Corning and Blossburg Railroad,.....555
Comparative Safety of Railroads,.....584
Collision-Director, Thaddeus Seleck's.....635
Cotton trade,.....662
Convention, Great Railroad.....696
Cornwall and Pinegrove Railroad,.....712
Cumberland Valley Railroad,.....233, 205
Cumberland Coal Trade,.....600, 266
Curious Fact (Rivers and Currents),.....535
Cumberland Coal, Statistics of.....540
Cuyahoga Furnace Graduates,.....613
Commercial Cities of the Seaboard,.....754
Coal Statistics,.....773
Cotton, Production of.....775
Crystal Palace in London, New.....582

D

Danville and Pottsville Railroad,.....14
Dayton and Troy Railroad,.....14
Danville Railroad,.....662, 24
Dayton and Western Railroad, Ohio, 631, 441, 139
Dayton and Michigan Railroad, 348, 485, 539, 665, [615
Dauphin Coal Co.'s Railroad,.....731, 488, 374
Dayton and Greenville Railroad,.....591
Darien Ship Canal,.....548
Drainage of Great Rivers,.....561
Danville and Paris (Ill.) Railroad,.....570
Delaware and Raritan Canal,.....87
" " Hudson Canal,...283, 246, 221, 123
Debt of Louisiana,.....165
Debts of the States,.....227
Debt of New Orleans.....283
Defrauding Railroads,.....295
Delaware and Hudson Canal,.....332
Delaware Water Gap Railroad,.....524
Depot, Locomotive.....599
Depot at Union,.....630
Dellow, Industrial resources of the South and West,.....664
Detroit, Monroe, and Toledo Railroad,.....761
Delaware Railroad,.....775
Dividends of New Works,.....449
Diving, Deep.....659
Doty, Hon. Jas. D., M. C., letter from.....492
Dubuque and Red River Railroad.....42
Dunkirk, Business at.....231
Dubuque and Keokuk Railroad.....280
Dunkirk, Growth of.....393
Durbin, Wm.....508
Duty on Railroad Iron.....74
Dry Dock, U.S. Naval, at Philadelphia....397

E

East Tennessee and Virginia Railroad, 249, 104, [11, 587, 357, 332 292
" " " Georgia Railroad, 444, 440, 92
Evansville and Illinois Railroad, 409, 377, 342, [93, 774, 710
Eaton and Hamilton Railroad, O...508, 492, 203
Evansville and Nashville Railroad.....250
Erie Railroad, double track.....312
Eaton Road, Georgia.....331
Eastern Railroad, location of..353, 647, 535, 492, [487, 461
England and Canada, Steam communication between.....517
Examination of Railroad in N. Y.....520
Eastern Railroads (Statistics of Railroads in Mass.).....550
Earnings of Railroads.....614, 602
Essex Railroad.....493, 374
Edgefield and Kentucky Railroad.....459
Extension of our Railway System.....561
Effects of the Earth's Rotation on Locomotion.....599
Extension of the Indiana Railroad.....611
Erie, Steamers on Lake.....136.
Erie Railroad..72, 43, 17. 3, 664, 631. 508, 550, 400 [377, 218, 233, 1
Erie Canal, Lettings of.....
" Railroad Loan, Bids for.....
" Canal, Enlargement of.....
" and Wabash Canal.....
" Routes to Lake.....
English Railroads, Statistics of.....60, 275
Eight-wheel Railroad Car.....119
Erie and Upper Lakes, Travel on.....188
Ericsson's Air Engine.....229
Erie Canal Tolls of.....261
Erie Canal.....279
Ericsson's Calorio Engine.....470, 306
Engineering, Civil, Study of in Union College.....392
Emigration Westward.....475
English Patent Law, new.....229
Engineer, Importance of Nat. Science to...545
English Railroads.....508
Engineman, remarkable Feat of.....694
Economics, Railway.....705
European and North American Railroad..124, [729, 650, 645, 633, 426, 276, 257, 153, 299
Education, Lecture on, by Rev. Dr. Murdoch 524
Evansville and Illinois Railroad.....246

F

Franklin and Warren Railroad,.....827
Frankfort and Louisville Railroad.....249
Fan Paddle, Stevens'.....277
Fairbanks' Railroad Scales.....312, 296
Farming, Specimen of in Ohio.....363
Fairs, State.....540
Fairhaven Branch Railroad 647, 632
French Railway System.....519
Fencing Railways.....760
Finances of St. Louis.....39
" Ohio.....140, 39
" Portland, Me.....43
" Maryland.....54
" Virginia.....245, 54
" Massachusetts.....356
" Michigan.....71
Fitchburg Railroad, Mass.....107, 75
Finances of Alabama.....124
" Kentucky.....130
" Pennsylvania.....546, 149
" Louisville, Kentucky.....246
" Connecticut.....331
Fishkill Railroad Meeting.....363
Fisheries.....519
Fisk, C. B., resignation of.....651
Flour Trade, Rochester.....44
Florida Railroad.....157
Florence Railroad Convention.....346
Fox River Valley Railroad.....647, 568, 575
Florence and Nashville Railroad.....408
For Wayne and Chicago Railroad, 776, 773, 674, [628
Foreign Investments in this country.....632
Florida, Railroads in.....712
Fort Wayne and Southern Railroad.....714
Foreign Correspondence.....778
Funded Debt of Maryland.....87

AE1
v.25

PRIVATE STORAGE

G

Galena and Chicago Union Railroad ... 156, 30, [541, 535, 392, 45, 58, 199, 201, 251
Grants of Public Lands for Railroads ... 218, 58
Gallipolis Railroad, Ohio ... 94
Gas, how to increase the illuminating power of. [189
Gauge of Railroad from Buffalo to Erie ... 232
Galena Lead Mines ... 583
Grand Trunk (Canada) Railroad ... 775
Great Western Railroad, Canada ... 139, 94, 44, [599, 443, 421, 168
Geneva and Ithaca Railroad ... 827
Georgia Railroads ... 231, 45
" What Railroads have done for ... 46
Greenville and Miami Railroad, 567, 397, 108, 741
Ghent and Troy (N. Y.) Railroad ... 151
Georgia Southwestern Railroad ... 155
" Central Railroad ... 198, 172, 425
Great Britain, Commercial Statistics of ... 189
" Metals exported from ... 197
Greenville and Union Railroad, Ohio ... 215
Georgia Railroad & Banking Co., Report of 321
Georgia, Central Railroad and Banking Co .. 374
Greenville and Columbia Railroad ... 730, 389
Genesee Valley Railroad .. 550, 540, 429, 406, 713, [567
Georgia State Railroad ... 570
Green Bay, Milwaukie and Chicago Railroad, 634
Great Achievement ... 679
Green Point and Flushing Railroad ... 680
Great Britain, National Debt of ... 694
Girard and Chunnenuggee Railroad ... 183, 249
Gold, Future of ... 69
Government Appropriation for Internal Improvements ... 267
Gold, Consumption of ... 524
" Statistics of ... 596
Gold and Silver ... 679

H

Harlem Railroad ... 201, 115, 24
Hannibal and St. Joseph Railroad ... 392, 587 [71, 70, 775, 491
Halifax and Quebec Railroad ... 520, 154, 138, 98
Harrisburg and Elmira Railroad ... 181
Hartford, Providence, and Fishkill Railroad. [551, 363
Hanover Branch Railroad ... 597, 547
Hamilton and Rushville Railroad ... 550
Hampden Railroad ... 564
Hamilton and Eaton (Ohio) Railroad ... 664, 567
Harrisburg and Lancaster Railroad ... 646
Hartford and New Haven Railroad ... 646
Hempfield Railroad, 538, 220, 11, 775, 360, 358, 251, [314
Henderson and Nashville Railroad 169, 459, 412, [376
Height of Mount Washington ... 588
Hillsboro' and Cincinnati Railroad, 125, 55, 215, [540, 349, 481, 488
Hillsboro' (Ohio) Railroad ... 328

H

Home Trade in England by Railroad ... 94
Housatonic Railroad ... 184
Hornellsville and State Line Railroad ... 231
Hoosic Tunnel Boring Machine ... 408
Horse trade of the West ... 550
Horse-power ... 709
Houston and Austin Railroad ... 762
Hudson River Railroad ... 27, 1, 694, 90, 29
" " " Tunnel on ... 27
" " " Tunnel under ... 136, 174
Hubbuck's White Zinc Paint ... 156
Hudson River Railroad 288, 344, 355, 359, 360, 363, [393
Hudson's Bay Railroad ... 552

I

Inland Commerce of the Mississipi Valley and the St. Lawrence Basin. Its routes to the seaboard ... 737
Internal Improvements of Alabama ... 5, 20
Internal Improvements of Virginia ... 139, 375
Internal Improvements, Government Appropriations for ... 267
Important Railroad Decision ... 294
Investments, Railroad ... 689, 552
Internal Improvement Convention, Texas .. 566, [580
Indebtedness of the several states, 1st Jan., 1851 ... 710
Illinois Central Railroad 87, 28, 551, 390, 383, 360, [217, 204, 184, 114
Indianapolis and Bellefontaine Railroad ... 583, [535, 443, 345, 440, 55, 727, 681, 328
Indianapolis and Terre Haute Railroad .. 72, 56
Indiana Central Railroad .. 106, 104, 680, 588, 391, [807, 265, 234, 230, 216, 187
Indiana Northern Railroad ... 248, 104
India Rubber Car Springs ... 136, 104, 633
Illinois Central Railroad, Bridge over ... 193
Influence of Railroads on the value of land. 295
Indiana ... 314
Indianapolis, Lake Erie and Pittsburgh ... 314
Indianapolis and Bellefontaine Railroad report ... 326
Influence of Railroads upon the value of real estate in New Orleans ... 330
Importation of Iron ... 331
Indiana—Exhibit of Evansville and Illinois Railroad ... 342, 377
Indiana, Free Banking in ... 354
Indiana, Railroads of ... 359
Illinois, Railroads in ... 375
Influence of Railroads, (improvements at Wheeling.) ... 549
Immigration during June, 1852 ... 549
Illinois and Wisconsia Railroad ... 745, 563
Indiana Gauge ... 567
Indianapolis, union track and depot at .. 792, 583
Illinoistown and Belleville Railroad ... 565, 587
Indianapolis and Lawrenceburg Railroad ... 599
Indiana Railroad, extension of ... 611
Indian Rubber, The great case of ... 633
Illinois General Railroad Law ... 706
Illinois, Banking in ... 714
Iowa City and Council Bluffs Railroad ... 9

Iron, Importation of ... 22
Intolerance of Railroad Legislation ... 264
Iron, Lowmoor ... 280
Iron Mountain Mo. Railroad ... 761, 630
Iron, Interests of the United States ... 674
Iron, American ... 725
Iron, malleable and R. R. axles ... 742
Iron Bridges ... 758
Improvement, A Good ... 775
Influence of Railroads on the course of trade, 609

J

James River Canal, Tolls on ... 136
" " and Kanawha Canal, .. 177, 743, 193
Jacksonville and Alton Railroad ... 587
Jeffersonville Railroad ... 570, 316
Junction Railroad, Ohio ... 292, 360, 328, 32

K

Kentucky, County Bonds ... 156, 122
" Finances of ... 135
" Statistics ... 151
" Railroad Projects in ... 172
" Internal Improvements of ... 249
" Covington and Lexington Railroad ... 299
Kennebec and Portland Railroad ... 375, 664
King's Mountain Railroad ... 633, 568
Kosciusko, Elkhart and Miami Railroad ... 120
Knoxville and Lexington Railroad ... 153
Knoxville and N. Carolina Junction Road .. 348
Knoxville and Charleston Road ... 348, 425, 568
Knoxville, Cumberland Gap and Lexington Railroad ... 568

L

Lakes, Accidents on the ... 45
Lake Imports at Oswego ... 73
Lawrenceburg and Cincinnati Railroad ... 108
Lafayette, Peoria and Burlington Railroad, 136
" and Indianapolis Railroad .. 386, 157
Lake Ports, Commerce of ... 189
Lakes, Trade on the ... 412, 199
Lake Michigan and Gulf of Mexico, Railroad between ... 204
Lafayette and Burlington Railroad ... 220
Lawrenceburg and Upper Mississippi Railroad ... 280, 250, 660, 664
Lagrange and West Point Railroad, Ga ... 251
Lake Superior Copper Mines ... 200
Lattice-Beams, Straine upon ... 284
Lake Freight ... 600
Large Subscription to Railroad stock ... 326
Lawrenceburg and Upper Mississippi Railroad ... 328
Lake Superior Railroad ... 349
Lake Erie, Wabash and St. Louis Railroad .. 459 [456, 393
Lake Ontario, Auburn and New York Railroad ... 821, 812, 550, 456
Lake Superior Copper Region ... 519
Lake Superior Iron Business ... 807
Lackawanna Coal and Railroads ... 518
Lands, Public, of the United States ... 515
Lake Shore (Michigan) Railroad ... 618, 565
Large Train ... 578
Lawrenceburg and Indianapolis Railroad .. [599
Lake Pontchartrain ... 613
Lake Shore (Erie) Railroad, 792, 776, 758, 679, 626
Lake Champlain Railroad, on west side, 775, 726
Lafayette and Pontchartrain Railroad ... 746
Lexington and Big Sandy Railroad ... 151 [611, 540, 392, 391, 378, 360
" and Danville Railroad .. 456, 183, 474
" and Maysville Railroad ... 288, 6, 530
Lehigh Coal Company ... 331
Lexington and Danville Railroad, Ky., 392, 332
Lexington and Covington Railroad ... 585
" and Frankfort ... 761
Legal, Railroad Decision ... 440
Lebanon Springs Railroad ... 587
Lead Mines of Northern New York ... 595
Little Miami Railroad ... 158, 37, 29, 424
Liabilities of Telegraphing ... 586
Lightning, A railway train struck by ... 631
Lines of Railroad, Short and Long ... 698
Louisville and Nashville Railroad, 713, 537, 489, [393, 94, 44
" " Frankfort " 571, 610, 540, [265, 88
Lowmoor Iron ... 104
Locomotives, Trial of ... 108
" Cast Iron Tires for ... 120
Louisiana, Debt of ... 165
Locomotive, First American ... 248
" Extraordinary Performance of 264
Louisville and Covington R ... 761, 667, 354, 577
Lockport and Buffalo Railroad ... 540, 330
Locomotive, New ... 371
Louisville and Memphis Railroad ... 379
Louisiana Railroads ... 455, 406
Lockport, Railroad to Tonawanda from ... 440
Louisiana Provision in Constitution ... 540
Louisiana Public Works under Constitution, 562
Locomotives, Portland ... 587
" Montreal ... 724
London and New York, Telegraphic Communication between ... 725
London Corrospondence (R. R. iron) ... 753

M

Maysville and Lexington Railroad ... 268, 6
Massachusetts Railroads, Cost of ... 42
" " Statistics of, 373, 198, [790, 52, 694, 662, 487, 426, 443
Maryland, Finances of ... 54
Massachusetts, Finances of ... 55
Madison and Indianapolis Railroad, 246, 76, 613, [265
Macon and Western Railroad, Ga ... 249, 201, 82
Maryland, Funded Debt of ... 87
Mt. Carmel and Albion Railroad ... 98
Marietta and Cincinnati Railroad, 359, 183, 146 [678, 615, 577, 566, 442
Maryland Coal Trade ... 249
Massachusetts, Norfolk Co. Railroad ... 300
" Railroad Reports, Abstract of, [375, 303
Maysville and Lexington Railroad ... 530, 328
McCallum's Patent Timber Bridge ... 385
Mad River Railroad ... 412
Maysville and Big Sandy Railroad, 507, 473, 775 [536
Manassas Gap Railroad ... 631, 488
Mansfield and Sandusky City Railroad ... 492
Manufactures, Agriculture of U. S ... 535
Marias Croche Railroad ... 535
Madison and Beloit Railroad ... 535, 524
Madison and Prairie du Chien Railroad ... 584
Maryland Mining Co ... 586
Memphis and Nashville Railroad ... 54
Memphis and Charleston Railroad, 679, 646, 615, [535, 426, 408, 355, 204, 94
Metals, Exported from Great Britain ... 197
Memphis and Louisville Railroad ... 383
Metals, Production of the Precious since 1492, 503
Michigan Central Railroad ... 549, 456, 551, 9
Mint of the U. S., 1851 ... 25, 725, 104
Mississippi and Atlantic Railroad, 151, 122, 43, 263
Milwaukee and Mississippi Railroad, 551, 503, [440, 424, 421, 408, 376, 369, 170, 120, 49
Michigan, Finances of ... 71
Michigan Southern Railroad, 553, 492, 438, 231, [156, 148
Miami and Erie Canal ... 227
Mint, Coinage for March ... 232
Michigan Central Railroad ... 358, 357, 295
Milledgeville and Gordon Road, Ga ... 331
Michigan Central Road, Opening of ... 343
Mississippi and Rock River Junction Railroad ... 349
Missouri State Bonds ... 363
Mississippi River and its Tributaries ... 373, 368
Michigan and Dayton Railroad ... 539
Mineral Point Railroad ... 773, 564, 551
Missouri, Railroad in ... 724, 630, 585
Missouri Railroad Lands ... 659, 602
Michigan Lake Shore Railroad ... 630
Mississippi Central Railroad ... 810, 761, 648
Mississippi and Chicago Railroad ... 685, 675
Mississippi and Atlantic ... 722, 714, 696
Mississippi Valley and St. Lawrence Basin, Inland Commerce of ... 737
Mississippi Repudiation ... 742
Mississippi, The ... 773
Mine Hill and Schuylkill Haven Railroad ... 775
Mobile and Ohio Railroad, 647, 618, 615, 540, 523, [520, 515, 165, 158, 151
Montreal and Quebec Railroad ... 152
Mobile and Ohio Railroad ... 349, 300
Montgomery and West Point Railroad, Ala., 406, [392, 314
Mobile and Ohio Railroad, 618, 569, 440, 409, 394, [392, 314
Mohawk Valley South Side Railroad ... 551, 540
Mount Savage Railroad ... 761, 628, 566
Model Engineer ... 587
Mount Washington, Height of ... 588
Montreal Locomotive Engine ... 724
Mount Vernon, Pittsburgh and Springfield Railroad ... 726
Muscogee Railroad, Ga ... 445, 88
Municipal Bonds of Penn ... 251

N

Nashville and Louisville Railroad, 568, 537, 94, 44
Nashville and Memphis Railroad ... 54
Nashville and Chattanooga Railroad, 617, 557, [536, 408, 283, 281, 237, 230, 83
Nashville and Danville (Ky.) Railroad, 504, 219
Nashville and Cincinnati Railroad ... 524
Nashua and Lowell Railroad ... 374
Nashville and Tennessee Railroad ... 534
Nashville and Alabama Railroad ... 539
Natural Science Importance to Engineer ... 545
National Railroad (Illinois) Sale of ... 675
Nashville and Florence Railroad ... 607
Naples and Decatur Railroad ... 761
Newcastle and Richmond Railroad, 420, 359, 167, 1
New York and Erie Railroad, 631, 427, 248, 223, [142, 72, 43, 17, 3
New Orleans and Nashville Railroad, 633, 552, [11, 5
N. Y., Commerce of Port of, 1851 ... 8
N. Y. Railroads, 793, 492, 391, 229, 173, 147, 131, 69, [19
N. Y. Canals ... 268, 24
N. Y., Debt of City of ... 25
N. Hamburg Tunnel on H. River Railroad ... 27
New Orleans, Southwestern Railroad, Convention at ... 65, 33
N. Y. Canals, Commerce of ... 245, 71, 44
New York and New Haven Railroad, 555, 375, [233, 37
New York Canals, Tolls on ... 214, 167
New York, New General Railroad Law of 216, [209
New York & Philadelphia ... 792
New York and the Lakes, Railroad between, 216
News from Europe in five Days ... 221
New Orleans and St. Louis Railroad ... 248
New Albany and Salem Railroad ... 490, 424, 233
New London, Willimantic and Palmer Railroad ... 745, 288
New Orleans, Debt of ... 283
New Jersey Railroad ... 298
New York, Rochester & Syracuse Railroad, 299
New Orleans and Jackson Railroad, 524, 455, 419, [330, 300
New York and New Haven Railroad, 371, 343, [332
New London and New Haven Railroad, 489, 358
New Haven, Hartford and Springfield Railroad ... 371
New Albany and Michigan Railroad ... 375
Newburyport Railroad ... 652, 375
New Jersey Central Railroad ... 711, 393, 388
New York City as a Railroad Terminus ... 424
New Brunswick Railroad ... 429
New Orleans, Opelousas and Great Western Railroad, 775, 772, 648, 592, 568, 567, 516, 501, 488, [455, 42 484
New Orleans, Jackson and Great Northern Railroad .. 627, 460, 359, 277, 244, 078, 633, 582, 567, 524
New Railroad Car Seat ... 37
New Hampshire Central Railroad ... 790, 551
New Haven and Middletown Railroad (air line) ... 533
New Postage Law ... 598
New Orleans, Finances of ... 661
New Railroad Route between the Lakes and New York ... 651
New Orleans and Nashville ... 678
New York and Boston Railroad ... 744
New Iron Project ... 761
Niagara Falls, New Suspension Bridge over, 578, [546
Nicaragua Canal ... 709
Norwich and Worcester Railroad ... 689, 43
North-Western Railroad, Va ... 157, 74, 55, 524 [283, 278
North Indiana Railroad ... 248, 104
North Carolina Railroad ... 547, 493, 119
North-Western Route ... 245
Northern Railroad ... 741, 594, 427, 418, 371
Norfolk and Petersburg Railroad ... 409
North Carolina Railroads ... 775, 444
Northern Cross and Central Military Tract Railroads ... 519
North Hampton and Westfield Railroad ... 551
North Branch Canal ... 566
Northern New York, Lead Mines of ... 595
Norwich Copper Mine ... 614
Nova Scotia Railroads ... 632
North Danvers, and S. Reading Railroad, 663, 647
Northern Railroad, (Canada) ... 679
North Missouri Railroad ... 774, 681
North Carolina (State Debt) ... 727
Northern and Southern Routes ... 746
North-Eastern (South Carolina) Railroad .. 760
North Missouri Convention ... 774

O

Orange and Alexandria Railroad. Va. 811, 630, 167
Ontario, Simcoe and Huron Railroad ... 501
Oswego, Lake Imports at ... 73
Ogdensburg Railroad ... 741, 359, 244
Ogdensburg and St. Lawrence Railroad ... 331
Ocean Steamers (Canada) ... 551
Ohio, Canals of ... 23
Ohio Central Railroad .. 260, 118, 24, 682, 567, 345 [407, 481, 487
Ohio, Railroads in Southern ... 28
Ohio, Finances of ... 140, 39
Ohio Railroads .. 123, 114, 92, 45, 580, 397, 375, 229
Ohio and Pennsylvania Railroad, 56, 52, 50, 77 [791, 332, 299, 141, 201, 205, 246, 507, 532, 584
Ohio & Mississippi Railroad ... 616 552, 549, 508, 486, 429, 392, 356 273, 247, 6, 549, [747, 694, 229, 157, 131, 98
Ohio, Public Works of ... 187, 110
Ohio, Agricultural Statistics of ... 135
Ohio, Wheat Crop of ... 141
Ohio, County Bonds ... 184, 181, 198
Ohio and Indiana Railroad ... 452, 339, 200, 680
Oil, Consumption of, on Railroads ... 270
Ohio, County Securities ... 260
Ohio, Railroads in ... 264
Ohio, Wheat and Corn Crop of ... 278
Ohio, Toledo, Norwalk and Cleveland Railroad ... 293, 411
Ohio, Wilmington and Zanesville Railroad, 300
Ohio, Akron Branch Railroad ... 311
Ohio, Exhibit of the Columbus, Piqua and Indiana Railroad ... 341
Ohio, County Subscriptions of ... 357
Ohio, General Railroad Law ... 451
Ohio County Bonds, Validity of ... 476
Ohio Projects of Roads in ... 586
Ohio Falls, Railway over ... 613
Ohio, Lake Shore Lines ... 615
Ohio, Southern Railroads in ... 682
Ohio Central Railroad ... 774
Old Colony Railroad, Mass ... 123
Old Town and Lincoln Railroad ... 666

P

Pacific Railroad, Mo ... 125, 90, 39, 242, 358, 392 [804, 408, 548, 508, 587, 632, 726
Passumpsic Railroad, Vt ... 120
Panama Railroad ... 136, 345, 770
Plattsburgh and Montreal Railroad ... 508, 390 [154, 631, 643, 630
Paint, Hubbuck's White Zinc ... 156
Paddle, Stevens' Patent Fan ... 277
Parkersburg Railroad, Va ... 551, 524, 278
Patent Law, New English ... 539
Palmer and Amherst Railroad ... 585
Peoria and Oquawka Railroad, 139, 14, 760, 252 [188
Petersburg and Shirley Railroad, N. H., 41, 231
Pennsylvania Railroad, 387, 293, 295, 310, 232, 201, [170, 166, 109, 248, 240, 473, 508, 533, 538, 541, 632, 776
Pennsylvania, Public Works of ... 163, 125, 247
" Finances of ... 140
" Railroad, Gauge in ... 161
" Railroad Policy ... 188
Peru and Indianapolis Railroad, 442, 405, 188 [445
Penobscot and Kennebec Railroad, 216, 383, 504 [612, 554, 551, 298
Pneumatic Bridge Building ... 234
Pennsylvania Central Railroad ... 268, 247
" Municipal Bonds of ... 10, 251
Permanent way for Railroads ... 275
Pennsylvania Coal Trade ... 374, 309, 327
North Branch Extension—an act to provide for immediate completion .. 311
Piass Foundry, Alton ... 350
Pennsylvania, Finances of ... 546
Prescott and Lake Huron Railroad ... 550
Peru and Indianapolis Railroad ... 558
Peru and Ogmawka Railroad ... 630
Pennsylvania, Table of Length and Cost of State Works of ... 710
Phœnixville and Cornwall Railroad ... 712
Piles Fork and New Martinsville Railroad, 61
Pittsburgh and Steubenville Railroad .. 77, 219 [541, 549
Philadelphia and Columbia Railroad ... 86
" and Allentown Railroad ... 93
Pittsburgh and Cincinnati Railroad ... 118
Philadelphia, Valuation of ... 157
" and Water Gap Railroad, 791, 244 [324, 678, 741
" Wilmington and Baltimore Railroad ... 282
Philadelphia Trade with Canada ... 836
Phil. & Norristown Railroad ... 792
Philadelphia and Oswego Railroad ... 299
Philadelphia, Commerce of ... 374
Pittsburgh & Cornnellsville Railroad ... 809
Pittsburgh, Mt. Vernon and Springfield Railroad ... 726, 358
Pittsburg and Erie Railroad ... 611

174148

Philadelphia and Sunbury Railroad. 299, 745, 631
Philadelphia and the South-West, (aid to the Marietta Railroad) 678
Portland, Me., Finances of 43
Population of Cities in the United States, 1850 ..... 267, 87
Providence and Worcester Railroad 88
" and Plainfield Railroad 158
Pork Trade of Cincinnati 174
Potomac Co., Origin of 224
Potsdam and Watertown Railroad 250
Portland and Montreal Railroad 282, 284
Providence and Bristol Railroad 248, 349
Providence and Worcester Railroad 299
Providence, Hartford and Fishkill Railroad. 300
Post Office, General Statement 807, 354
Point of Rocks Railroad 359
Portland, Saco & Portsmouth Railroad, 407, 540
Progress of Steamboating in the West 519
Population and Representation of the United States 547
Portsmouth and Dover Railroad 567
Portland Locomotives 587
Postage Law, New 598
Population of Canada 725
Public Works of Ohio 110
Public Lands, Grant of, to Railroads 241
Public Lands, Table of 515

Q

Quebec and Richmond Railroad, 45, 109, 347, 358
" and Montreal Railroad 152
" and Halifax Railroad 376, 520
" Steamboat Line from New York 439
" and St. Andrews Railroad 552
Quincy's Letter to Stockholders in Vermont Central Railroad 225
Quincy and Meredosia Railroad, (Ill.) 541
Quarts Mining in California 731, 729, 697

R

Railroads in the Provinces 190, 5
" Progress of, in the U. S. 5
Railroad Law .. 120, 99, 77, 44, 28, 6, 533, 531, 283, [435, 269, 202
Railroads in the U. S., 1852 ..... 226, 454, 12, 10
Railroad Arrangements from Pittsburg West, 14
Railroads, Names of Presidents of 27
Railroads in Northern and Southern States, 27
" in Southern Ohio 2
Railroad Convention at New Orleans .. 33, 65
Railroads in Mass., Annual Cost of 42
" Ohio 123, 114, 92, 45
" Georgia 86, 45
" Influence of 55
" Grants of Public Lands for ... 218, 58
" in Great Britain, Statistics of .. 47, [75, 60
Railroad between Richmond, Va., and Ohio River 66
Raleigh and Gaston Railroad .. 199, 93, 71, 508
Railroads, Influence of upon Value of Property, [71, 549
Railroad Accidents 243, 235, 74, 522, 262
Railroads through Central Tennessee 76
Railroad Companies, County Subscriptions for, [82, 129
Railroads in Virginia 125, 86
" in Pennsylvania 820
" in Western New York 824
" in Arkansas 827
Railroad Reports, how they should be made up, [58
Railroads, Corporate Subscriptions to 97
Railroad Bonds and Shares, Fluctuations of, 105
" Controversy in Virginia, 116, 85, 148, 139
Railway Car, Eight-wheeled 119
Railway from Columbia and Greenville Railroad to Knoxville, Tenn. 119
Railroads, Government Aid to 120
Railroad from Lexington South 124
Railroads in New York, Statistics of, 147, 131, 175
Railroad Subscriptions in Virginia 137
Railroads in U. S., what a good credit abroad would do for them 145
Railroad Gauge in Pennsylvania 161
" Projects before Congress 162
" " in Kentucky 172
Rabun Gap Railway, S. C, 456, 259, 174, 776, 748
Railroads in Arkansas 502, 180
Railroad Convention in Baltimore 181
Rail, Continuous Bearing 184
Railroad Policy of Pennsylvania 186
" Track Sprinkler 188
" Wheel, Woodruff's 189
" Scales 2-0, 235, 300
" between Lake Michigan and the Gulf of Mexico 204
Railroad Connection in Ia 215
" between N. Y. and Lakes 216
Railroads in Tennessee and Kentucky 219
Railroad from Rutland and Washington to the Lakes 245
Railroad Route to Boston, new 240
Railroads in Tennessee 256
Railroad Legislation 264
Railroads in Ohio 264, 5 0
Railroad on Staten Island 268
Railway Economy, Permanent Way 275
Railroads in England, Persons employed on 275
" " Prospects of 276
Railway Axles and Wheels 277
" Gauge in Canada 282
Rabun Gap Railway 290, 34
Railroads in Southern Ohio 291
" from Brunswick, Ga., to Pensacola, Florida 291
Railroads in France 294, 519
Railway Curves, Axles and Wheels 307
Railroad from Columbus to Opelika 331
Railroads in Switzerland 343
Railway Curves 348
" from Toledo to Goshen 357
Railroads, Effect of, in Enlarging the Business Circle of Cities 360
Railroad Subscription. 627, 630, 645, 646, 613, 603, [340
Railroads, Social Influence of 362
Railroad Freights, Tariff of, in Ohio 372
" of Danphin Coal Co. 374
" Southwestern, from Danville, Kentucky, to Tennessee State Line) 392
Railroads in Louisiana 405
Railroad Securities, Negotiation of 417
" " English View of 433
Railway Traffic in United Kingdom 518
" System, French 519
Railroad Examination 529
" Time 529
" System of the West 534
" Car-Seats 552, 537
Railroad from Wheeling to Cleveland 820
Railroads East of Pittsburg and Wheeling. 539
" v. Wolves 539
Railroad Investments 552, 6-9
" to Hudson's Bay 552
" Rivalry 554
" Looking Glass 555
Railway System, its extension 561
Railroad Law, Journal of 820, 794, 763, 747, 724, [709, 695, 674, 666, 646, 643, 627, 612, 562, 778.
Railroad Convention at Springfield, Mass .. 567
" " Warsaw, Ind. 567
Railroad system beyond the Mississippi 825
Railroad Exhibits & Negotiations 785
Railroad from Olean 795
Railroad Improvements and Comfort 811
" Securities and Real Estate Mortgages 568
Railroad Corporations v. Hack Drivers 572
" Suspension Bridge at Niagara Falls, [546, 578
Railroads, English 598
Railroad Bonds 600
" Lands in Missouri 602
Railways about Boston 614
Railroad Bridge across Souhegan River 614
" Trial at Cleveland 615
" in Turkey 616
" Convention at Warsaw 628
" Commerce of Sandusky 629
" Iron, shall we admit it for New Works duty free? 817, 641
Railroad Convention at Springfield ... 737, 643
" " Knoxville 647
Railroads, Advantages of 663
Railroad Iron 673, 664
Railway Bridge over the River Wye 682
Railroad Items 807, 773, 747, 727, 711, 695
Railroads, Lines of, short and long 698
Railway Economies 728, 705
Railroad Law, General, of Illinois 706
Railways, American *vs.* English 710
Railroad Iron, Duty on 721
Railway, Atmospheric 723
Railroads, Centralization of 725
" of Great Cities 730
Railway Axles and Malleable Iron 742
Railway Car Trimmings 760
Report of Secretary of Treasury 21
Reading Railroad 807, 289, 35
Revenues of principal Ports in U. S. 281
Return of English Railway Traffic 283
Remington Bridge, the 314
Reciprocity and Retaliation (Canada) 625
Richmond, Fredericsburg and Potomac Railroad 231
River, the Amazon 371
" the Mississippi and its Tributaries ... 373
Richmond Railway (Canada) 519
Rivers, Great, their Drainage 551
River Wye, Railway Bridge over 682
Rock Island and Chicago Railroad ..... 29, 675, [350. 215, 195. 155, 56
Rochester Flour Trade 44
Rochester between Lake Erie and Atlantic 58
Rochester and Syracuse Railroad .. 204, 124, 663, [548, 392, 391
Ross and Rutter's Railroad Track Sprinkler, 188
Roanoke Valley Railroad 199
Rontes West 199
Rockford and Rock Island Railroad 215, 505
Ross Winans' Patent, Decision on 283
Rochester and Lake Ontario Railroad 328
Route, Northern, *vs.* Southern 360
Rochester, Lockport, and Niagara Falls Railroad 391, 444, 577
Rochester City Bonds 794
Rome and Watertown Railroad 440
Routes of Railroads to the Pacific 492
Rock River Valley Union Railroad ... 775, 729
Rutland and Washington Railroad .... 134, 441, [391. 231
Rutland Railroad and Vermont Central Railroad 240
Rutland and Burlington Railroad 523

S

Sale of Buffalo, Corning and N. Y. R. R. Bonds 792
State Policy of Illinois 803
St. Lawrence and Champlain Railroad .. 58, 44, [114
Sandusky City and Indiana Railroad 46
St. Lawrence and Atlantic Railroad, 791, 578, [293, 51
State Railroad, Georgia 38, 104
Statistics of N. Y. Railroads 173, 147, 131
" Kentucky 151
Savannah and Freeport Railroad, Ill. 151
Sparta Railroad, Tenn 155
Sackett's Harbor and Saratoga Railroad 156
St. Lawrence Line of Atlantic Steamers .. 167
Sandusky, Mansfield and Newark Railroad. 167 [407
Scales, Duryee and Forsyth's 235
St. Lawrence, Bridging the 257
Staten Island Railroad 258
St. Lawrence Route, Canadian View of 275
Scales, Fairbanks' 2-0
Sandusky and Indiana Railroad 300
Savannah Branch Railroad, Ill. 314
Savannah *vs.* New Orleans 347
Sandusky, City of, Ohio 357, 629
Savannah and Albany Railroad, Ga 775, 533
Sault St. Marie Canal 774, 693, 679, 6 8, 456
Spain, Railroads in 828, 457
State Fairs 540
St. Andrews and Quebec Railroad 552
St. Joseph's and Hannibal Railroad 587
Statistics of Gold 596
State Fairs and Railroad Fares 644
St. Lawrence and Lake Huron and Peterboro' Junction Lines 645
Straight Line Road from Utica to Syracuse, 648
Sacramento Valley Railroad 664
Saugus Branch Railroad 665
Sackett's Harbor and Ellisburgh Railroad ... 665
Sale of the National Railroad, Ill 675
San Francisco, the Mountain Lake Water Co. of 683
Straight Line from Baltimore to St. Louis. .. 684
State Works of Penn., Table of Length and Cost 710
St. Louis and Iron Mount. Railroad 761
Steamers on Lake Erie 136. 2
Steamer Baltic 11
Secretary of Treasury, Report of 21
Steubenville and Indiana Railroad 812, 131, 56, 456
Steam Marine of the United States 70
Steamers, Collins Line of 107, 197
Steam Boiler, Boardman's 150, 138
Steamers, Collins and Cunard Lines of 147
Stevens' Patent Fan Paddle 277
Steam Communication between Baltimore and Boston 278
Screw Wrench, Taft and Gleason's 408, 376
Securities, Negotiation of Railroad 417
Securities, English View of American 433
Securities, American Railroad 506
Speed, unprecedented Railroad 441, 429
Steamboat Losses on the Western Waters .. 444
Steam Communication between England and Canada 517
Steamboating in the West, Progress of 519
Seats for Railroad Cars 552, 837
Steel Manufacture in India 565
Shelbyville and Harrodsburg Railroad 584
Steamboat Inspectors, appointment of 60
Seleck's, Thaddeus, Collision Director 635
Speed and Fares on Great Western, and London and North Western, Railways 663
Speed, Table of Comparative, on the principal Railways of the United States 758
Springfield and Mansfield Railroad, .. 437, 58, 600, [536
" 59
Springs, New Road to the 59
Springs for Railroad Carriages 136, 72
Scioto and Hocking Valley Railroad .. 541, 411, [762, 666, 631, 603, 566
Ship Building in Maine 460
Springfield, Mt. Vernon, and Pittsburg Railroad 775, 536
Science, Nat., importance to Engineers 545
Springfield and Terre Haute Railroad 568
Springfield and Bloomington Extension Railroad 594
Springfield and Columbus 599
Ship Railroad across the Isthmus of Florida 615
Ship Canal from the St. Lawrence to Lake Champlain 618
Silesian Iron 678
Stocks in New York, 1851 8
St. Louis, Finances of 39
Stocks, Value of American 57
Southwestern Railroad Convention .. 120, 65, 33
South Carolina Railroad 583, 427, 137, 98, 94
Stony Brook Railroad, Mass 104
Sodus Point and Southern Railroad, 549, 391, [221, 215, 122
St. Louis and Cincinnati Railroad 142
Southwestern Railroad Georgia, 726, 633, 612, [586, 571, 555, 153
Southern Convention, App. to 180
South Side Railroad, Va. 744, 534, 185
Southern Railroads, ... 508, 502, 198
St. Louis and New Orleans Railroad 248
Somerset and Kennebec Railroad 248
Sodus Bay and Southern Railroad, 616, 658, 549, [312
Southwestern Railroad Convention 337
Sodus Bay and Ithaca Railroad 391
St. Louis and New Orleans Railroad 498
Southern Railroad, The 555, 508
Southern Wisconsin 568
Souhegan River Railroad, Bridge across 614
Southern Ohio, Railroads in 682
Sunbury and Erie Railroad 362, 55, 42, 37
Susquehanna, Ice Bridge over the 55
Schuylkill Navigation Company 107, 56
Susquehanna Railroad, 774, 698, 676, 631, 489, 411, [796, 391, 200, 164
Superior Copper Mines 402, 260
Susquehanna Railroad, N. Y 300
" " 456, 332
Sullivan Railroad 303, 407
Superior, Lake, Railroad 430
Suspension Bridge over Niagara Falls. .578, 546
Subscriptions, Railroad 630, 613, 603
Suez Isthmus, Railroad across 675
Suspension Bridges 711
Syracuse and Binghamton Railroad, 523, 491, [396, 376, 208, 199, 171

T

Tanneries of the U. S 587
Travel on Lake Erie and the Upper Lakes, 360, [198
" between Albany and New York 730,
Trade of the Lakes 199
Trade of the U. S. with Canada 233
Texas, Debt of 9
Tennessee, Finances of 24
Texas, Public Domain of 53
Terre Haute and Indianapolis Railroad .. 72, 5
Terra Haute and Richmond Railroad 67
Tennessee Railroads 203, 76
Tenn. Valley, New Railroad into 119
Terre Haute and St. Louis Railroad, 714, 696, [441, 172
Tenn., Railroad Law in 202
Terre Haute and Alton Railroad .. 775, 771, 2-5
Tehuantepec, Isthmus of 236
" Railroad 256, 241
Tennessee, Nashville and Northwestern Railroad 296
Terre Haute and Alton Railroad 375, 304
" " " " " 536, 445, 363, 312
Texas Central Railroad 412
" Western Railroad 828
Telegraph, Submarine 453
Tennessee Valley Railroad, History of 490
Telegraph Business 550
Texas Internal Improvement Convention, 580, [566
Telegraphing, Liabilities of 586
Telegraph between England and America, 725, [631
Telegraph, Magnetic, in Hindostan 662
Texas, Railroads in 693
Tioga Railroad Company, Exhibit of 454
Time, Railroad 529
Timber by Railroad 611
Troy and Dayton Railroad 14
Toledo, Norwalk and Cleveland Railroad, 551, [411, 251, 231, 152
Tobacco, Shipment of 163
Tolls on New York Canals 214, 167
Through Line Railroad to the West 251
Toronto and Guelph Railroad 253
Tolls, Trade and Tonnage of Erie Canal 261
Tonnage of Great Britain and U. States 265
Troy and Greenfield Railroad 359, 284
Travel West 299
Toledo, Norwalk and Cleveland Railroad .. 328
Troy and Schenectady Railroad 391
Toronto and Lake Huron Railroad 414
Tonnage of our Commercial States 444
Toledo and Indiana State Line Railroad 603
Tunnel under the Hudson River 174, 136
" " " " at Albany .. 632
Tunneling Machine 571, 164
Trunk Railway, Canada 554, 279
Tunneling Machine for the Hoosac Mountain, 408
Tunnel, Blue Ridge 507
Turfing a Railroad 414
Turntable, Carhart's Improved 456
Turkey, Railroad in 616

U

U. S., Banks in 24
U. S., Mint of 796, 725, 649, 232, 104, 25
U. S., Steam Marine of 423, 70
U. S., Census of Cities, 1850 ..... 267, 87
U. S., Statistics of 804
U. S., Debt of 825
United Kingdom, Export of Metals from 197
U. S., Statistics of Railroads in 454, 226
U. S. Population at Various Periods 660, 429
U. S., Agriculture and Manufactures of 535
U. S. Population and Representation 547
U. S. Inland Commerce more important than Foreign 787
University for Practical Science 458
Union Track and Depot at Indianapolis 583
Utica and Syracuse (straight line) Railroad, 667, [648. 635
Utica and Schenectady Railroad 391, 349

V

Vermont Central Railroad, 45, 20, 71, 184, 253, [268, 278, 353, 698
Vermont and Massachusetts Railroad 125
Vermont Western Railroad 248, 137
Vermont Central Railroad, Mr. Quincy's letter to stockholders 225
Ventilation of Cars 347, 712
Vermont Valley Railroad 549
Vermont and New Hampshire Railroads 631
Vermont and Boston Telegraph Co 713
Virginia Central Railroad 818, 788, 681, 2
Virginia, Finances of 244, 54
Virginia and Tennessee Railroad .. 237, 215, 66 [662, 769, 776
Virginia Railroads 126, 86
Virginia, Railroad Controversy in .. 130, 116, 85 [148
Virginia, Railroad Subscriptions in 137
Virginia, Internal Improvements of 139
Virginia, North-Western Railroad, 157. 74, 55 [278, 283
Virginia and Tennessee Railroad 300
Vicksburg, Shreveport and Texas Railroad. 828, [555
Virginia Internal Improvement Convention, 566

W

Wabash and Erie Canal 562, 498, 93, 56
Water Gap, Railroad from Philadelphia to, 248
Waynesborough Road, Georgia 331
Wabash Valley Railroad 787, 599, 445
Wabash Valley, Trade of 566
Western Railroads and Securities 26
West Chester and Philadelphia Railroad, 76, 284
Western Railroad, Mass 507, 122, 98
Wheeling Bridge case 167, 162, 123
Western Vermont Railroad 248, 137
Wheat Crop of Ohio 278, 141
Western and Atlantic Railroad, 503, 386, 164, 772
Western Railroad Connections 168
Western Routes of Transportation 223
West, Progress of the 247
Western Transportation 267
Welland and St. Lawrence Canals, Tolls on, 299 [547
West. Railroad System of the 538
Wellsville and Wheeling Railroad 663
Wilton Railroad, N. H 7
Winslow's Compound Rail 649, 99
Wilmington and Manchester Railroad .. 113, 205 [357, 441
Winchester and Potomac Railroad 786
Wisconsin, Resources of 460, 140
White Zinc Paint 156
Wilkes Co. Railroad, Georgia 263
White's Suspension Bridge 344
Whitehall and Plattsburg Railroad 826
Wisconsin Railroad Bonds as a basis of banking 346
Winchester and Potomac Railroad 425
Wisconsin Southern Railroad 568
Wilmington and Raleigh Railroad 727, 572
Wisconsin, Free Banking in 776
Worcester and Nashua Railroad 69
Woodruff's Railroad Wheel 189
World's Fair, American Manufactures at 190
Whistler, George W 240
Woollen Manufacture of Great Britain 413
World's Fair in New York 570

Y

York and Cumberland Railroad, Me., 531, 44 [540
York and Cumberland Railroad, Pennsylvania 632, 612, 524

Z

Zinc Paint 361

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VII., No. 1.] SATURDAY, JANUARY 3, 1852. [WHOLE No. 820, VOL. XXIV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Newcastle and Richmond Railroad 1
Hudson River Railroad 1
Steamers on Lake Erie 2
Wilton Railroad 2
Virginia Central Railroad 3
New York and Erie Railroad 5
Columbus, Urbana and Piqua Railroad 5
Railroads in the Provinces 5
Railroads in Alabama 5
Wellsville and Wheeling Railroad 5
New Orleans and Nashville Railroad 11, 5
Railroad Law 6
Stock and Money Market 8
Railroads in Iowa 9
Railroads in the United States in 1852 10
Lake Shore Railroad 10
East Tennessee and Virginia Railroad 11
Hempfield Railroad 11
Steamer Atlantic 11
Table of Railroads in the United States 12
Peoria and Oquawka Railroad 14
Danville and Pottsville Railroad 14
Dayton and Troy Railroad 14

American Railroad Journal.

Saturday, January 3, 1852.

Indiana.

New Castle and Richmond Railroad.—This road was, by its original Charter, limited to the distance between Richmond and New Castle, 27 miles, and a subscription of $100,000 was required before the Directors could be chosen.

This sum having been secured, the company was organized on the 24th of August, 1850, and the grubbing, grading and bridging of the entire line, from Richmond to New Castle, was let by private contract, to Mr. A. DeGraff, on terms favorable to the Company; 15 per cent. of the total amount payable in stock of the Company.

Active operations were commenced in February, 1851, since which time the work has steadily progressed, a force varying from 50 to 100 hands being constantly employed on the road.

Since the organization of the Company in November, 1850, the subscriptions to the capital stock have been increased from $100,000 to over $190,000, of which over $70,000 have been subscribed by citizens of Cincinnati.

This amount is sufficient to prepare the road for the iron, but as the time for payment is fixed at too distant a day, the Board think it advisable to procure a loan in anticipation of the stock, by which the grading and bridging may be completed during the summer of 1852, and the road put into running order by the 1st of January, 1853.

The receipts upon the stock up to Dec. 1. 1851 have been $14,689 27, and the disbursements $14,238 85.

The following is the estimated cost of the sections between Richmond and New Castle.

Grubbing, grading and bridging, including two miles of side track	$140,420 84	
Ballasting	9,078 75	
Right of way and Depot grounds	5,000 00	
Engineering and contingencies	10,000 00	
Total		$164,499 59
29 miles superstructure, (iron track, etc.) including 2 miles side track a $6.500.		$187,850 00
Locomotives and cars	$51,650 00	
Repair shops, turn tables, and water tanks	3,300 00	
Depot Buildings	11,500 00	$66,450 00

The Company were authorized, by a special act, of the last Legislature, to extend their road from New Castle, in Henry county, to intersect the Peru and Indianapolis, or the Lafayette and Indianapolis Railroads, at such point on said roads as they might determine upon.

Under this amendment of their charter, the board determined to locate the extension of the road by way of Logansport, in Cass county, and intersect the Lafayette and Indianapolis railroad at or near Lafayette.

At Logansport the road will form a connection with another railroad from that town to Lake Michigan; and will thus be changed from a *local road*, of only 27 miles in length, to an important link of 107 miles in length, in a chain of railroads running almost direct from Cincinnati, Ohio, to Chicago. Ill.

It is proposed to cross the Indianapolis and Bellefontaine Railroad at Anderson, and the Peru and Indianapolis Railroad at or near Kokomo.

The people along the line of the Extension have taken hold of the work with great zeal, and there is every reason to believe it will be successfully prosecuted. Subscriptions for the extension have already been made to the amount of $196,000.

The country traversed is one unsurpassed in richness of soil and agricultural capacity. Although much of it is newly settled, it is rapidly increasing in population. In a few years it will become one of the most populous and productive portions of the State.

Under such a promising aspect of affairs, the Company are sanguine in their expectations that their road will prove a highly successful and profitable one.

For the American Railroad Journal.

The Hudson River railroad seems not to have met the public expectation. It opened under very flattering auspices so far as a rapid trip was concerned. The Press took up the description and scattered it broad cast that this road was to be run with a rapidity unexampled in this country. Of course, railroad men who had been used to such things, looked upon all this, as promising pretty largely, and they could not fail to see the great difficulty there would be in meeting such high expectations. Preliminary calculations are very delusive. In no branch are they more so, than in the railroad. One hundred and fifty miles of railroad is a very substantial matter, and if the thing is to be so managed as to fairly save the public and properly to regard the rights of the proprietors there must be thorough experience, devoted service, a sound system, good discipline and firm purpose.—All these are essential. It cannot be worked upon any fanciful theory; nor upon any daily changing legislation. It is a business upon which the soundest conclusions, are reached by averages, upon its own best working.

It will be the duty of the Directors of this company, to consider what are the proper distinctions between the legislative and the executive departments of the railroad, and to properly regard such distinctions. When these are clearly understood, and properly maintained, this road may be more successful. It is a matter of well grounded doubt, whether the directors of a company can successfully manage a railroad by resolutions. They must select an able executive officer, one in whose experience, sound judgment, and unflinching firmness they can rely, and then hold him responsible for the sound working of the whole matter. It must be a discipline quite as strict as that of the army, or on shipboard, that can alone sustain the railroad, If this is consistent with a management by resolutions of boards of Directors, very well; if it is not, then the board will come to the conclusion to hold the executive officer responsible to them, and leave to him the exclusive control of his subordinates.—

These suggestions are made, because it is sometimes said, that this company through its direction are managinig all the details of the operations of the road.

A board of directors which attempts to follow the advice of every one who complains, will have business enough. There is a morbid sentiment too prevalent in the public mind, that the railway must be worked to suit everybody, no matter how conspicuous may be their demands. Men walk upon the tracks and get killed, and there is rung through the country "*another railroad accident.*"—They attempt to steal their passages over the railroad, and when put off, the sympathies of *juries* are appealed to against *corporations.*

This sentiment is so general, that a verdict in favor of a railroad company would be a wonder. How is all this to be corrected? How is the public mind to be set right? Can it be by bending in the direction of an imagined public sentiment one way at one time, and in a contrary direction at another. Can it be by promising to the public very high speed, concealing, or being ignorant of the fact, that this can only be attained at measurable hazard? Can it be by the practice of the system on which goods are sold, or on that other, by which politicians succeed? There may be some affinity between these systems, but they are illy applicable to the railroad. The questions of velocity of motion, of momentum, of the structure and fibre of material are those of solid, hard fact. They do not depend upon the favorable feeling of this or that set of men, or of this or of that interest. Better meet questions fairly. The traveller cannot be carried 40 miles an hour as safely as he can be carried 20 in the same time. He cannot be carried as cheaply at the former speed as he can at the latter. if he will go at the high rate, tell him there is hazard in it as there really is. Make him pay for it as he really ought to, and when honestly appealed to will be willing to do.

These are the difficulties of the Hudson River railroad. The public has been allowed to expect too much. Forty miles an hour at one cent a mile, and everybody be pleased besides, is no easy matter.

Steamers on Lake Erie.

At the yard of Messrs. Bidwell, Banta & Co., there is now on the stocks, and will soon be ready to launch, two of the largest class steamers for Arthur Edwards, to run in connection with the Michigan Southern Railroad Co., between Buffalo and Monroe. Their dimensions are:

Length of keel	302 feet.
Depth of hold	13 "
Breadth of Beam over all	64 "

1,200 tons burthen.

They are of beautiful model, will be propelled with low pressure beam engines of great power.

They will be out early in the season, and it is expected, for beauty and speed, they will out-strip anything yet put afloat. One of them is to be under the command of Capt. R. Wagstaff, and the other Capt. A. D. Perkins.

New Hampshire.

Wilton Railroad.—Directors for the ensuing year—Daniel Abbott, President; Joseph Greely, Zedediah Shattuck, and John Reed, Nashville; Wm. Ramsdell, Milford; C. C. Boutwell, Hancock; and David Whiting, Wilton. I. Hunt, Treasurer, Charles Lovejoy, Clerk. A semi-annual dividend of 3 per cent on the capital stock was paid,

The Virginia Central Railroad.

In the report of Col. Garnett, Engineer of the Virginia and Tennessee railroad, to the stockholders of that company, a large share of his attention is devoted to the Central railroad.

It is to be regretted that the advice which he gives to our commercial towns, not to wage a war of rivalry with each other, should not have been made the rule of his conduct in relation to the other railroads of the State. If his zeal and energies had been confined to the building up of his own road, instead of the pulling down of others, his course would have been commendable; but the desire of his company to monopolize the business of the whole valley of the Ohio and Mississippi, has led to the commission of gross errors in relation to the Central line, most of which has been very ably exposed by Mr. Shaw in his letter which accompanies this.

He makes a comparison of distance, extent of road to be made, and grades. He works out a difference of seven miles in his favor, on a line of four hundred and sixty miles, by stating the distance from Richmond to Staunton four miles longer than it really is; and if he had erred to the same extent in setting down any of his distances too short, then the Central line would have the advantage in distance, (which I firmly believe it has,) on a final location.

There is an entire omission of the subject of curvature, an obstacle to the power of the locomotive, quite as formidable as that of grades. It will be seen that Mr. Shaw has triumphantly vindicated the line from Covington to the Ohio, from the attack on the subject of grades, and from what I have heard, an expose of the curves on the Virginia and Tennessee line will develope for the Central line a decided advantage on that point also.

But suppose the Virginia and Tennessee line did have the advantage in grades and curves, or even a few miles in distance, all of which I think is the reverse, can it be possible that the great interests of Central Virginia, commercial, mineral, and agricultural, are to be sacrificed to such trifling considerations? I presume the Legislature of Virginia will enquire how these important interests are to be subserved—that *it will not be a mere question,* how *the foreign trade and travel are to be passed through the State to a foreign market.* I think, however, even that also can be better done over the Central line, at the same time that *larger interests in the State will be benefitted.*

Mr. Shaw has shown that Richmond will be far more interested in the Central line, than the Southwest line, as the trade from the Virginia and Tennessee road is likely to go to Norfolk. Is Alexandria altogether to be overlooked? Are the Manassas Gap, and Orange and Alexandria railroads both to be abandoned?

But let us return to the subject of distance, and the excess of new road to be made on the Central railroad line. *To my great surprise,* Col. Garnett puts it down at ninety-two and three-fourth miles (92¾ miles.) How is this startling result arrived at? He says "the stock is already provided, and a large portion of the work is done for a road from Richmond to Christiansburg, within seventy-seven and a fourth miles of the mouth of the Greenbrier," and proceeds to say: "Suppose the Central road to be completed to a point 16 miles west of Charlottesville, this is within 170 miles of the mouth of the Greenbrier." Have the Virginia and Tennessee company really funds enough in hand to complete and equip their road to Christiansburg? Of course we presume so, if that is what Col. G. means to say. But as to the Southside railroad, I am confident he is mistaken. I have been informed that they have to provide for 30 or 40 miles next to Lynchburgh, embracing some very serious difficulties in making a connexion.

The limitation of the means of the Central railroad company for completing their road "to a point 16 miles west of Charlottesville," is calculated to excite great astonishment.

The road is all under contract to Staunton, and so far progressed to completion, that it is expected to be in operation to that place in the next year, with the aid of a short portage over the Blue Ridge at the Tunnel, and for this extent of work, the company is amply provided by the means in hand, or reliable subscription. The stockholders at their last meeting, considered that they were justified in placing 35 miles beyond Staunton under contract, and accordingly the work is advertised to be let for that distance on the 18th instant, which is half way to Covington. It is very strange that Col. Garnett should have overlooked these facts, and have located the Central road as completed only "sixteen miles west of Charlottesville."

Mr. Shaw, in his letter which accompanies this, makes it appear that there is but 4¼ miles in favor of the Virginia and Tennessee road, and the Engineer having charge of the location between Staunton and Covington, expects to reduce the distance below what is now estimated. Very respectfully,

E. FONTAINE,
President Va., Central Railroad Company.
December 15th, 1851.

CHARLOTTESVILLE, Dec. 13, 1851.

Col. E. Fontaine:

DEAR SIR:—I have just been favored for the first time with a look at the entire report of Col. Garnett, on the Virginia and Tennessee railroad. It contains some erroneous statements, which it is important, for the interests of the Central road, should be corrected.

The first is but a small matter, but, neveitheless, might as well be corrected at once.

The distances from the mouth of Greenbrier by my surveys, and those for the Central rond, are as follows:

From the mouth of Greenbrier to Covington	76 miles.
From Covington to Staunton	70 miles.
From Staunton to Richmond	136 miles.
	282 miles.

By Mr. Garnett's own statement, on which the estimated distance from Lynchburg to Richmond is no doubt the shortest possible, as is mine from Staunton to Covington, the distance from the mouth of Greenbrier to Richmond is 278¾ miles, making a difference of 4¼ miles only in favor of the Virginia and Tennessee railroad.

In the paragraph which follows the comparison of measured distances, as well as in a former one, he admits the ruling grades on the Virginia and Tennessee road to be 60 feet per mile rising eastward, and 68 feet per mile falling in that direction; and then rather hastily assumes the ruling gradient on the Staunton and Covington road to be 105 feet per mile both ways. As you have no such grades on your road, it is but fair to presume that allusion is here made to the transit of the Allegheny, on the proposed Covington and Ohio railroad. Here, however, I take issue with him.

Mr. Garnett very well knows that obstacles to railway transportation, where collected into a very short space, are much less formidable than if diffused over the whole extent of the road. Can he not see the great difference between a single five mile gradient of 105 feet to the mile, and 5 gradients of 1 mile, each having the same rate of grade, but dispersed to sundry points of the road?

The latter system would require five assistant engines, each of them standing with steam up idle four-fifths of the time, while the former system would require but one assistant engine, which would be at full work and do as much as the five.

A gradient is not called the ruling gradient except it limit (or rule) the load to be transported.—If grades are distributed as in the latter system, and assistant power is not employed upon them, then they may with propriety be called the ruling gradients; but where a single heavy grade occurs on any line of road, and spare power is provided to overcome it, it is an Exceptional Gradient; and the more active the trade the more profitable are such gradients, as all fractions of labor are thus husbanded. On the Covington and Ohio railroad, between the mouth of Greenbrier and the town of Covington, the ruling grade going eastward is 40 feet per mile, and westward 50 per mile. Leaving the exceptional gradient at the seven-mile pass of the Allegheny to be discussed hereafter, we will compare the Covington and Ohio with the Virginia and Tennessee road.

Taking Col. Garnett's own table of the performance of a given engine on grades of 60 and 40 feet respectively, the weight transported will, on the

latter, be 202 tons, while on the former it will be but 144 tons.

Grades of forty feet then require but seven-tenths of the power requisite on grades of 60 feet, or, what is plainer, locomotives on the first system of ruling grades will do the work of 10 such engines on the latter.

As for the exceptional gradient of 105 feet per mile, its value as an obstacle is easily computed.

Col. Garnett speaks in the paragraph just preceeding his tables of power, of applying, in a comparison of the Baltimore and Ohio with the Virginia and Tennessee road, "the rule generally used for assigning to a certain amount of ascents and descents, on a road, their equivalent in distance."

The rule of Messrs Latrobe and Knight is to divide the sum of the ascents and descents by 52 8-10, the quotient giving the number of equivalent miles of level grade.

My report of last year announces another, and I think a more philosophic rule, too long to repeat.

The Allegheny inclines are 5 miles of 105 feet per mile ascending from the east, and 2 miles of 92 8-10 feet per mile descending towards the west. Equating the grades both eastward and westward, by my own rule, the average equated excess of distance will be 14¼ miles. By the rule of Latrobe and Knight the equivalent excess of distances will be 13 56-100 miles. If now we suppose this same mountain to have been graded with Col. Garnett's gradients, 5 miles at 68 feet per mile on the east side, and 2 miles of 60 feet per mile on the west, and if we again apply both rules to an equation of the grades, the equivalent excess of distance by my own rule will be 8 miles, and by that of the other engineers 8 7-10 miles.

The advantage then at that mountain of Col. Garnett's system of gradients over the one adopted, would be 6¼ miles by my own rule, and 4¾ by that of Messrs. Latrobe and Knight.

The high exceptional gradients then at that point give to the general system of Col. Garnett an advantage at most equal to but 6¼ miles of distance. On the other side, I claim for the Covington and Ohio railroad the advantage of being able to transport on all other points of its line, nearly 50 per cent more, with the same power, than can be done on the Virginia and Tennessee road.

Col. Garnett will probably endeavor to get rid of this difficulty by asserting, that the comparison must be made throughout, from the mouth of Greenbrier to Richmond. This I would be very glad if he would do by a comparison of profiles on the entire of both routes, and equating the grades throughout. Of the 282 miles, from the mouth of Greenbrier to Richmond, there are but 100 miles altogether which do not occupy very level ridges or gentle river bottoms. Whatever advantage might result to the Southside connection from the goodness of the grades on the Southside railroad near Richmond, will be lost on all the frequent undulations of the Virginia and Tennessee road at the west end, and in the occurrence of 50 feet gradients adverse to the heavy trade on the Danville road on approaching Richmond, after it crosses the Southside road. At Covington, however, all the heavy tonnage will have an opportunity to take the canal, with the important advantage of water transportation for 90 miles more than the same tonnage if conveyed to Lynchburg on the Virginia and Tennessee road.

It will not do, however, to permit Col. Garnett to deceive himself with the expectation that Richmond can be made a point in the through transit of passengers from the great west. As soon expect them to go around by the North Pole.

The Central road could command the whole western travelling towards the seat of the General Government as far as Gordonsville (394 miles) but no further. Thence it must pass on to the Orange and Alexandria railroad by a route 70 miles shorter in measured distance, than by the Virginia and Tennessee railroad through Richmond. In equated distance the difference would, I am persuaded, be greater.

As Col. Garnett seems to concede the propriety of this mode of comparing routes, and as it has elsewhere been stated that the distance, via the Parkersburg and the Baltimore and Ohio railroad, is but 580 miles to Baltimore, while by way of the Central railroad and Richmond it is 760 miles, it becomes worth while to examine that argument.

If the grades on the Baltimore and Ohio railroad be equated from the north branch of Potomac to the western base of the Laurel Moantain, and the same be done at the Single Summit, existing at the Alleghany Mountain on the Covington and Ohio railroad, there is an excess of equated distance in favor of the latter road, of 60 miles. To this add the 70 miles cut off from the Richmond route at Gordonsville, and the 180 miles advantage of the Baltimore road will be reduced to 50 My own knowledge of the country to be traversed by the Parkersburg branch enables me to assure you that an equation of grades would much more than annihilate that difference. Thus from Cincinnati to Baltimore, the shortest route would be by the Central road.

The substitution of the Virginia and Tennessee, and its branch down New river, for the Central road, must have the certain effect of directing the whole western travel to the Baltimore road, and the branch of the Virginia and Tennessee to the Ohio will have been made in vain. On the other hand exists the certainty that the Central road could command that travelling, and that the profits derived from it would greatly reduce the cost of tonnage traffic to Richmond, and enlarge the sphere of its inland commerce.

By the Virginia and Tennessee railroad the trade of the Southside and James river, and whatever trade it can command, is doomed eventually to pass by Richmond and take shipping at City Point or Norfolk.

From Burke's to City Point by the Southside railroad there will be no grade adverse to the preponderating traffic exceeding 15 feet per mile, while from the same point via the Danville road to Richmond are adverse grades of 50 feet per mile. The distance, moreover, from Burke's to the deep water of the James at City Point is no greater than from Burke's to Richmond, leaving it scarcely a matter of doubt that the trade would eventually take shipping there. Does not the Southside railroad, moreover, cross the Danville below grade, thus creating an additional obstacle in the trade of Richmond?

It is important to Richmond to prosecute the Central road as a means of diverting the trade of the west from such a destiny.

The prospect of a railway to the deep water of York river must be resumed. A place would then spring up which would be the Piræus of Richmond, and would confer on it advantages unknown to any other southern city. I subjoin some statements in confirmation of this:

From Staunton to Baltimore via Winchester	218	Miles.
From Staunton to Baltimore by Alexandria	196	"
From Staunton to Richmond, 136 mls } From thence to York River, 40 mls }	176	"
From Baltimore to Capes of Virginia	200	"
From York river to Capes	60	"
From Staunton to the Capes of Va. via Winchester	418	"
From Staunton to York river via Richmond	236	"
Excess in favor of Richmond over Baltimore	182	"
Excess in favor of Richmond over Alexandria	114	"

The execution of the York River railroad will forever preclude all the danger of the tonnage traffic leaving the Central road at Staunton for Baltimore, or even at Gordonsville for Alexandria as a point on York river approachable by vessels of any burden, lies from one or two days sail nearer to the continent of Europe, as well as nearer to the Western States of the Union.

It belongs to yourself to defend your road from Mr. Garnett's charge of being only a local road, and terminating 16 miles west of this place. I have seen the work in progress, nearly all the way to Staunton, and seen a notice that you intend next Thursday, to let the grading and masonry 30 miles beyond that point—as well as by a recent resolution, it is to be laid with the heavy rail throughout. Such things are however easily ignored, when it suits one's interest to overlook them.

The lateness of the hour obliges me to close, as I cannot otherwise put you in possession of these reflections, without more delay than would be advisable, while the mind of the public is abused with the peculiar reasonings of Col. G.'s report.

I remain your obedient servant

CHARLES B. SHAW.

New York and Erie Railroad.

REPORT.

To the Stockholders of the New York and Erie Railroad Company:

The board of directors have the satisfaction of congratulating the stockholders upon the opening of the entire line of the Erie railway, since the date of their last report.

On the 22d of April, the first train of cars containing the officers of the road, passed over the line from Piermont to Dunkirk; and on the 15th of May the event was celebrated at the latter place, honored by the attendance of the President of the United States and a portion of his Cabinet, and a large number of other distinguished guests.

Thus, within the period prescribed by law, without asking any indulgence or special legislation from the State, the board have complied with the requirements of the act of 1845, and the State lien of three millions of dollars has been cancelled and extinguished.

The road was opened for travel in the middle of May, but was not in effective operation until the latter part of the succeeding month.

Since the opening of the road, there have been added to it as lateral roads or feeders, the Canandaigua and Corning, connecting with the Chemung at Jefferson, 45 miles. The Lackawanna and Western, connecting at Great Bend, 50 miles. The Buffalo and State Line road, and the Erie and North East road, connecting at Dunkirk, 46 miles. Total of connections, 141 miles; and there is now under way, and in immediate course of completion, the Buffalo and New York City road, 90 miles; the Conhocton Valley (133 miles), 52 will be in operation in April. Total of connections to be brought into use, before and during the spring, 142 miles—giving as a total, 283 miles of railroad connections or feeders, pouring into the Erie the freight and passengers contiguous to the country through which they pass, and of other roads which they themselves intersect, or of which they are continuations. In reference to the projected roads alluded to in former reports, all of them are in a state of progress, but may not be finished during the year.

The estimates of the board of the earnings of the road for 1851 have been exceeded, while the cost of running has fallen within the estimate.

The receipts of the road for 1851 are as follows:

January	$144,909 30
February	125,105 20
March	163,400 99
April	189,149 51
May	174,345 12
June	224,722 44
July	228,460 33
August	263,964 13
September	306,888 96
October	356,553 21
November	299,420 40
December, est	300,000 00
	$2,776,919 59
The estimate, see last years report	2,771,333 00
	5,586 59
The estimated expen. were 1,385,667	
They will be, estimating November and December, including ferries and steamboat service on Lake Erie 1,377,977	
	7,690 00
Excess over the estimate	13,276 59
The cost of the road when completed to Lake Erie, was estimated in the last report at about	$20,500,000
It is ascertained to be	23,580,000
Excess over estimate	3,080,000

An explanation of this discrepancy is due, and the board having nothing to conceal, desire to make it. The engineers in submitting their report to the directors for constructing the road from Hornellsville to Dunkirk, western division, estimated the cost for building 128 miles at $2,123,289, and for right of way $50,000. It proved on final settlement of accounts to be $3,526,657 38.

Difference		$1,353,368 38
The convertible bonds issued last spring for $3,500,000, sold at 90 per cent, making a difference of	350,000 00	
Locomotives and cars over estimate	500,000 00	
Buildings id New York	90,000 00	
Wharves and buildings in Dunkirk	109,000 00	
Fences built during 1851, 300 miles	200,000 00	
Subscription to Buffalo and State Line road	250,000 00	
	2,852,368 38	

The chief part of the discrepancy is accounted for, however, by the company's being obliged, in order to get the road through in time, to incur increased expense, in driving the work day and night amid frost and snow; in being compelled to assume work which the contractors were unable to perform; and in the heavy expense attending the transportation of materials for the superstructure. The propriety or policy of doing in one year what it has taken other roads two or three to accomplish, will not be doubted when it is considered that the loss of interest alone would be 14 per cent, to say nothing of having two years' benefit of earnings to the treasury. The total cost of the Erie railroad, including 60 miles of double track, sidings and turnouts, wharves, locomotives, cars, stations and property of every description (excepting $250,000 Buffalo and State Line stock) is $50,172 per mile, or, exclusive of engines, cars, steamers, stations, etc., $43,333 per mile. Although this is more than the directors hoped and believed it would be, it is still about the average cost of all the railways in the State of Massachusetts, which by last year's report was stated at $49,573 43 per mile, and within the cost of nearly all the following, viz:

	Per mile.
The cost of the Western railroad was	$69,190
" Old Colony "	50,961
" Fitchburg "	53,498
" Eastern "	53,882
" Cheshire "	51,088
" Boston and Worcester	71,175
" Boston and Providence	64,457
" Boston and Maine	47,659
" Boston and Lowell	72,060

and less than the average cost of many of the important roads of this State.

The company have leased from the corporation of the city of New York, the square at the foot of Duane street, on which they have erected a large block of buildings, in a portion of which their offices are now located. The whole building will in a few years be required for their business. These buildings cost, including fixtures, about 80,000 dollars.

But it is not the intention of the directors to solicit forbearance of censure, if any is deserved; they acted up to their best judgment and ability, and, under the circumstances, would not act differently were it to be done over.

The present floating debt of the company is 3,080,000 dollars; it has not been increased since October, when it reached its maximum.

To pay this floating debt, and to aid in building 100 miles of double track from Great Bend westward, the company propose to issue bonds payable in ten years (the remaining unissued stock, 4,500,000, being as yet unavailable) convertible into stock, and bearing 7 per cent interest.

The portion of double track which the company propose to build is of easy grade and construction, and can be built at the rate of about ten thousand dollars per mile; and is imperatively required by the increasing business of the road.

The directors are able to state to the stockholders that for the construction of the 100 miles of double track, they can make available, and on terms advantageous to the company, a sufficient portion of the capital stock to insure its immediate completion.

The security for the payment of all the company's obligations, and all the money they propose to borrow, is ample and indisputable.

The company owns 465 miles of railroad. Cost			20,150,163 56
132 locomotives	Cost	1,118,152 96	
72 passenger cars		178,290 84	
1505 freight and emigrant		864,986 44	
4 barges		16,249 87	
2 steamboats		101,154 11	
Depots		382,868 03	
Water stations		129,094 80	
3 machine shops		136,248 01	
Machinery in do		59,133 00	
Duane st. pier		10,426 69	
Buildings & depot, West street		80,667 37	
Wood on hand		154,750 00	
Materials on hand		197,824 32	
Telegraph, cash on hand and debts due		170,000 00	
			3,599,836 44
Stock Buffalo and State Line road			250,000 00
Total			24,000,000 00
Bonds already issued		14,500,000	
Proposed issue		3,500,000	
			18,000,000 00
Stock issued			$6,000,000 00

Thus taking the road and its appurtenances at cost, there is a security of the whole issued capital stock to meet any contingencies, but in fact there is the security of a road that, in the first six months of its operation, has earned an interest at the rate of over ten per cent per annum on its entire cost.

It will be observed there is no estimate for depreciation of property. There is none. The whole line of the road is in better order and condition than it has been at any time, and vastly counterbalances the wear and tear of locomotives, cars, depots and piers combined.

Some apprehensions existed in the minds of those who were not informed on the subject, in regard to the harbor of Dunkirk. The directors are happy to inform the stockholders that the steamers running in connection with the road, have not failed in entering the harbor in a single instance, and the depth of water is sufficient for the largest steamers on the lakes; and with an appropriation of $50,000 by the general government, and an extension of the company's pier and wharf, already demanded, it will be as competent and safe as any harbor on Lake Erie.

At the time of making our last report, measures were in progress by individuals, friends of the N. York and Erie railroad, to build an independent line of railroad from Dunkirk to the State line of Pennsylvania, to prevent the partial or total diversion of the trade of the great west to another road along the lake shore. To obviate the consequences of two rival and parallel lines, a compromise was subsequently agreed upon, and the two rival interests were united, and this company agreed to join in building a neutral road, to subserve the interest of both, and for that purpose have furnished $250,000.

The total amount of double track, sidings and turnouts on the main line, and Newburgh branch, is 60 miles, of which 20 miles have been laid down this year.

The transportation expenses of working the road, it will be seen, are forty-eight per cent, and the directors confidently expect to reduce them below this sum in future. The construction of the proposed double track, will materially aid in accomplishing this result.

In estimating the receipts of the road in the report of last year, the earnings of 1852 were put down at $3,735,198. The results for the past six months justify the directors in raising the estimate to $4,000,000. Deduct running expenses, 48 per cent, $1,920,000, and it leaves $2,080,000 to pay interest on $18,000,000 of bonds, at 7 per cent, $1,260,000; and a balance of $820,000 for dividend on stock, equal to 13⅔ per cent.

The directors have declared a dividend of 4 per cent on the capital stock, out of the net earnings of the last six months, payable on and after the 12th day of January next; and they deem it proper to publish the report of the committee on which they have declared this dividend. It is appended to the report. It requires no comment or explanation, and they have only to remark, that sanguine as have been their expectations with regard to the great public utility of the work, to the city, to the state, and to the whole country, and in its present and prospective value to the stockholders, they have been in no wise disappointed. Their hopes have never been brighter nor their faith stronger than now, and in the judgment of the board the entire and complete success of the New York and Erie railroad has ceased to become, if it ever was, a problem.

The directors are happy in congratulating the stockholders, creditors and friends of the road, on the auspicious result of this great enterprise thus far developed. However much they may have fallen short in their estimate of the cost of construction, they have not fallen short in their estimate of its importance and of its profitable returns. They feel a degree of satisfaction which almost compensates them for the anxiety, labor and pecuniary responsibility to which they have been subjected, but they have held on in full faith in the work itself. Had they imagined in the outset the amount of labor, anxiety and inconvenience, and, in some instances, abuse, they would have to encounter, they would have shrunk back from the task; but the stockholders have sustained them by their confidence, the public have cheered them by their support, and the press have stood by them manfully in the struggle, and they have given to the Empire State the Empire road. The directors feel that it is an honor to have been connected with its construction, and they have the satisfaction of knowing that they have earned the confidence and support which has been so generously extended to them.

By order of the board of directors.

NATHANIEL MARSH, Secretary.

New York, December 24, 1851.

REPORT OF COMMITTEE ON DIVIDEND.

The committee appointed to examine the affairs of the company for the past six months, with reference to a dividend on capital stock, in January next, report:

RECEIPTS.

1851—July	$228,460	
August	263,964	
September	306,888	
October	356,553	
November	299,420	
December, est	300,000	
		1,755,285

EXPENSES.

1851—July	$120,545	
August	110,475	
September	117,636	
October	135,000	
November, est	125,000	
December, est	130,000	
	738,656	
Expenses Lake Erie Steamers	90,000	
		828,656
		926,629
Deduct 6 months' expenses general office		9,600
Net revenue		917,029

INTEREST TO PAY.

$3,000,000 first mortgage bonds	105,000	
4,000,000 second "	140,000	
3,500,000 income bonds	122,500	
3,500,000 convertible bonds	122,500	
500,000 certificates	17,500	
Interest on floating debt	97,222	
		604,722
Balance for dividend		312,307
$6,000,000 stock, four per cent, dividend would be		240,000
Balance unapplied		$72,307

$580,000 for locomotives not included in floating debt.

Submitted December 20, 1851.

CHAS. M. LEUPP,
C. SMITH,
DANIEL S. MILLER, } Committee.

Ohio.

Columbus, Urbana and Piqua Railroad.—We give below an account of the above road, copied from the Ohio State Journal. the Editor of which has the best possible means, from personal observation, of knowing the condition and prospects of this road.

We are gratified in being able to state that this road, alike important to our city and all Central Ohio, is, under the supervision of its efficient directory, making rapid progress to completion. Active operations for the construction of this road were commenced only some eighteen months past. During that time, it will be remembered, owing to a variety of causes, it has been difficult, in almost every part of the State, to obtain subscriptions to Railroads. Apprehensions, in which we confess we have not fully participated, have been entertained by many persons, that the number of projected Railroad enterprises was great, that few, if any, would prove to be profitable investments, and that serious consequences, in various forms, would result from their prosecution. Be this as it may, neither the croaking nor the fears of this class of persons have, so far as we know, been directed against the Columbus, Piqua and Indiana road, or if so directed have they had any effect on its progress. Its career from the start has been eminently prosperous. Passing through a country of unsurpassed fertility, embracing within its immediate sphere of influence nearly one-tenth part of the entire population of the State, and more than that proportion of the taxable property of the State, intersecting on its line and connecting at either terminus with important channels of trade, as well Railroad as Canal, its merits have been so obvious, and the prospective value of its stock so certain, that it early secured and has constantly retained the confidence of all whose interests are in any way connected with the country through which it passes. So vigorous is this enterprise being prosecuted that we have every reason to expect the entire line to be ready for the iron by September next. Indeed we do not see how it can be otherwise. To that end, we are assured, the most determined efforts are being made. Contracts for all the earth-work and masonry have been entered into, and the contractors are pushing the work with the most encouraging energy. Contracts too for a large portion of the ties, which we are glad to learn are to be of the most durable material. have been concluded, and the bridging, if not already let, will be contracted for within a few days. But more than this. We have just learned, from an authentic source, that contracts have been closed for the purchase of all the locomotives required for commencing the business of the road, at the lowest cash prices, to be paid for in the Company's bonds at their par value. From this brief exhibit of the affairs of the Company, it will be seen that nothing remains to secure the speedy completion of the road, but the procuring the necessary iron, and a small part of the rolling machinery. To obtain these active efforts are now being made by the directors. We cannot doubt their early success. The financial resources of the company, as shown by a recently published statement of its President, furnishes the most satisfactory assurances of its ability to promptly meet all engagements necessary to be entered into for purchase of iron, etc. Indeed we doubt if any similar enterprise in the Western States ever offered ampler guaranties for the payment of its liabilities than does this company present for securing the bonds we learn it proposes to issue for the rail and machinery necessary for the road. The road is wholly unincumbered from liens of any sort; the company owns, for depot and other purposes, a large amount of valuable real estate, and means, in the form of money and reliable subscription, corporation and individual, are provided for preparing the entire line for the iron, and as the company have determined not to charge the road with any lien except as a security for the bonds to be issued for the iron and machinery, we repeat we have no doubt they will soon be procured, and that within a short time, say eighteen months at the farthest, the road will be finished, and the capitals of Ohio and Indiana be connected by a continuous first-class Railway. That will be a cheering epoch in he history of our rapidly growing and prosperous city. May success attend the road.

Ohio.

Railroad Convention—A delegate convenvention, representing sundry railroad interests, in Eastern Ohio, from Warren to Marietta inclusive, was held in Steubenville on the 11th ult., for the purpose of consulting in reference to connecting the Cleveland and Wellsville railroad with the Baltimore and Ohio road at Wheeling. The convention was large and respectable, and the proceedings were characterized with great unanimity. It was, among other things,

Resolved, That it is expedient to construct said road from Wellsville to Bridgeport on the Ohio river, at the earliest possible day.

The following resolution was offered, and adopted:—

Resolved, That the completion of the Ohio river chain of railway, by which the great bends of the Ohio river, in the State of Pennsylvania, Virginia, Ohio and Kentucky, will be cut off by the continuation of the "Marietta and Cencinnati railroad" to Wheeling, with a view there to connect with the city of Philadelphia, is a project of the first magnitude and importance to the city of Philadelphia, as well as to the Great Central Pennsylvania railroad, and merits the cordial co-operation and aid of each, inasmuch as it is an extension of the shortest and most direct railroad communication between the interior of the States of Kentucky and Tennessee, and the city of Philadelphia, by means of which the trade and travel of these States destined to that city will be brought to the Pennsylvania railroads, adding immensely to their revenues, otherwise taking a more Southern and longer route from the Ohio river to the Atlantic coast.

Railroads in the Provinces.

A meeting was recently held at St. John, New Brunswick, to take into consideration the subject of the proposed roads in the Provinces, at which the following resolutions were passed:—

Resolved, That this meeting considers that a railroad undertaken commensurately with the means of the Provinces, and passing through districts promising the most traffic, and the least expenditure for construction, is indispensably requisite for the improvement and prosperity of New Brunswick.

Resolved, That it is the opinion of this meeting that the route of a railroad from Halifax to Quebec, through the Valley of St. John, presents the best prospect of advantages both as respects remuneration and general convenience, and that no other route should be entertained by the Legislature.

Resolved, That it is the opinion of this meeting that Mr. Howe's railway scheme, by which, as it is understood the people of this Province will be called upon at their own risk to construct 217 miles of the Halifax and Quebec railway, by way of the north shore, presents no reasonable prospect of paying a fair rate of interest on the investment required, nor of affording either directly or indirectly any adequate benefit to the Province generally; *and further that it is the opinion of this meeting, that railroads in this Province should not be undertaken by the Government.*

Resolved, That in the opinion of this meeting any Representative of the City or County of St. John, who shall advocate the construction of the Halifax and Quebec railroad by way of the north shore, will in so doing be acting adversely to the general interests of the Province.

The meeting was well attended. and we believe that there is a probability that the ground assumed will be sanctioned, when the Provinces come to act. The change proposed, converts Mr. Howe's scheme from an impracticable into a practicable, and perhaps into a paying line.

The true question for the Provinces to ask themselves is this, what route would business men adopt, who should undertake the road as a matter of investment? No other route can safely be taken, nor are the Provinces justified in entertaining any scheme that practical men would not undertake and carry through, had they the means.

Progress of our Railroads.

In another column we give the number of miles of railroad in operation and progress in the U. S. We see no probability of any abatement in new projects. The railroad is to become the common highway for the farmer, as well as the manufacturer, and merchant. No well settled portion of the country will remain contented without the conveniences that they afford. No State is yet fully supplied with them. Connecticut, which bids fair to have the greatest extent of line in proportion to her area, is prosecuting new work with energy and vigor, which, when completed, will make her a perfect net work of railroads. At the same ratio per square mile, Virginia should now have 9000 miles of railroad in operation within her borders. As it is, Connecticut with 4000 square miles of territory, is far ahead of Virginia, with 65,000! The construction of railroads will never cease so long as any portion of our country is not well accomodated in this respect.

At the present time New York stands far ahead of all her sister States in extent of line in operation. We believe however that she will in time be eclipsed by the Ohio. There is not much difference in the area of the two; but railroads are much more needed in the latter. Every portion of her territory is well adopted to cheap construction, which is not the case with New York. The former has a much more fertile soil, much greater mineral resources, and is capable of sustaining a much denser populatien. But both Ohio and New York may in the end be compelled to yield the palm to Illinois, in consequence of the greater extending territory of the latter, of her vast resources, in which she is not excelled by any State in the Union.

Alabama Legislature.

Internal Improvements—Mr. Philips, from the committee on Internal Improvements, reported a bill to promote the prosperity of the people of Alabama, by developing the agricultural, mineral, manufacturing and commercial resources of the State. The bill provides for the following distribution of the State funds or credit:

$10,000 for Geological Survey.

$20,000 to remove obstructions in the Tombigbee river.

$200,000 to the Gadsden and —— railroad.

The Governor to endorse bonds to the amount of $500,000 each, for the following roads:

Memphis and Charleston railroad.
Selma and Tennessee railroad.
Mobile and Ohio railroad.
Montgomery and Mobile railroad.

New Orleans.

It is well known the city of New Orleans is now making vigorous exertions to open Railway communication with the neighboring Southern and Western States. One of the most important of the proposed lines is the one through Mississippi to Nashville, Tennessee. For the purpose of securing the co-operation of the latter State, a delegation from New Orleans, headed by Hon. James Robb, recently visited Nashville, where he presented the objects of his mission to the Legislature of the State, which is now in session. Below we give the substance of his remarks, copied from a Nashville paper.

Mr. James Robb, the chairman, and on behalf of the delegation, responded to this invitation, and on Tuesday evening, delivered, in the Hall of Repre-

sentatives, an address that was characterised by good taste and very enlarged views on the subject of internal improvements, agriculture and manufactures, and which we are glad to perceive is awakening a wide-spread spirit of interest and enthusiasm in all the States of the Southwest.

Mr. Robb opened his remarks by thanking the Legislature for their courtesy and hospitality, on behalf of the delegation and the citizens of New Orleans, whose interests they were here to represent. He observed, and he felt that he was appearing before the people of Tennessee, in an attitude that was novel and embarrassing, that he came among us on behalf of his city, to invite the Legislature to grant a charter for a Railroad from Nashville to the State line, to connect with a road from New Orleans. That in making this request, he felt great humility in having to admit that New Orleans had not, at the present moment, even commenced her portion of this great work. Mr. Robb proceeded to explain some of the causes that had been operating to discourage enterprise in Louisiana—he alluded to the cession of the Territory in 1803, that we had found its inhabitants differing from us in language, laws, and customs, that they had been influenced in their progress by institutions and laws derived from Spain and France, laws only adapted to a colonial condition of government, and at variance with the genius and character of the American people. He paid a glowing tribute to the loyalty of the descendants of the French population to our government, and that while their history had furnished no memorials on an active enterprise and progress, that have distinguished other portions of the Union, they were not less patriotic in all their impulses, and less interested in such measures as would promote the prosperity and exalt the character of their State.

Mr. Robb alluded to the trammels imposed by laws now prevailing in Louisiana, and declared his convictions that the feeling now awakened among the people of the State, offered every assurance that these laws would speedily be amended and changed; he pledged himself that this reform would be immediate, and that the great work he advocated would be commenced and carried through to completion; and he urged on the Representatives of Tennessee to take him at his word, and come forward in the spirit of manliness and liberality that characterised their people, and grant the necessary charter, and aid to complete their portion of the work. He explained the great interest Tennessee had in making a Railroad connection with Louisiana; that it would open new and extensive markets for their mineral and agricultural products, and while her immense mines of iron were almost untouched, they would speedily, and under an enlarged system of Railroad enterprise, connecting her with the vast country lying South of her borders, be worked on the largest scale, and in time secure to the iron of Tennessee the exclusive supply of this valuable market. The agricultural capacities of the country, lying between Tennessee and the Gulf of Mexico, were on the largest scale, they only need the agency of Railroad communication to encourage a rapid development, and that in proportion to the increase of population and wealth in that region, Tennessee, more than any other State would be benefitted, that she stood as a frontier barrier against competition.

Mr. Robb assumed that the progress of manufacturing would be encouraged by Railroads—that Louisiana and the country South of her borders furnished a market that was rich and valuable—that they would become the best customers of manufactories in Tennessee—he reviewed the fortunate location of the State, in climate, abundance and cheapness of provisions, that a manufacturing and industrious population would be attracted by these inducements, as soon as speedy communications were once established. He stated that manufacturing enterprise in the North had achieved wonders, that while the system had grown up under the patronage of government, and at our expense, it had nevertheless wrought public benefit, but that this benefit would be lost unless the South applied herself diligently in appropriating the skill it had brought into the country.

Manufacturing power in the North controlled every interest in the country, through its connexions, and concentrated in the Northern cities a complete domination over the capital, industry and commerce of the nation; that the South was a great tributary to this mighty power, and would ever remain so, unless they would profit by the example of the energy and enterprise of the North, and encourage within its own borders undertakings that are wise and useful. Mr. Robb spoke with energy of the necessity of overcoming the inertness that had characterised the policy of the past; and to do this, all personal and selfish calculations must be set aside, and every step made in the progress of a great and liberal system of internal improvement, would be an advance towards regaining power that we have lost, and one vital to our independence, politically and commercially. He stated that weakness had and would continue to invite aggression, and to curb this spirit we must stand a united people, united in every interest of life and pursuit—united in a policy that would make us respected; attach our citizens more closely to our institutions. By building up Railroads, and uniting the Eastern Valley of the Ohio and Mississippi with New Orleans, emigration and settlement west of Louisiana will advance rapidly, new States will be formed out of the extensive territory of Texas, of kindred sympathies and institutions that would restore the equilibrium in our National Councils, and become a powerful agent in preserving the blessings of our Union.

Mr. Robb appealed to the people of Tennessee, whether they would allow by their inaction that the transfer for all time to come of supremacy over Southern industry and commerce should be made to Northern cities, whether it was not time to arrest the power of such a mischievous and powerful monopoly, whether the building up of marts within Southern limits should not command their serious attention. He admitted such a policy would build up and aggrandize New Orleans; but New Orleans was common ground, the whole Southwest had a stake in her fortunes; that the brightest and most endearing page in the historical fame of Tennessee was a record of a brilliant achievement of her sons at New Orleans, that had won for them and the nation immortal renown and imperishable honors. He appealed to the associations of the past, the interests of the present, and the hopes of the future, to unite with New Orleans in building up this great national work—a work that would forever connect Tennessee and Louisiana in bonds of enduring and lasting alliance.

Mr. Robb assumed that railroad connection with the Gulf of Mexico and the Southwestern States, would, while building up internal commerce, promote direct importations. That merchants in Southern cities would no longer be deterred from embarking into this branch of commerce, when the difficulty of access to their customers would be overcome. That ships now trading between New Orleans and Europe, owing to insignificant imports, were compelled to pay the expenses of two voyages out of the freights of the outward one, but give to New Orleans a railroad connection that would bring her within twenty hours of the centre of your State, and this will all be changed, and the illusions that have and do prevail on the subject of our ability to import from the countries that consume our produce will be dispelled. Besides this advantage, the Southwest have an immense interest in our newly acquired territories of the Pacific. The rich and lucrative trade that would sooner or later grow up between the countries on its distant shores, and those of the Gulf of Mexico would open a new field of enterprise that will tend to enrich us in power if we but do our duty—but let it pass and be brought under the dominion of the North, and it will give new power to strengthen their supremacy and increase our weakness.

Mr. Robb concluded his remarks by stating that he did not come armed and fortified by figures to prove that Tennessee should make railroads—he came to urge in general terms a grave consideration of interests that were decaying, of power that was departing, and hoped that the day was not distant when there would be a liberation of the energies of the entire South, and that we would yet stand redeemed before the world in the display of an energy and an activity that would advance us in the great arts of modern progress and civilization.

We do not pretend to furnish anything like an accurate report of Mr. Robb's speech, which occupied an hour and a half in the delivery. The views it presents are bold and patriotic, and such as should invite the serious consideration of our Representatives.

Kentucky.

The Great Railroad Case.—We published, a short time since, the decision of the Circuit Court of Mason county, Kentucky, sustaining the subscription made by that county, to the stock of the Maysville and Lexington Railroad. The case was carried, by the petitioners, to the Court of Appeals, where it has been argued, and now only wants the decision of that Court for its final disposition. It is a matter of vast importance, and from the general interest felt in the question, we publish below the arguments of Counsel. We shall give the decision as soon as it is made public. That it will sustain the subscription we have not a doubt. We are indebted for the Report of the Arguments to the Louisville Courier.

FRANKFORT, Dec. 18, 1851.

The argument in the great case of Slack et al., *vs.* the Maysville and Lexington Railroad Company was commenced on Tuesday, and closed on Thursday of this week. It was argued by the Hon. Ben Hardin and Hon. Thos. F. Marshall for Slack et al., and by Henry Waller, Esq., and Hon. Geo. Robertson, for the Company.

The charter of the company was approved March 4, 1850, and amendment February 17, 1851. The company was authorised, by giving a prescribed notice, to have an order from the county court of Mason providing for a vote of the people of the county on the proposition to subscribe $150,000 to the capital stock; and in the event of a vote in its favor, it became the duty of the court to make the order of subscription, and provide for its payment by a direct tax, or by a loan, upon terms at its discretion. The vote resulted in favor of the proposition; the subscription was made, the bonds of the county were issued, delivered to and accepted by the company in payment of the subscription, and a tax levied to pay the interest. The petitioners filed a petition in equity, to enjoin the taxes assessed upon them; the Circuit Judge refused the prayer, and dismissed the petition, from which decision the petitioners appealed.

Mr. Hardin opened the argument for the appellants. He contended that the tax was unconstitutional, because it was local, and because the road was not of equal advantage to all the citizens of the county—that it was a work of State interest, and that the citizens of the smaller towns and of the western section of the county were remote from and not benefitted by the road. He exhibited a diagram of the county, and referred to the vote of the different precincts to prove his position. The act of incorporation, he said, was inconsistent with the 36th section of the 2d article of the new constitution, which prohibited the Legislature from creating any debt on behalf of the Commonwealth, without providing for a tax to pay the principal and interest, and for a submission to the people of the State at the general election. This embraced *county* as well as *State* debts, as the intention was to prevent all public indebtedness. He referred to the debates of the Convention in proof.

Mr. Waller, in reply, argued that the amendment to the charter, passed subsequent to the promulgation of the present Constitution, was simply an explanatory act, regulating the details of the bonds, and attempted to confer no power to *create* a debt; that the original charter was passed before the adoption of the present constitution, and therefore is not subject to its provisions. The section relied on was not retrospective, but *prospective*, and could not intertere with a law, existing before the adoption of the new constitution and authorising a debt, even of the Commonwealth. As it was prospective, no existing law could be inconsistent with that section; and besides, the rights of eorporate bodies were expressly protected by the first section of the schedule. The section, however, did not apply to any debts other than *State* debts.

It was so expressed, and as a prohibitory clause it was to be construed strictly. The debates in

convention related only to State debts; that was the evil complained of; county debts were not mentioned. The right of counties, under a law of the Legislature, to create county debts for local purposes had been sustained by the judiciary of the country, and was the established law when the convention met; if the intention had been to restrict the creation of such debts, the fundamental law would have been so written; it was not, and therefore the construction could not be maintained. It could be no county or corporation debt of any kind could be created, except by a vote of the whole people of the State at the general election.

The issues in the case were under the constitution of 1799. By that instrument all legislative power, reserved to the separate States, and which belonged to the people of Kentucky, was vested in the General Assembly, except only such as was expressly prohibited. The whole power of taxation passed to the Legislature by this grant, and there was no express limitation upon it. The spirit of the constitution simply required that taxation shoud be *general* and *uniform*. Absolute equality in the operation of taxation was impracticable.

A tax, in the sense of the constitution, is a common burden imposed upon a community, State or local for an object common to such community, according to a general rule, and to some ratio of equality, by a body responsible in some form to the people upon whom the burden rests. The exertion of this power does not conflict and is not inconsistent with the 12th section of the 10.h article of the constitution which prohibits private property from being taken for public use without just compensation and the consent of the owner. The theory is, that in case of taxation, the owner who becomes the tax payer receives compensation through the benefits flowing from the application of the tax. The tax in this case is general and uniform upon the real and personal property of the local community. No man's property is exempt, the tax is *ad valorem*.

Although the Legislature cannot delegate any portion of its vested powers—that is of its general law-making sovereignty—yet it can confer by an act of incorporation, or by special statute, municipal and local powers to be exercised within the scope of the corporation, or the limits of the local community, for corporate or local purposes. This is not a delegation of the legislative power of the State. The *act* by which special or local powers are conferred, is itself the legislative power, which is *ipso facto*, exhausted for the occasion, and the special or local powers conferred by the act, is merely the *operation* of the law. The will of the Legislature is manifested and completed by the act; and this is altogether distinct from the execution of the power conferred by the law.

This was the principle of the case of Rice *vs.* Foster, 4 Harrington's Reports, which was relied on by the opposite counsel. The case declared conditional legislation constitutional; and local taxation by local authorities or communities, lawful. This was the doctrine of our own Court of Appeals, repeatedly adjudicated.

The Legislature having the right then to delegate the power of local taxation for local purposes, it followed as a consequence, in the absence of any constitutional prohibition, that it could create or select the agent or agents by whom the power should be exercised. In the unreported case of Churchill *vs.* the Jefferson Pond Draining Company, our court has declared constitutional a law of 1838, by which the inhabitants of a certain district marked out by the statute, within the county of Jefferson, were incorporated, and an annual tax not exceeding fifteen cents per acre imposed, for the purpose of draining the marshes and ponds of the district. Here the local tax was laid directly by the Legislature upon the local community, and the district within which it should operate defined.

By the general school law of 1838, the counties were ordered to be divided off into districts, and the *people themselves* within each district were authorised, in general meeting, to assess a tax upon the *property* and the *heads* of the inhabitants, by the vote of a majority. This act was declared constitutional, in 4 Ben. Monroe.

By the charter of the city of Lexington, a petition of the *owners* of the greater part of the ground fronting any square, authorised the City Council to levy a tax upon all the owners of the lots fronting any street, for the purpose of improving it. This was decided constitutional, in 9 Dana, City of Lexington *vs.* McQuillan's heirs.

The charter of the Paris, Winchester and Kentucky River Turnpike Company, authorised the County Court to subscribe stock in the company to a large amount, and to levy a tax in payment. This is decided constitutional, in 11, Ben. Monroe.

The charter of the Louisville and Frankfort Railroad Company authorised the Mayor and Council of Louisville to submit to the voters of the city, a proposition to subscribe stock in said company. In case of a favorable vote, it was made the *imperative duty*, of the Mayor and Council to subscribe the stock voted, and to levy the tax. *The money was to be expended outside the corporate limits, and along the line of the road to Frankfort.* In an able and elaborate opinion of the Court of Appeals, 9 Ben. Monroe, Talbot *vs.* Dent, the charter was declared constitutional and valid.

The Maysville charter is copied from the Louisville charter, as to the vote and its mandatory obligation upon the local authorities.

The Legislature, in these two charters, conferred the power on the local authorities, and commanded them to exercise it upon the condition of a favorable popular vote. The limits upon the amounts to be subscribed, the requirement of a popular vote, and the fact that the burdens would fall upon those who voted them, were the securities thrown around the power by the Legislature. The privilege of a popular vote, was no grant of Legislative power to the people. There was no tendency to a pure democracy, as the law had passed through all the forms of the constitution, and been subjected to all the checks imposed by a republican government. The dangers of a democracy were hasty and impulsive legislation without any of the deliberation or safety arising from a division of the powers of government.

The county court was a body vested with *ministerial* functions by the constitution, and it was the creature of the Legislature so far as its jurisdiction was concerned. The Legislature could therefore use it as an agent, and *require* it to do what the Legislature determined was public and right. The delegation of a trust, to be executed, did not necessarily involve discretion in the trustee as to the terms and conditions of its execution; and the Legislature might properly say to the county court, "*you shall* levy the tax," as well as "*you may* levy the tax." The power of the Legislature was supreme over this subject.

In this case the subject of the tax was *local*. The road was to run through the county, and although it might confer general advantages upon the State, yet it conferred advantages peculiar to the counties which it traversed, and which did not attach to distant counties. The test was, the interest of the local community in the work, and not the territorial boundary. This was the doctrine in the case of Talbot *vs.* Dent, and in the Virginia, Connecticut and Tennessee cases.

The current of decisions on this subject was, without a single exception in any reported American case, uninterrupted and in favor of the power.

The disproportion or extent of interest amongst the citizens of the local community was not a judicial question, as decided by our own court.

Judge Robertson followed, and sustained and enforced by a general view, the positions taken by Mr. Waller. He explained the character and influence of the system of railroads upon the country at large, and its different sections, and demonstrated the propriety of such works being executed by the counties on the line. He examined critically the section relied on to bring the charter under the operation of the present constitution, and contended that it had no possible application; that the charter was beyond the reach of the new constitution, and that even if that constitution was to be the rule under which to construe the law, the section quoted had no application to this case. He considered the whole doctrine involved in the case as *res adjudicata*.

Mr. Marshall in conclusion, re-stated, expanded and pressed the argument of Mr. Hardin upon the application of the present constitution to the case. The great object of the 36th section was to protect the commonwealth, and all its subdivisions, the people of the State and every portion of that people, from public debt, except with the restrictions therein imposed. The commonwealth of Kentucky was composed of the counties, cities and towns—the separate communities, all of them—within the borders of the State. Take away the parts, and there would be nothing left of the whole. The constitution did not intend to permit the Legislature to do by indirection what it could not do directly. If this power of creating debts for works of this description were allowed to the counties, the people of the State would be burdened with a debt far more enormous than any debt the Legislature would dare to impose directly, even if the restrictions of the 36th section were removed. Such a construction would enable the Legislature to shuffle off responsibly upon the counties, and enable them to do what the Legislature itself under the present constitution had not the power to do. This was dangerous in principle and ruinous in practice.

The amendment to the charter of the company was subsequently to the time when the new constitution was promulged, and was therefore subject to it.

The charter of this company authorized the president and directors to give notice, and say when a vote should be taken, and what amount of subscription within the limit should be voted for. It was mandatory upon the county court, which was compelled to open the polls. The company, at their pleasure, had the right to call together the sovereign people of Mason county, and require them to vote upon a proposition to tax their lands and their property to an amount fixed by the will of a private corporation. No such power was ever granted before. It was monstrous. The Louisville charter gave no such privilege to that company.—The Mayor and Council, and not the company, were authorized to give the notice to take the vote.

He would not argue against the opinions and previons decisions of the court, but contended that this case was distinguished from any other, and involved a surrender of the representative principle of the government. The county court was the local government. It was the true representative of the people for all local purposes, and the discretion as to the time, the amount, and the manner of the imposition of any tax should have been confided to them.

The Legislature had no right to delegate its law-making power in any case, or to any extent. He denied the principle totally. It was at war with the genius and structure of a republican government, and irreconcilable with the grand divisions of power entrusted by the constitution to the separate branches of the government. They were all distinct and neither branch had the right to exercise any power belonging to any other branch. If the Legislature could delegate its power, so could the Judiciary, and so could the Executive. The governor might select some agent to pardon a criminal, and the Judiciary might delegate its authority to any other body to determine a vexed question which it shrunk from deciding.

The Legislature might create a municipal or corporate body by statute. As soon as the law passed the body created was complete, and by virtue, not of the statute, but of immemorial usage and law, all the powers inherent in the nature of the organization attached to it. The term municipal was formed of two Latin words, *munus*, a gift, and *capio*, to take; and a *municipality* meant the recipient of a gift; and free cities and towns, being invested by the sovereign power, with certain franchises peculiar to themselves, were called municipalities or municipal corporations. It originated in the Roman government, and was borne to England by the Roman invasion, and incorporated, along with the free principles of the Saxons, into the English constitution. Thus after the lapse of time, it became the settled law, that when a charter was granted by the Crown or by Parliament, to any body of men for municipal franchises and powers, inherent in the idea of a municipality, spring into being and attached to the new creation, without any specific grant.

The idea of allowing a mob to legislate, to lay tax upon the property of the country, was destructive of every principle and barrier of a republican government. The laborers upon the road of this

company, could under this principle, control and vote away the rights and property of the free citizens of Mason, at the bidding of the president and directors.

He represented the minority of the people of Mason, who complained of an oppressive burden placed upon them by a majority against their consent. The minority had rights, law was made by the weak for their protection against the strong, and these rights would be invaded and this protection would be destroyed, should this charter be sustained.

Harrison Taylor, Esq., for the petitioners, and Hon. James Harlan for the company, filed briefs in the case.

It is expected that a decision will be rendered as soon as the other duties and business of the court will permit.

American Railroad Journal.

Saturday, January 3, 1852.

Stock and Money Market.

The money market for the present week has been stringent, owing rather to the fact, that the week covered the last of the old, and the commencement of the new year, than to an absolute scarcity of money. The expectation is now generally entertained that money must continue abnndant for the balance of the winter, and through the spring months. Cotton now goes forward freely, which will furnish bills for remittances, and check the export of specie. The news from California continues to be of the most flattering character, and unless calculation is very much at fault, money must soon become reasonably abundant from all legitimate enterprises, at fair rates. We believe that our railroad companies will soon be able to negociate their securities upon much more favorable terms than they have been able to do in some time past. And that with the opening of the season they will be able to move forward with the rapidity which has characterized their movement for two or three years past.

In another column will be found the report of the Erie railroad company. It certainly discloses an extraordinary state of affairs. We have no room for comment this week. The new loan asked for, will tend to relieve the market, as it will fund a floating debt already incurred.

The following is a statement of the amount of issue of government stocks, published by the Treasury Department:

	Amount.
Treasury Notes of 1842, interest included	$116,716 79
Other Treasury notes	162,776 64
District Columbia debt	840,000 00
Sixes of 1842, redeemable Dec. 31, 1862	8,198,686 03
Fives of 1843, redeemable July 1, 1853	6,237,931 35
Sixes of 1846, redeemable Nov. 12, 1856	4,999,149 45
Sixes of 1847, redeemable Jan. 1, 1868	26,255,150 00
Sixes of 1848, redeemable July 1, 1868	15,740,000 00
Total debt, Dec. 1, 1851	62,560,310 26
Deduction, by payment of $1,667,843 11 on the debt of Dec. 1, 1850. Since when have also been paid:	
To Mexico, installments under treaty of 1848	$3,242,400 00
Amount paid under awards by the Commissioners on claims on Mexico	2,587,438 45
Total	5,829,838 45

The following is a statement of the business of the mint at Philadelphia, for the week ending on Saturday:

	Deposits.	Coinage.	Payments.
Gold	$1,920,800	$1,651,980	$705,930 55
Silver	1,200	5,250	6,096 98
Total	1,922,000	1,657,230	712,027 53

The business for the four weeks of December, was as follows:

	Deposits.	Coinage.	Payments.
Gold	$5,373,500	$5,446,825	$4,406,370
Silver	9,700	36,260	14,053
Total	5,383,200	5,483,085	4,420,429

The following is a statement of the semi-annual dividend recently declared upon some of the leading Massachusetts railroads, payable on or about the 1st inst.

Roads.	Capital.	Div.
Portland, Saco and Portsmouth	$1,200,000	3
Taunton branch	250,000	4
Western	5,150,000	4
Sinking fund for investment—Pittsfield and North Adams	450,000	3
Albany bonds Western railroad guarantee	.....	..
Boston and Worcester	4,500,000	3½
Interest on bonds Boston and Me.	4,155,700	3½
Boston and Lowell	1,830,000	4
Boston and Providence	3,160,000	3
Interest on bonds Fitchburg R.R.	3,540,000	3
Michigan Central	2,886,700	4
Eastern	2,850,500	4
" N. H.	492,500	4
Fall River	1,050,000	4½

Commerce of the port for the year 1851.

VALUE OF IMPORTS.

1851.	Dutiable merchandise.	Free merchandise.	Specie and bullion.
January	$12,708,518	937,650	210,455
February	9,442,007	1,208,036	164,031
March	10,651,142	982,530	270,505
April	8,546,184	555,386	521,665
May	8,952,711	785,326	111,443
June	8,097,631	668,716	121,234
July	12,373,199	1,027,481	81,143
August	11,279,004	638,334	186,503
September	8,384,172	366,153	115,572
October	5,765,795	1,548,720	23,165
November	4,399,085	415,838	218,473
December	5,042,399	552,797	25,367
Total	$105,741,847	9,636,967	2,050,056

VALUE OF IMPORTS CONTINUED.

1851.	Withdrawn fm. warehouse.	Entered for warehouse.	Cash duties Received.
January	1,024,246	1,611,847	3,511,610
February	899,438	1,240,329	2,658,835
March	1,068,437	1,181,925	3,124,811
April	1,144,068	1,238,313	2.547,582
May	858,519	1,148,428	2.504,640
June	717,633	1,043,345	2,305,185
July	1,167,644	1,022,725	3.558,400
August	1,252,245	1,358,089	3,234,764
September	1,669,304	864,916	2,609,832
October	1,602,436	1,204,994	1,958 516
November	1,377,100	938,056	1,488,740
December	1,117,723	1,027,115	1,576,294
Total	$13,900,793	13,880,022	31,079,209

VALUE OF EXPORTS.

1851.	Domestic merchandise.	For. mdse. dutiable	For. mdse. free.
January	3,152,744	412,395	51,584
February	2,585,786	295,567	60,930
March	3,976,198	316,494	29,121
April	4,561,770	320,981	50,904
May	4,402,052	361,015	113,371
June	3,778,289	265,290	56,435
July	3,188,027	284,397	2,311
August	3,250,594	334 549	22,974
September	2,593,986	316,047	134,271
October	2,702,382	358,292	106,626
November	2,451,511	397,597	62,368
December	2,512,436	351,428	21,918
Total	$39,162,775	4,014,052	712,813

The following table will show the quotations in the New York market for some of the leading stocks for each month during the past year:

	Jan.	Feb.	Mar.	Apl.
U. S. Loan, 6 per cent, 1867.	115⅛	115½	115⅝	116
Ohio 6 per cent, 1860	111	109¼	108	107½
Kentucky 6 per cent	107	104¾	....	....
Illinois Int. Imp. 1847	61	66¼	65	64
Indiana State 5s	81	84	85	84
Pennsylvania 5 per cent	95	96	94½	....
Farmers' L'n. and Trust Co.	62½	65½	69	64½
Bank of U. S. in Penn	1⅞	1⅞	1⅞	1⅞
N. York and N. Haven road.	118⅛	117	115	114½
Hudson River railroad	80¼	65½	83	80⅛
New York and Erie railroad.	89	85½	84¼	81
Albany and Schenectady road	94⅛	91	93	92½
Utica and Schenectady road.	145	123¼	125	126
Rochester and Syracuse road.	115	112½	113½	107
New York and Harlem road.	69¼	65⅛	70¼	68⅛
Reading railroad	74⅛	64½	63½	54½
" mortgage bonds	85⅛	80	80	79¼
Erie railroad bonds, 1st	107½	110	109½	108⅛
" " 2d	105	104	105	100¼
Erie income bonds	98	98½	94½	92¼
Hudson River railroad bonds.	104⅛	104½	105	103½
Del. and Hudson Canal co.	141	134½	134	127
Norwich and Worcester road	69	65	67½	62½
Morris canal	22	22	21	19
Stonington railroad	54	46	42½	44
Long Island railroad	13½	23½	25	23⅜

	May.	June.	July.	Aug.
U. S. Loan, 6 per cent, 1867.	117	117½	117	115
Ohio 6 per cent, 1860	108⅛	110	108⅜	109
Kentucky 6 per cent	106½	....	109½	107⅛
Illinois Int. Imp. 1847	63½	63⅛	65	66⅛
Indiana State 5s	84	....	85	84
Pennsylvania 5 per cent	92½	93⅛	91	91⅛
Farmers' L'n and Trust co.	63½	70	68	67⅛
Bank of U. S. in Penn	1½	1½	1⅛	1⅛
N. York and N. Haven road.	117½	116	115	115
Hudson River road	82	80	76	76
New York and Erie road	90½	88⅛	83½	78
Albany and Schenectady road	96⅛	97	97	97
Utica and Schenectady road.	125	126	129	131
Rochester and Syracuse road.	109	113⅛	114⅛	117
New York and Harlem road.	74⅛	74	74	69⅛
Reading road	56⅛	56½	56⅛	55
" mortgage bonds	76	73⅜	74	81
Erie railroad bonds, 1st	..	107½	108⅛	110
" " 2d	102	103	102⅛	102
Erie income bonds	96	97½	97	97½
Hudson River railroad bonds.	105	....	106½	104
Del. and Hudson canal co.	128	121½	118⅛	113½
Norwich and Worcester road.	64⅛	64½	60½	53½
Morris canal	18½	16	16⅛	15⅛
Stonington railroad	44	42½	44⅛	41
Long Island railroad	23⅛	21½	18⅜	15⅛

	Sept.	Oct.	Nov.	Dec.
U. S. Loan, 6 per cent, 1867.	115	115	116⅛	116
Ohio 6 per cent, 1860	110	109	107⅛	110
Kentucky 6 per cent	105	105½	104½	106⅛
Illinois Int. Imp. 1847	62	61½	62	63
Indiana State 5s	79	78	83	85
Pennsylvania 5 per cent	90	91	91	92
Farmers' L'n and Trust co.	65½	64½	68	70
Bank of U. S. in Penn	1⅛	1⅛	2	2⅛
N. York and N. Haven road.	107½	104	109	108½
Hudson River railroad	70	70	73½	69⅛
New York and Erie road	73	72	84	88½
Albany and Schenectady road	90	90	95	96
Utica and Scenectady road.	127½	127½	127	129
Rochester and Syracuse road.	106½	104½	105½	109⅛
New York and Harlem road.	68	63	68	67⅛
Reading railroad	52½	52	57½	55½
" mortgage bonds	75½	76	75	73
Erie railroad bonds, 1st	107½	108½	10	107½
" " 2d	101⅛	99½	102	101½
Erie income bonds	91⅛	89	94½	94
Hudson River railroad bonds.	101½	100½	103½	104½
Del. and Hudson canal co.	112½	108	104½	104
Norwich and Worcester road	52½	45	57½	55½
Morris canal	14½	13	14⅜	14½
Stonington railroad	42½	41½	50	51½
Long Island railroad	15	12½	16	15½

Boston, Concord and Montreal Railroad.—Receipts in November, 1851 ..... $15,634 33
Same month last year 12,554 38
Gain in 1851—25 per cent $3,079 95

Vermont Central Railroad.—Comparative receipts, *in the month of November* 1851, *and* 1850.

Receipts in November, 1851	66,234
Same month, 1850	41,274
Gain in 1851, over sixty per cent	$24,960
Vermont and Massachusetts Railroad.—Receipts in November, 1851	14,664
Same month, last year	16,058
Decrease in 1851	$1,394

The decline in the receipts of November, is attributed to a slight interruption, and to the fact that there were *five Sundays* in the month, which left but twenty five working days. The gain thus far, in eleven months, has been rising $23,000 over last years' receipts.

Michigan Central Railroad.—At a meeting of the directors of this company in Boston on the 19th instant, it was resolved that a dividend of *fourteen* per cent. be declared—*four* per cent. in cash, and *ten* per cent. in stock—payable on the 1st of January next; payment to be made to stockholders residing in Michigan at the office of the Treasurer in Detroit; stocks registered in the city of New York at the office of the Farmer's loan and Trust company; and all others at the office of the Treasurer in Boston. Stockholders can obtain the whole amount of the dividend in stock, by giving notice on or before the 15th of January to either of the offices.

We subjoin a comparative statement of the earnings of this road for five years. The road passed from the control of the State of Michigan into the hands of the company, in September, 1846:—

	Passengers.	Freight.	Total.
1846-'47..	$130,570 11	$218,132 11	$385,463 44
1847-'48..	155,771 34	208,819 37	373,981 81
1848-'49..	320,897 00	265,912 88	606,370 61
1849-'50..	446,894 92	346,640 56	857,246 96
1850-'51..	608,912 65	410,865 03	1,100,043 89

The Treasurer, by direction of the board, submits the financial standing of the company in *General Account*, and also the standing of the company in *Income Account*, the balance of which is $461,-364 80.

If there be deducted from this the division now declared, and amounting to $404,168, there will be standing a balance to the credit of income account, of $57,226 80. The recent disaster to the steamer Mayflower made it necessary to reserve a larger amount than under other circumstances would have been deemed expedient.

A comparison of the net earnings of the road for the six months ending the 1st inst, against the corresponding six months of the last year, shows that the present exceeds the latter in the sum of $96,482 32. Thus—

Net receipts for the six months ending December 1st, 1851, after paying Interest and operating accounts	$385,051 97
Net receipts for 1850	288,569 65
	$96,482 32

The gain being entirely in the passenger and miscellaneous receipts. In fact, there was a diminution of freight receipts in the sum of $9,208 21, growing out of the exceeding low price of wheat and flour in the Eastern markets. This leaves a large stock of these articles in the hands of the producer for future transportation, the crop of 1851 being the largest ever raised in Michigan and the adjoining States.

Debt of Texas.—The last Austin Gazette contains the report of the Auditor and Comptroller on the public debt of Texas, giving a clear and intelligible description and classification of the character and amount of the liabilities of the late Republic. It appears that the whole ostensible or face value of all the claims filed according to law is $9,647,253 14, of which the par value is $4,807,764 37; and the whole amount not filed, $3,789,739 20 worth $2,019,514 27; making the total ostensible debt $12,436,991 34, or $6,827,278 64 par. This includes interest.

The debt is classified as follows,

First Class.—Consisting of audited or ascertained claims.

Second Class.—Claims sufficiently authenticated to be admitted to be audited under the laws of the Republic.

Third Class.—Claims not sufficiently authenticated to authorize their being audited under the law of the Republic.

Amount of	Ostensible.	Par.
First Class	$8,587,132 92	$3,817,321 64
Second Class	962.445 12	892 477 63
Third Class	97.675 10	97,675 10
Totals	$9,647,253 14	$4,807,474 37

The first class embraces all consolidated fund, funded debt, treasury bonds, and audited paper, including the claims for naval vessels, loan from U. S. Bank. etc.

The second class embraces claims not audited, but for debts contracted by the Government under the sanction of law.

The third class embraces claims not provided for by law, though many of them are highly meritorious. Among them are many claims for losses sustained during the war, from the appropriation or destruction of property by our own army or that of the enemy. The Legislature has already given a pretty strong indication of a determination not to open the door to claims of this character.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK JANUARY 3, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101
U. S. 6's, 1856	103½
U. S. 6's, 1862	110½
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	116½
U. S. 6's, 1868	115½
U. S. 6's, 1868—coupon	122½
Land Warrants	140a145
Arkansas 6's	52a53
Alabama 5's	91a92
Indiana 5's	85
Illinois 6's, 1870	65a68
Kentucky 6's, 1871	104½a106
Massachusetts sterling 5's	106
Massachusetts 5's, 1859	100½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1855	103½
Ohio 6's, 1860	109
Pennsylvania 5's	91

RAILROAD BONDS.

Atlantic and St. Lawrence, 6 per cent	85
Baltimore and Ohio, 1867	90
Boston and Providence 6's, 1855	101
Boston and Worcester 6's, 1855, convertible	107½
Bost., Concord and Mont. 6's, 1860, mortgage	87½
Cheshire 6's, 1860	91½
Connecticut River 6's, convertible	89
Erie 7's, 1859	102
Erie 7's, 1868	106
Erie income 7's	93½
Hudson River 7's, 1853	101½
Michigan Central, convertible, 8's, 1856	104½
New York and New Haven	100
Norwich and Worcester, mortgage, 1860	80a85
Old Colony, 1854	97½
Ogdensburg 7's, 1859	93
Portsmouth and Concord	80a85
Passumpsic 6's, 1859	94½
Rutland 7's, 1863	89
Reading mortgage, 1860	78
" " 1870	72
Sullivan, mortgage 6's, 1855	67
Vermont Central 6's, 1852	93
" " 6's, 1856	85
Vermont and Massachusetts 6's, 1855	84

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Dec. 24.	Dec. 31.
Albany and Schenectady	89½	97
Atlantic and St. Lawrence	60a65	—
Androscoggin and Kennebec	30a35	—
Boston and Maine	102½	102½
Boston and Lowell	106	106
Boston and Worcester	98½	98
Boston and Providence	90	84
Bost., Concord and Montreal	35	35½
Baltimore and Ohio	64½	61½
Baltimore and Susquehanna	34	—
Cheshire	47	45½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Connecticut River	60	56
Delaware and Hudson (canal)	100	99½
Eastern	100	95½
Erie	84½	80½
Fall River	97½	97½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	67	67½
Hartford and New Haven	122	115
Housatonic (preferred)	—	—
Hudson River	70	67
Kennebec and Portland	50a55	—
Little Miami	—	—
Long Island	15	15½
Mad River	—	—
Madison and Indianapolis	90	93
Michigan Central	97	95½
Montgomery and West Point	—	—
Michigan Southern	103	102½
Manchester and Lawrence	83	82½
Morris (canal)	13½	14½
New York and New Haven	109½	109½
New Jersey	—	130
Northern	63½	64½
Nashua and Lowell	104½	104
New Bedford and Taunton	108	116
Norwich and Worcester	52	55½
Norfolk County	15	13½
Ogdensburgh	28	27
Old Colony	64½	64
Passumpsic	59	63½
Pennsylvania	—	—
Pittsfield and North Adams	95	—
Philadelphia, Wilm'gton & Balt.	30	30
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	59½	59½
Rochester and Syracuse	111½	112½
Rutland	40	37
Stonington	51½	48½
South Carolina	—	—
Syracuse and Utica	123½	—
Sullivan	15a20	25
Taunton Branch	108	109
Troy and Greenbush	90	—
Tonawanda	—	—
Utica and Schenectady	129	127½
Vermont and Canada	97	99½
Vermont Central	25½	25½
Vermont and Massachusetts	26½	25½
Virginia Central	—	—
Western	100	99½
Wilmington and Raleigh	56	—
York and Cumberland (Pa.)	18½	18½

Iowa.

At a meeting held at Fort Des Moines, Iowa, on the second ult, a company was organized under the general incorporation law of Iowa, having in view the construction of a railroad from Iowa city to Council Bluffs, via Fort Des Moines. It is styled the "Iowa city, Fort Des Moines and Council Bluffs railroad company."

The following persons were elected officers for the ensuing year, to wit: President, R. W. Sypher, Secretary. Hoyt Sherman, Treasurer, Jonathan Lyon, Directors, W. McKay, P. M. Casady, A. H. Hull, J. E. Jewett, Le Grand Byington and S. Sheladay.

1852.

We have again completed another volume of the *Railroad Journal*, and with the present number, we enter upon the twenty-first year of its existence. The occasion naturally suggests a brief review of the condition and progress of that great interest to which the Journal is devoted, during the year just closed.

The past has been an exceedingly prosperous year, both for railroads in operation and for those in progress. The earnings of every road, we believe without exception, have been largely increased. A great number of new lines have been brought into use, and have commenced to make a return upon capital invested in their construction. The success of new projects has far exceeded public expectation; and has exerted a strong influence in bringing railroad property into general favor. It has secured public confidence, and with this, the requisite means for most of our roads in progress. Though a large portion of the cost of all new roads is raised by *loans*, every line entitled to credit has been enabled to obtain sufficient means upon a sale of its securities to carry forward the work of construction with vigor. In fact, we know of no line that has been compelled to suspend work from inability to provide the necessary funds for its prosecution. So freely have the wants of railroads been supplied, that greater apprehension has been felt lest they should absorb too large a portion of our accumulated capital, than that they should be compelled to suspend operations for the want of means.

We have now passed the crisis, the most trying period in the progress of our railroads. For years the people of the different States have been straining every nerve to carry forward their enterprises, and many of them under great discouragements.—They were compelled to wait till their respective lines were completed before they could expect any return; and from the isolated character of many of those that were completed, they could not be brought into profitable use. But we are now fast emerging from the embarrassment of which we have spoken. The railroad systems of different States are now rapidly being brought into connection with each other, and but a short time will elapse, before each line now in operation and progress will bear the same relation to each other, and to the whole, that a single artery in the human body does to the entire system. Alone it is without office or use; but when brought into combination with its members, it secures the efficient, orderly, and useful operation of the whole. So with our roads: they can never develope their highest usefulness, nor the most profitable results, till all the different lines shall be combined into one grand system.

We are now on the eve of the consummation of these great results. In six months from this time the traveller will be able to take the cars from New York to Cincinnati; and during the year, to the western boundary of Indiana. By the first of January, 1853, the great Pennsylvania and Maryland lines will reach the Ohio, and will enter into communication with the roads of that State. In two years more, the Mississippi will be reached by the Galena and Chicago, and the Rock Island and Chicago roads, and in a little longer time, by other lines in progress, through Illinois. On the south, a great line of railroad based upon Charleston and Savannah has already entered the valley of the Mississippi, and will soon reach Nashville, the Capital of Tennessee. After passing the Cumberland Mountains, this great line will be met with numerous branches striking the Mississippi river at several important points. Already have means been provided for the Memphis branch of 281 miles. Another branch is to be carried from Nashville to the Mississippi, at the northwestern corner of the State. Going still further south, we find only a small link wanting to a continuous line of railroad from Savannah to Vicksburgh, which we cannot doubt will ere long be filled. In the central portion of the Union, the people of Virginia are straining every nerve to carry forward two great lines, the Central, and the Virginia and Tennessee, to the waters of the Ohio, for the purpose of connecting themselves with the vast net work of railroad spreading out over the whole west. On the north, the New England States have already opened a continuous line of railroad from Boston to the great lakes, and Montreal. Another very important road between the Atlantic and the St. Lawrence, the Portland and Montreal railroad, will be in operation within the year. Still further east, stimulated by the example of our own people, the British Provinces are busily engaged in maturing a vast inter-Colonial railroad, extending from Halifax to Detroit, the greatest railway undertaking ever yet attempted. In a few years more lines of railway will be completed extending from every important Atlantic city to the extreme limit of our western settlements.

The great lines of which we have spoken, are those based upon the Atlantic cities, and having a general eastern and western direction. Others equally important are in progress, connecting the extreme north and south, and binding them together with iron bands. The first of the north and south, is what may be termed the *coast* line, extending from the eastern part of Maine to the Gulf of Mexico, a distance of nearly 2000 miles. We find no interruption to this great chain, till we reach Wilmington, North Carolina. The gap here existing, of 162 miles, is to be filled by the Wilmington and Manchester railroad, the construction of which is now progressing with great rapidity. A large portion of this line is already in a very advanced state. After the South Carolina roads are reached, we find only a small link of about 40 miles wanting to carry us to Montgomery, Alabama, which place enjoys uninterrupted water communication with the gulf. From Montgomery, a railroad to Mobile or Pensacola, will, undoubtedly, be soon commenced. But such a road is not essential to the practical operation of the above route, as the Alabama river from Montgomery follows the general direction of travel.—The whole of this vast line will be in operation in a little more than a year from this time.

Going further inland, we come to the second great north and south line, running through Western Virginia, Eastern Tennessee, and thro' Alabama to the Alabama river, at Selma, from which place it will be carried to the gulf. This line will traverse the Cumberland Mountains for many hundreds of miles; but by running parallel with the mountain ranges, a remarkably direct and favorable route is found. Nearly the whole of this line is under contract, and upon a greater part of it the work of construction is being carried forward with great energy.

Passing the Alleghenies, we find another northern and southern line, striking their western base, and running from the great lakes to the southern Atlantic ports and the gulf. Means are already secured to carry the northern part of this line to Danville, Kentucky, which is only 180 miles from Knoxville, the northern terminus of the East Tennessee and Georgia railroad. To Nashville, the distance from Danville is still less. The former town is destined ere long to be connected not only with Charleston and Savannah, but with Mobile and New Orleans.

From Louisville, the Louisville and Nashville railroad will form a part of the fourth northern and southern route. Louisville will soon be connected by railroad with Chicago, and sufficient means are already provided, to warrant the immediate commencement of the Louisville and Nashville railroad, which will probably be completed in two or three years.

The fifth great northern and southern line is the Mobile and Chicago, which will take very nearly a straight line between the above cities, running by the mouth of the Ohio river. This great line, from its length, directness, and from the vast results that must flow from its construction, occupies a conspicuous place in public favor. Already a portion of the Mobile division is in operation, and measures are now in progress, to place all that part of the line south of the Ohio under contract. The construction of the Illinois division is fully secured by the recent munificent grant by Congress of public lands.

We have thus given a brief sketch of the general features of the vast railroad system which is soon to come into active operation in every part of the country. We have pointed out the great arteries of this system. The minor conduits, to a great extent, already exist. When this system shall be brought into full play, it will hardly be possible to estimate the impulse that will be given to every interest in our land; and if our roads in their present isolated condition are able to show a profitable business, what may we not anticipate when each one shall become a part, and share the business of the whole.

We have at last reached the position from which we can now calculate with certainty, upon the completion of all the above named lines in two or three years, at most. No ordinary reverse can check their progress. They will intersect at convenient distances from each other, from north to south and from east to west, the whole inhabited eastern portion of our country. They will give an impulse to commerce and to travel never before felt. They will bring all our vast resources into full activity and life. They will in time break down all sectional differences, and render us a homogeneous people, possessing similar ideas and pursuits. They will serve as immense arteries, through which the life blood of one portion will be diffused for the support of all others, and in which will be commingled the interests of every portion of our wide-spread domain. No section will be too remote not to be reached and warmed into life and activity, by thus being made a portion of this great system.

Such are the prospects that 1852 opens to us. We have only to wait a few short years to realize the picture which we have given. We shall then present the sublimest spectacle of material and physical greatness that the world has yet seen.

Lake Shore Railroads.

The iron is being laid east of Painesville. The bridge at the furnace will soon be completed, and the cars run to Madison.

The locomotives and cars necessary for opening the Buffalo and State-line road have arrived at

Dunkirk, and the Journal says, are being placed on the track.

New Orleans and Nashville Railroad.

A public meeting of the citizens of Tuscumbia, Ala., was held on the 16th ult., to consider the project of building a line of railroad commencing where the Canson and Aberdeen road touches the western line of this State, and joining the Nashville and Columbia road at its point of intersection with the Northern line of this State, thereby forming an intermediate link, in the Great New Orleans and Nashville railroad, Col. David Deshler was called to the chair, and E. J. Gurley appointed Secretary.

The meeting adopted resolutions, highly approving the project of building a line of railroad from the city of New Orleans to the city of Nashville; that it was fully apprized of the great advantages to be derived by the country at large from such improvements and facilities, tending as they do to increase commercial facilities, develope the resources of the country, and enlarge and facilitate social and commercial intercourse, thereby aiding and encouraging the social, mental, political and religious improvements which the spirit of the age and onward progress of our country clearly indicate as our destiny if we are true to ourselves.—That this road peculiarly recommends itself to the favor and support of the people of the states through which it passes or is proposed to pass, because in its location and the route proposed it respects the organization of both State and county as they now exist. Starting as it does, from the seat of Government of the State of Tennessee, passing through Columbia, Franklin, Lawrenceburg and Florence, all county towns, entering the State of Mississippi, it passes through Aberdeen, Starkeville, Cosuiski, Canton, Jackson [the capital of the State] at or near Gallatin, through Montieello to Baton Rouge, [the capital of Louisiana] thence to New Orleans. The meeting also appointed a committee of 15 persons, to prepare a memorial to the Legislature, asking a charter for the construction of the above road in Alabama.

East Tennessee and Virginia Railroad.

This company have just issued their annual report. From it we learn that the work of construction was commenced on the 27th of March last, upon the division extending from *Strawberry Plains to Bulls Gap*, a distance of 40 miles. This portion of the line was let to Samuel Furgerson, Esq., at the engineer's estimate, one-half payable in cash, and one-half in the bonds of the company, to be converted into stock on the opening of the road.

The company have not pushed ahead very rapidly, partly for want of means, and partly for the reason that nothing would be gained by opening the road in advance of the connecting lines. The company have incurred no debt. Its cash liabilities on the 40 miles are only about $65,000.

In October last, the company let 20 miles of that portion of the line commencing at the Virginia terminus.

The reasons given for not extending the line from Bull's Gap eastward in its proper connections are: 1st, because the subscriptions upon that portion of the road were not sufficient to justify such a proceeding; and because a conditional subscription of $20,000 was raised chiefly in Sullivan and Carter, with a portion in Washington county, provided the road was let out to the Watauga river by the first day of November; 2d, because the board found that a saving could be made in the transportation of the iron, required for the road on the Virginia, over that of any western or southern line, of from forty to fifty thousand dollars; 3d, and lastly, because it would tend to rouse up interest on the whole line, by dividing and distributing the disbursements, and bind the interest of both extremes to a speedy connection; while if the work were carried on continuously from a given starting point. the zeal for extension would flag before the road reached its destined terminus.

There can be no doubt, we apprehend, that the State will aid the above road to an amount equal to the cost of the iron and equipment. Should the bill now before the Legislature of Tennessee become a law, as we presume it will, this will give a renewed impulse to the above project. But in such an event, we suppose the road will not be opened until after the completion of the Virginia and Tennessee and East Tennessee and Georgia roads, between which the East Tennessee and Virginia will be the connecting link. In an isolated condition, it would be of comparatively little importance, but with the connection referred to, it will become one of the most important works in the country.

The subscriptions to the stock of the company now amount to about $635,000, upon which have been collected about $30,000. We presume that the balance of the line will be speedily placed under contract.

Hempfield Railroad.

We learn from the late annual report of the directors of this road, that the subscriptions now made to its stock, with the additional amounts which the Board have assurances of obtaining are sufficient to secure the completion of the work.

Individual subscriptions are still going on in Washington county. The amount of these is not far from $100,000; the county subscription amounts to $200,000. In Ohio county, the individual subscriptions reach the sum of $154,000, and the corporate subscriptions, authorized by an almost unanimous vote of the people amount to $300,000, making the available resources of the company $754,000.

Large additions will be made in Washington county to the present subscriptions, which together with the aid to be expected from other quarters, will greatly increase the means of the company.

Four of the proposed routes for this road have been surveyed under the direction of the chief engineer. They all begin at Wheeling bridge and terminate at the passenger depot of the Penn. railroad at Greensburgh. The distances over these different routes are as follows.

1. By Mingo Creek	77 7-10	miles.
2. By Peters Creek	78 1-10	"
3. By Maple Creek and Belvernon	78 7-10	"
4. By Pigeon Creek	78 3-4	"

Another line has been surveyed from Washington, by way of Wellsburg to Wheeling, which has been found to be 9 3-10 miles longer than the direct line by way of Claysville.

The difference in distance and the consequently increased cost of construction, have induced the board to adopt the Claysville route. As soon as the estimates can be completed for the first division of the road, from Wheeling to Washington, the president and engineer are authorized to put the grading and bridging under contract. It is expected that this portion of the road will be advertised for contract in the month of December, or January, the 2nd division, from Washington to the Monongahela river, and the 3d, from the Monongahela river to Greensburgh, will be put under contract as soon as the requisite amount of stock can be raised.

The friends of this project express an opinion that it will prove one of the most profitable in the United States. It traverses a densely populated region, of immense agricultural resources, and celebrated for the surpassing excellence and abundance of its bituminous coal. It is expected that the way business will yield a fair remuneration for its cost. As a through road it possesses peculiar advantages. It offers one of the shortest and most direct routes between the west and the Atlantic seaboard. It is connected at Columbus with a system of railroads extending to St. Louis. At Zanesville it is connected with the Cincinnati, Wilmington and Zanesville railroad; and as the Cincinnati and Marietta railroad has lately been deflected from the terminus proposed at Belpre to Marietta, with express reference to its extension to Wheeling, a large portion of the business passing over these roads from Cincinnati, will it is claimed, take the Hempfield route to Philadelphia. We are happy in being able to give such a favorable account of the above project in which so many other lines are interested, and which occupies such a conspicuous place before the public.

Bird's Eye view of a Big Steamer.

Thurlow Weed, Esq., Editor of the Albany Evening Journal, who has just crossed the Atlantic in the steamer Baltic, gives the following account of the ship, and of her *personell* and equipment:—

Thousands have admired the exceeding beauty of form and fidish of the steamer Baltic, for in this respect she is unsurpassed. But she has higher and nobler qualities. In her construction, the architect, while preserving her "line of beauty," has given her bearings which combine herculean strength with the utmost attainable speed.

The Baltic is of 3000 tons burden. Her ponderous engines, boilers, etc., weigh 1000 tons. She usually takes 1300 tons of coal, though some 900 tons are sufficient for an ordinary voyage. This leaves room for 700 tons freight, and when thus laden she draws 19 feet water.

The crew consists of a Captain, four Mates, four Quarter-Masters, two Boatswains, Purser, Surgeon, 20 seamen, and two boys.

In the engine department there is a Chief and six Assistant Engineers, with 24 firemen and 24 coal passers.

In the culinary department there is a steward, 2 stewardesses, 6 cooks and a butcher, with 40 pantry and state room servants.

Now, with the steward's permission, let us look into his larcer. The "stores" for a voyage consist of 2000 lbs. of crew beef, 1500 lbs. prime do, 250 lbs. veal, 250 lbs. pork, 400 pounds mutton, two hundred lbs. lamb, 100 lbs. sausages, 25 sweet breads, 6 pigs, 12 kidnies, 50 lbs tripe, 6 livers, 12 ox tails, six calves heads, 12 calves feet, 30 turkies, 30 geese, 60 ducks, 170 chickens, 60 pigeons, 24 grouse, 24 rabbits, 12 hares, 400 eggs, 600 quarts milk, 100 lbs. codfish, 50 haddock, 136 lobsters, 100 bushels potatoes, 2 barrels turnips, 100 heads cabbage, 200 do cellery, onions, cauliflowers, horse radish, etc., 70 lbs. figs, 40 lbs. prunes, 6 Wiltshire, 4 Stilton, and 2 cheshire cheeses, 6 kegs butter, 25 barrels flour, etc., together with ample "reserved stores," in case of accident.

The principle articles of freight now on board are, 30 boxes cheese, 127 tierces lard, 200 boxes bacon, 500 barrels apples, 41 boxes India-rubber, and $1,500,000 in specie.

The Baltic makes sixteen passages a year. Her average time, so far, has been 10 1-2 days. She is usually in the best running condition on the fifth day of her passage, when, with fair weather, she accomplishes from 300 to 350 miles every twenty-four hours.

Railroads in the United States on the 1st January 1852.

MAINE.

	Roads in operation.	Roads in progress.
Androscoggin and Kennebec	55	..
Atlantic and St. Lawrence	91	65
Buckfield branch	13	..
Bangor and Piscataquis	12	..
Kennebec and Portland	50	..
Bath branch	9	..
Portland Saco and Portsmouth	51	..
Calais and Baring	6	..
Machaisport	8	..
York and Cumberland	11	42
Androscoggin	..	20
	315	127

NEW HAMPSHIRE.

Boston Concord and Montreal	71	22
Cocheco	28	..
Concord	35	..
Concord and Claremont	25	..
Contoocook Valley	14	..
Great Falls and Conway	12½	..
Manchester and Lawrence	27	..
New Hampshire Central	26	..
Northern (Concord to W. Lebanon)	81	..
Portsmouth and Concord	40	..
Sullivan	25½	..
Wilton	11	..
Cheshire	54	..
Ashuelot	23½	..
Eastern	16	..
White Mountain	..	25
	490	47

VERMONT.

Connecticut and Passumpsic Riv	61	..
Rutland and Burlington	119	..
Vermont Central	164	..
Rutland and Washington	12	..
Vermont Valley	24	..
Bennington Branch	..	6
Western Vermont	..	53
	380	59

MASSACHUSETTS

Berkshire	21	
Boston and Lowell	28	..
Boston and Maine	83	..
Boston and Providence	53	..
Stoughton branch	4	..
Boston and Worcester	69	..
Cape Cod branch	28	..
Dorchester and Milton	3	..
Eastern	59	..
Essex, (Salem to Lawrence)	21	..
Fall River	42	..
Fitchburg	66	..
Fitchburg and Worcester	14	..
Lowell and Lawrence	13	..
Nashua and Lowell	15	..
New Bedford and Taunton	31	..
Newburyport	14	..
Norfolk County	26	..
Old Colony, (Boston to Plymouth)	45	..
Petersboro' and Shirley	23	..
Pittsfield and North Adams	20	..
Providence and Worcester	43	..
South Shore	11	..
Stony Brook	13	..
Western, Boston to Albany, (200 miles in all)	117	..
Worcester and Nashua,	46	..
Vermont and Massachusetts	77	..
Housatonic branch	11	..
South Reading branch	9	..
Salem and Lowell	18	..
Grand Junction	6	..
Havard branch	1	..
Lexington and West Cambridge	7	..
Connecticut River	52	..
Troy and Boston	..	67
	1089	67

RHODE ISLAND.

Stonington	50	..
Providence and Fishkill	..	32
	50	32

CONNECTICUT.

Hartford and New Haven	62	..
Hartford, Providence and Fishkill	51	96
Housatonic	98	..
Middleton branch	10	..
Naugatuck	62	..
New Haven Canal	45	..
New London, Willimantic and Palmer	66	..
New London and New Haven	..	55
New York and New Haven	76	..
Norwich and Worcester	66	..
Collinsville	11	..
Stonington branch	..	10
Air Line	..	100
	547	261

NEW YORK.

Albany and Schenectady	17	..
Albany and West Stockbridge	38½	..
Attica and Buffalo	31½	..
Buffalo and Niagara Falls	22	..
Cayuga and Susquehanna	33	..
Chemung	17½	..
Hudson and Berkshire	31½	..
Hudson River	144	..
Lewiston	3	..
Long Island	98	..
New York and Erie	464	..
New York and Harlem	130	..
Northern	118	..
Oswego and Syracuse	35	..
Rensselaer and Saratoga	32	..
Rochester and Syracuse	104	..
Saratoga and Washington	39½	..
Saratoga and Schenectady	22	..
Schenectady and Troy	20½	..
Skaneateles and Jordan	5	..
Syracuse and Utica	53	..
Tioga	15	..
Tonawanda	43½	..
Troy and Greenbush	6	..
Utica and Schenectady	78	..
Watertown and Rome	97	..
Albany and Northern	..	33
Albany and Susquehanna	..	130
Buffalo and State Line	26	41
Buffalo and New York	..	58
Buffalo and Conhocton Valley	..	130
Canandaigua and Corning	46	..
Plattsburg and Montreal	..	25
Rochester and Niagara Falls	..	74
Rutland and Washington	28	..
Sackett's Harbor and Ellisburgh	..	17
Troy and Boston	..	39·9
Troy and Rutland	15	..
Canandaigua and Niagara Falls	..	92
Syracuse and Binghampton	..	70
Sodus Bay and Southern	..	35
Whitehall and Rutland	13	..
	1836½	744

NEW JERSEY.

Belvidere and Delaware	15	40
Burlington and Mt. Holley	6	..
Camden and Amboy	64	..
Morris and Essex	35	45
New Jersey	31	..
New Jersey Central	36	26
Patterson and Ramapo	33	..
Trenton branch	6	..
	226	111

PENNSYLVANIA.

Alleghany Portage	36	..
Beaver Meadow	36	..
Carbondale and Honesdale	24	..
Columbia and Philadelphia	82	..
Westchester branch	9	..
Corning and Blossburg	25	..
Cumberland Valley	52	..
Hazleton and Lehigh	10	..
Little Schuylkill	20	..
Mine Hill	30	..
Mount Carbon	7	..
Pennsylvania	185	64
Phil., Reading and Pottsville	92	..
Phil. and Norristown	17	..
Germantown branch	6	..
Phil. and Trenton	30	..
Phil., Wil. and Balt	98	..
Schuylkill Valley	25	..
Summit Hill and Maunch Chunk	25	..
Whitehaven and Wilkesbarre	20	..
Williamsport and Elmira	25	51
Franklin	22	..
Dauphin and Susquehanna	16	..
Strasburgh	7	..
Lykens Valley	16	..
Nesquehoning	5	..
Room Run	5	..
Pine Grove	5	..
Beaver Meadow branch	12	..
York and Cumberland	25	..
Sunbury and Erie	..	240
Lackawanna and Western	50	..
Catawissa and Williamsport	..	89
Delaware and Susquehanna	..	48
Philadelphia and Westchester	..	25
Pennsylvania Coal Co	47	..
Hempfield	..	77
Allegheny Valley	..	180
Columbia branch	19	..
Hanover branch	13	..
York and Wrightsville	13	..
Lancaster and Harrisburg	37	..
	1145	774

DELAWARE.

New Castle and Frenchtown	16	..
Wilmington Branch	..	11
	16	11

MARYLAND.

Annapolis and Elkridge	21	..
Baltimore and Ohio	254	125
Washington branch	31	..
Frederick branch	3	..
Baltimore and Susquehanna	57	..
Westminister branch	10	..
	376	125

VIRGINIA.

Richmond and Danville	35	122
Richmond and Petersburg	22	..
Clover Hill	15	..
South Side	10	110
Manassas Gap	..	106
Petersburg and Roanoke	60	..
Seaboard and Roanoke	80	..
Appomattox	9	..
Winchester and Potomac	32	..
Virginia Central, including Blue Ridge railroad	98	75
Virginia and Tennessee	10	195
Orange and Alexandria, including branch to Warrenton, ten miles	10	90
Richmond, Fredericksburg and Potomac	76	..
Greenville and Roanoke	21	..
Northwestern	..	120
	478	818

NORTH CAROLINA.

Gaston and Raleigh	87	..
Wilmington and Manchester	..	162
Wilmington and Weldon	162	..
North Carolina Central	..	223
	249	385

SOUTH CAROLINA.

South Carolina railroad	..	241
Greenville and Columbia	54	111
Charlotte and South Carolina	45	65
King's Mountain	..	25
Laurens	..	31
Spartanburgh and Union	..	66
	340	498

MISSISSIPPI.

Raymond	7	..
St. Francisville and Woodville	28	..
Vicksburgh and Brandon	60	..
Mobile and Ohio	..	273
	93	273

GEORGIA.		
Central	191	..
Georgia	175	..
Macon and Western	101	..
Western and Atlantic	140	..
South Western	51	..
Rome branch	17	..
Muscogee	..	71
Atlanta and West Point	40	47
Milledgeville	..	18
Eaton and Milledgeville	..	22
Wilkes	..	18
Athens branch	39	..
Waynesboro'	..	53
	754	229

ALABAMA.		
Montgomery and West Point	88	..
Mobile and Ohio	33	29½
Alabama and Tennessee	..	160
	121	189½

LOUISIANA.		
Carrolton	6	..
Clinton and Port Hudson	24	..
Lake Ponchartrain	6	..
Mexican Gulf	27	..
	63	

TENNESSEE.		
Nashville and Chattanooga	70	89
East Tennessee and Georgia	42	68
East Tennessee and Virginia	..	130
Memphis and Charleston	..	281½
Winchester and Huntsville	..	60
Mobile and Ohio	..	119½
	112	748

KENTUCKY.		
Frankfort and Lexington	28	..
Louisville and Frankfort	65	..
Maysville and Lexington	..	70
Covington and Lexington	..	78
Lexington and Danville	..	37
Louisville and Nashville	..	180
Mobile and Ohio	..	39½
	93	404½

MISSOURI.		
Pacific	..	315
Hannibal and St. Josephs	..	200
		515

OHIO.		
Cleveland and Columbus	135	..
Columbus and Lake Erie	61	..
Dayton and Springfield branch	24	..
Findlay "	16	..
Little Miami	84	..
Mad River	134	..
Sandusky and Mansfield	56	..
Xenia and Columbus	54	..
Bellefontaine and Indiana	..	118
Cincinnati and Marietta	..	188
Cleveland and Pittsburg	98	..
Cleveland, Norwalk and Toledo	..	87
Cleveland, Painesville and Ashtabula	..	71½
Columbus, Urbanna and Piqua	..	93
Cincinnati, Wilmington and Zanesville	..	160
Cincinnati, Hamilton and Dayton	60	..
Dayton and Western	..	35½
Dayton and Xenia	..	15
Greenville and Miami	..	40
Hamilton and Eaton	..	36
Hillsboro'	..	37
Iron	..	50
Junction	..	110½
Ohio and Indiana	..	126
Ohio and Mississippi	..	20
Ohio and Pennsylvania	81	104
Ohio Central	25	125
Scioto and Hocking Valley	..	120
Steubenville and Indiana	..	121
Pittsburg and Cincinnati	..	110
Dayton and Michigan	..	25
Eaton and Piqua	..	30
Hudson and Akron branch	..	50
Franklin and Warren branch	..	30
	828	1892½

INDIANA.		
New Albany and Salem, (with branch around Lake Michigan of 54 miles)	117	279
Jeffersonville	50	16
Madison and Indianapolis	86	..
Shelbyville branch	16	..
Rushville branch	20	..
Knightstown branch	27	..
Lawrenceburgh and Indianapolis	..	90½
Indiana Central	..	71½
Richmond	..	4
New Castle and Richmond	..	27
Indianapolis and Bellefontaine	43	41
Peru and Indianapolis	23½	50
Lafayette and Indianapolis	..	68
Crawfordville	26	..
Terre Haute and Indianapoiis	72	..
Evansville and Illinois	26	24½
Martinsville branch	..	29
Indiana Northern	100	35
Extension of the Greenville and Miami	..	10½
Ohio and Mississippi	..	160
	600½	905

ILLINOIS.		
Illinois Central	..	699
Galena and Chicago	94	88
Rock Island and Chicago	..	180½
Central Military Tract	..	125
Peoria and Oquawka	..	100
Ohio and Mississippi	..	145
Northern Cross road	..	54
Sangamon and Morgan	54	..
Alton and Sangamon	..	72
Aurora branch	13	..
St. Charles branch	7	..
O'Fallon's Coal road	8	..
	176	1463½

MICHIGAN.		
Central	228	..
Southern	133	..
Pontiac	25	..
Tecumseh branch	8	..
Erie and Kalamazoo	33	..
	427	

WISCONSIN.		
Milwaukee and Mississippi	20	180
Fon du Lac and Rock Island Valley	..	241
	20	421

TEXAS.		
Buffalo, Bayou and Brazos	..	32

	Miles in operation.	miles in progress.	Total.
Maine	315	127	442
New Hampshire	489½	47	536½
Vermont	380	59	439
Mass	1089	67	1156
Rhode Island	50	32	82
Connecticut	547	261	808
Total	2870½	593	3463½
New York	1826	745	2571
New Jersey	226	111	337
Penn	1146	774	1920
Delaware	16	11	27
Maryland	376	125	501
Virginia	478	818	1296
N. Carolina	249	385	634
S. Carolina	340	298	638
Georgia	754	229	983
Alabama	121	189½	310½
Miss	93	273	366
Louisiana	63	..	63
Texas	..	32	32
Tennessee	112	748	860
Kentucky	93	404½	497
Ohio	828	1892½	2720½
Michigan	427	....	427
Indiana	600	905	1505
Illinois	176	1409	1585
Missouri	....	515	515
Wisconsin	20	421	441
Total	10,814½	10,878½	21,693

Above we have given a table of the number of Railroads in progress and operation in the United States, on the 1st of January, 1852. We have prepared it with care, and we believe it to be very correct, especially as far as those in operation are concerned. It is more difficult to make out an accurate table of those in progress. We have probably stated the extent of line in process of construction, below the mark. We have given only the lines upon which work has actually commenced, and under circumstances that warrant the belief that they will be carried to a speedy completion. Projects of great extent are being matured in every part of the country, of which no notice has been taken. For instance, Louisiana is credited with no roads in progress, though it is well known that the people of that State are about to commence the construction of several important lines, making in the aggregate many hundred miles. The same may be said of many other States; so that in addition to the above amount we may safely calculate that from 1000 to 1500 miles of new line will be put under contract before the expiration of the year.

We have not attempted to give the cost of our roads, for the reason that it is impossible to do this with any accuracy. Only in a few States, are Railroads compelled to make returns of their doings to their Legislatures. Even in cases where returns are made, the constantly increasing cost of some of our roads render the returns of little value, a short time after they are published. As accurate an idea can probably be formed of the cost of our roads, from the average of a few lines taken as representatives of the cost in the different sections of the country, as from carefully prepared statistics. The cost of the New England roads may be stated at about $45,000 per mile. The New York and Pennsylvania railroads will average about $40,000 per mile. The same may be said of the Maryland roads, including the Baltimore and Ohio road. The general surface of the States named are much less favorable to cheap construction than any other portions of the Union. They are much the most densely inhabited, and the cost of right of way, real estate, etc., make up an important item of the aggregate cost.

The aggregate cost of the roads in the Southern States, and the Mississippi Valley, will not exceed $20,000 per mile. This is owing to the extremely favorable character of the country, and to the fact, that all the real estate required for way, and for depots, stations, etc., are generally gratuity to the roads, to encourage their construction. The cost of the above items upon important lines, does not in some cases, exceed $100 per mile. In many of the Western States the grading of a road can be done for $1,000 per mile. All the materials, with the exception of the iron and equipments, are furnished at a very low rate. For the reasons given, railroads can now be built in the Western States, for one half or two thirds of what they would cost in ten years from the present time.

By our tables we have now 10,814½ miles of road in operation, and 10,878½ in progress. The increase of line in operation since January 1, 1848, has been 5,224½. Since 1851, 2,153½. Of the lines in progress nearly all of them have been commenced since 1848.

A very large addition will be made to the above extent of line in *progress*, by the roads projected in Louisiana, Mississippi and Alabama. But those are not sufficiently advanced to be included in the above table.

Illinois.

Peoria and Oquawka Railroad.—We are frequently asked what is doing upon this work, and although not situated so as to state how the work is progressing, can say that no efforts are spared which would tend to its advancement. The difficulty with the Farmington people is, we understand, satisfactorily arranged, and the five per cent paid at the time of subscribing the capital stock, has been paid in to the president of the company, by the person in whose hands it had previously been. A branch, we understand, is to be built to Farmington. The citizens of Oquawka, who had previously been backward, have, we are informed, come forward with an unconditional subscription of from $39,000 to $40,000, and yet promise more. The branch to Burlington has been permanently located on the South Henderson route, and as seen by an article copied from the Burlington Telegraph into last week's paper, the work has been let to enterprising contractors, who immediately commenced the work in earnest; and from an article from the Peoria Press, we learn that a contract has been made for the iron necessary for the completion of fifty miles of the road, or from Burlington to this place.

Col. Morgan, the energetic engineer of the road, is, we understand, examining the country east of Illinois river, to the Central railroad, and will in a short time present a report of the practicability of an extension to that important work.—*Knoxville Journal.*

Danville and Pottsville Railroad.

Kimber Cleaver, Engineer, has made a report of the route of the railroad from Danville, to intersect the Shamokin and Sunbury road. The route starts near the rolling mill, in Danville, and crossing the river, passes through the Shamokin Hills, and descends the ravine, crossing the creek where it intersects the Sunbury and Shamokin road. The heaviest grades are 58 feet to the mile on the south bank of the river, 60 feet at the head of descending grade, and 63 feet at L. Vastines. There will be a tunnel of 1600 feet through the Shamokin Hill. The length of the road is 9 6-10 miles, and will cost $235,164 56. The following is the estimate:

Graduation and small bridges.....	$64,414 75
River bridges, double track, with.....	50,000 00
Tunnel, (1600 feet).....	43,192 00
One track of road through [9 6-10 miles] and three passings of ¼ mile each—10 35-100 miles—rails 60 lbs per yard =at $6,237 47 per mile.....	64,557 81
Engineering and incidental expenses...	13,000 00
Total.....	$235,164 56

The distance from Danville to the Shamokin coal mine is 15 6-10 miles.—*Mining Register.*

Railroad Arrangements from Pittsburg West.

The new arrangement by which passengers are to be taken from Pittsburgh to Cleveland in 12 hours, goes into effect this morning. As we anticipated, Mr. Prentiss, the President of the Cleveland and Wellsville road, has entered into the arrangement with proper spirit. From his well known sagacity, and desire to accommodate the public, we expected no less from him.

The Express Train now leaves the Federal St. station at 6½ o'clock A. M., and stopping only at Rochester, Brighton, Darlington and Enon, arrives at Palestine at 9. At this point stages will be in waiting to convey the passengers to Salem, where they arrive at 1 o'clock, P. M., and will take the cars again, arrive at Alliance at 2, and at Cleveland at quarter to six.

Returning, the train will leave Cleveland at 8 A. M., and the passengers will arrive at Palestine at 5 P. M, and at Pittsburgh by 8, stopping at the places mentioned above.

The Night Train on the Cleveland and Columbus road has been discontinued, and passengers will stay in Cleveland all night, and leave in the morning trains, making in all 36 hours from Pittsburgh to Cincinnati, with one night's rest included.

In about two weeks the line will be finished to Alliance, when this arrangement will be modified.

Through Tickets, to Cleveland and Cincinnati, can be had at the Ticket Office at the Federal St. station.—*Pittsburgh Gaz. of 25th ult.*

Dayton and Troy Railroad.

We learn from the Dayton Journal and Troy Times, that the contract for constructing a Railroad between these places has been given to Mr. Henry Doolittle, of Cincinnati. The price paid is 10,000 per mile—the Company furnishing the iron. The whole cost will therefore be something like $340,000, or about $17,000 per mile. We learn further that Mr. D. is to take $10.000 in stock, and $60,000 in bonds, and is to complete the work by the first of September next. The Bonds, we suppose, are those issued by the County Commissioners in pursuance of a vote of the people of the eight Southern townships of the county for that purpose.

The price paid Mr. Doolittle is much above the average of roads in this section of the State, but probably not any too high considering the quality of the work, the short time in which he is to complete it, and the manner of payment. Mr. D. has the reputation of being a good contractor.—*Piqua Register.*

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

To Contractors.

IN gross, will be received until the 25th day of January, 1852, proposals for the grading and entire construction of the Ohio and Indiana Railroad, extending from Crestline, the point on the Cleveland and Columbus Railroad where the Ohio and Pennsylvania railroad terminates, to Fort Wayne, Ind., 131 miles long.

The location, stock subscription, and releases, are in condition to warrant an early commencement and vigorous prosecution.

This road is the third link in the great chain of roads from Philadelphia to Chicago.

W. MERRIMAN, Pres't.
Bucyrus, Ohio, Dec. 25, 1851.

American Lap Weld Iron Boiler Flues.

MANUFACTURED by the Reading Iron Tube and Boiler Flue Works, from 1¼ to 7 in. diameter, and in lengths to eighteen feet, made from the best Pennsylvania refined cold blast charcoal iron, and equal in finish to any imported. Also made to order a but welded flue with patent lap welded ends, and when preferred they will be finished with a screw and ferrule on the ends. All the above will be made of any thickness of iron ordered. Also, welded wrought iron Tubes for water, steam and gas. Extra heavy tubes made to order, for sale by our agent, A. B. Wood, 23 Platt street, New York, and Samuel Griffiths, No. 15 North 7th street, Philadelphia, or at our works.

SEYFERT, McMANUS & CO.,
January 3d, 1852. Reading, Pa.

To Civil Engineers and Contractors.

THE advertiser, an Engineer recently from England, is desirous of an engagement, having been employed on some of the principal lines in that country and France. Satisfactory testimonials from parties in England and America. Address A. B., at the Railroad Journal office.

January 1, 1852. 1m*

M. B. Hewson, *Civil Engineer,*

(Open to a New Engagement,)
Memphis, Tenn.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

New England Car Spring Co.,

No. 104 Broadway, New York,

MANUFACTURERS OF

INDIA RUBBER CAR SPRINGS & HOSE,

Of F. M. Ray's Improved form, and dealers in every description of Rubber Goods for Railway purposes.

All Goods manufactured by this company are warranted of the best materials, and the same composition which has estnblished the reputation of F. M. Ray's India-rubber Car Springs.

F. M. RAY, Agent.

Railroad Iron.

THE undersigned offer for sale 1000 tons Railroad Iron, (about 56 lbs. to the yard,) now at Brooklyn.

CHOUTEAU, MERLE & SANFORD,
Oct. 1, 1851. 51 New st.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

PREMIUM RAILROAD CAR SPRINGS,

AND OTHER

India-rubber Goods.

TWO Prizes were awarded me last month by the American Institute—one for *best Car Springs*, the other for *best Overshoes*. This proves the superiority of the Goods made by me.

HOSE and STEAM PACKING, and all other India rubber goods for Railroad purposes, on hand and for sale cheaper than any other house.

Car Springs, 50 cents per lb. for cash—of the best quality and of all sizes, (Fuller's patent.)

I now give notice that Fuller is the original and true Inventor of the India-rubber Spring, and companies who use Springs made by other parties will eventually have to pay me damages. H. H. DAY,
23 Courtlandt st., New York.

Inventor and owner of 17 I. R. Patents, and the oldest Manufacturer of India-rubber in the U. S.

December 6, 1851.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Civil and Mining Engineers and Surveyors.

A YOUNG MAN having lately completed an engagement of six years with an eminent Civil and Mining Engineer in Scotland, is desirous of a situation in that capacity. Has had considerable experience in the mines of Scotland, and is in possession of all instruments necessary for land and mining surveying. Address A. S, care Mr. D. H. Arnot, 50 Wall St., N. Y.

Dec. 13th. 1m*

Railroad Iron.

2000 TONS of an approved pattern 59 to 60 lbs. per lineal yard, now manufactured in England, and ready for immediate shipment, from thence.

Also, 2,500 tons of different patters in port and expected to arrive within sixty days. For sale by

DAVIS, BROOKS & Co.
28 Beaver Street, New York.

CONTRACTS made for Railroad Iron at a specific price delivered in England, or at port in the United States.

TO FOUNDRYMEN, AND Contractors for Iron Castings.

THE Proprietor of the Rossie Furnace, St. Lawrence County, N. York, having lately erected at their works a Casting House 125x75, with suitable Cupolas, Cranes, etc., and a Machine Shop, furnished with a considerable stock of tools, and a water wheel of 30 horse power—the whole carried out in the most substantial manner—offers the use of these premises, in connection with the sale of Rossie Iron, to manufacturers and contractors for castings and machinery.

There are 2000 tons of hot and cold blast iron now at the works, any part of, or more than which, might be contracted for in connection with the above; and as liberal terms of credit would be extended to parties offering satisfactory security, it is supposed that the conditions contemplated may present no ordinary advantages to persons desirous of a large business on a limited capital.

It may be useful to add that the Cold Blast Iron made at these works is of a very superior quality for Car Wheels.

Rossie is 6 miles from the River St. Lawrence, and connected by a good Plank road all but 1 mile. For further particulars, apply to D. W. Baldwin, Agent, at the works, or at the office of the subscriber, Ogdensburg, St. Lawrence Co., N. Y.

G. PAIRSH.

December 20, 1851. 6t*

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a coat to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

LOWMOOR IRON.

THE *LOWMOOR* IRON COMPANY having appointed WM. BAILEY LANG their sole agent in America and Canada, he is now prepared to receive and execute all orders for Railway Tire Bars, bent, welded, and blocked Railway Tires, Axles, Piston Rods, and Boiler Plates. Also, plain, angle, rivet and every other description of Lowmoor Iron.

All communications respecting the above are requested to be sent to Wm. Bailey Lang, at his Steel Warehouse, No. 9 Liberty Square, Boston, or to the Lowmoor Iron Works, Bradford, Yorkshire, England. 30th Sept., 1851.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Stone Masons.

THE NEW ALBANY AND SALEM RAILroad Company have about 10,000 c. yards of Abutment Masonry to let at private contract, to be completed by the 1st of July, 1852.

To contractors who can produce testimonials of character for ability as STONE MASONS, fair, remunerating prices will be given.

Early applicants, by securing the work now offered, will gain advantages over competitors for the erection of an additional 15,000 yards, to be let out early next spring, in bridging the streams between Bedford and Michigan City, via Bloomington, Gosport, Crawfordsville and Lafayette, (the most productive and healthy region in Indiana,) by the knowledge they will have acquired of the resources of the country.

Application may be made in person, or by letter addressd to the undersigned, at New Albany, Indiana. S. B. WILSON, Engineer.

Engineer's Office, New Albany, Sept. 29th, 1851.

To Chief Engineers, Directors of Railroads, Canals, etc.

A Civil Engineer and Surveyor, who has been professionally engaged under the British Government, East India Company, etc., is desirous of obtaining employment as an Assistant. No objection to the South or West. Address for one month to C. E. & S., American Railroad Journal office.

August 16, 1851.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Iron.

THE undersigned, Agents for British Manufacturers, continue to sell Railroad Iron of the best quality, and of any weight or pattern required; deliverable at any part of the United States or Canada.

They have now on hand, ready for delivery New York:

2,000 tons of an approved pattern, weighing abont 60 lbs. to the yard.

WM. F. WELD & CO.,
42 Central Wharf, Boston.

To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address

J. B. GRAY, Philadelphia.

July 10, 1851. 4m

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

THE NEWCASTLE MANUFACTURING Co continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack Screws, Wrought Iron Work and Brass and Iron Castings, of all kinds connected with Steamboats. Railroads, etc.; Mill Gearing of every description; Cast Wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

Practical and Scientific Books

PUBLISHED BY

HENRY CAREY BAIRD,

SUCCESSOR TO E. L. CAREY, PHILADELPHIA.

For sale by Dewitt & Davenport, Tribune Buildings, New York, and Booksellers generally throughout the United States and Canada.

Now being published in Twelve Parts, price 25 cents each, the PRACTICAL MODEL CALCULATOR, for the Engineer, Machinist, Manufacturer of Engine work, Naval Architect, Miner and Millwright.—By Oliver Byrne, Compiler and Editor of the Dictionary of Machines, Mechanics, Engine Work and Engineering, and Author of various Mathematical and Mechanical works—illustrated by numerous Engravings; forming, when completed, one large volume, octavo, of nearly 600 pages.

It will contain such calculations as are met with and required in the Mechanical Arts, and establish models or standards to guide practical men. The tables that are introduced, many of which are new, will greatly economise labor, and render the every-day calculations of the *practical man* comprehensive and easy. From every single calculation given in this work other calculations are readily modeled, so that each may be considered the head of a numerous family of practical results.

The examples selected will be found appropriate, and in all cases taken from the actual practice of the present time. Every rule has been tested by the unerring results of mathematical research, and confirmed by experiment, when such was necessary.

The Practical Model Calculator, will be found to fill a vacancy in the library of the practical working man long considered a requirement. It will be found to excel all other works of a similar nature, from the great extent of its range, the exemplary nature of its well selected examples, and from the easy, simple and systematic manner in which the model calculations are established.

Parts 1, 2 and 3 now ready.

American Miller and Millwright's Assistant, By W. C. Hughes. 12mo., illustrated...$1 00
Byrne's Practical Model Calculator. In 12 parts, each..... 25
Byrne's Treatise on the American Steam Engine. 8vo, [in press].....
Booth's Encyclopedia of Chemistry. In one vol. royal 8vo, 974 pages, sheep..... 5 00
Builders' Companion. By A. C. Smeaton.—Seventy illustrations, 12mo., cloth..... 1 00
Cotton Spinner and Manufacturers' Companion. By Scott and Byrne. In one vol. 8vo., cloth, with large working drawings..... 3 50
Cabinet Maker and Upholsterer's Companion. 12mo., cloth..... 75
Dyer and Color Maker's Companion. 12mo., cloth..... 75
Elwood's Grain Tables. A new edition, in one vol. 12mo., cloth..... 1 00
Encyclopedia of Useful Knowledge. 8vo., illustrated..... 5 00
Fisher's Photogenic Manipulation. 16mo., cloth..... 62
Gregory's Mathematics for Practical Men. Illustrated, 8vo., cloth..... 1 50
Household Surgery, or Hints on Emergencies. By J. F. South, M.D. 12mo., cloth..... 1 25
Leslie's Complete Cookery. 41st edition, 12 mo., sheep..... 1 00
Morfit's Perfumery: its Use and Manufacture. 12mo., cloth..... 1 00
Morfit's Treatise on Tanning, Currying, and Leather Dressing in General. In one vol. 8vo., [in press].....
Norris' Hand-book for Locomotive Engineers. By Septimus Norris. 12mo., cloth..... 1 50
Neill's Fruit, Flower and Kitchen Garden. Illustrated by numerous plates, 12mo. cloth. 1 25
Overman on the Manufacture of Iron and Steel. Illustrated, 8vo., cloth, new edition. 5 00
Practical Metal Workers' Assistant. By C. Holtzappfel, with numerous illustrations, 8vo., cloth..... 4 00
Painter, Gilder, and Varnishers' Companion. New edition, 12mo., cloth..... 75
Randall's Sheep Husbandry in the South. Illustrated, 8vo., cloth..... 1 25
Steam for the Million. 8vo., paper..... 37

Best Cast Steel Axles & Tires,

(A NEW ARTICLE,)

For Railroad Carriages and Locomotives.

THE quality of this Steel is sufficiently attested in the announcement that it has carried off the first prizes awarded at the World's competition o 1851, in London. The axles are in general use on the Continent, and are now offered in competition with any other that can be produced; and to be tested in any way that may be desired by the Engineers of the United States, either by impact or by torsion. This Steel is manufactured by Fried Krupp, Esq., of Essen, in Renish Prussia, represented in the United States by

THOS. PROSSER & SON,
28 Platt st., New York.

November 1.

To Railroad and Canal Companies, Contractors, etc.

THE Undersigned wishes to direct the attention of Chief Engineers and Contractors to the facilities he possesses for supplying them with workmen, laborers, etc. of any description, and also to remind them that he forwards such men to whatever destination they may be required.

Companies or Contractors desirous of receiving peaceable and industrous men, will be promptly supplied at the shortest possible notice.

C. B. RICHARDS,
No. 85 Greenwich Street, New York.

REFERENCES:—Chas. H. Webb, Esq., Supt. of the St. George's and British Protective Society, New York; Messrs. Harris and Leech, Philadelphia, Wm. P. Malburn, Esq., Albany.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Trautwine on R. R. Curves.

By JOHN C. TRAUTWINE, Civil Engineer,
Philadelphia, Pa.

JUST published, accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by Wm. Hamilton, Actuary of the Franklin Institute, Philadelphia. Price $1.

Also, "*Trautwine's Method of Calculating Excavation and Embankment.*"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidity, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, $1. For sale by Wm. Hamilton.

June 28, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

Bridges & Brother,

DEALERS IN

RAILROAD AND CAR FINDINGS,

64 Courtlandt street, New York.

Having established a general Depot for the sale of articles used in the construction of Railroads, Locomotive Engines and Railroad Cars, we would invite your attention to our establishment. We have already in store a good assortment of CAR FINDINGS and other articles used in the trade, and feel justified in saying, that should you desire anything in our line, we can supply on terms perfectly satisfactory, and in the event of your desiring to order, you may feel assured that your terms will be as good as though you were here to make your own purchases.

Among our goods may be found Railroad Car Wheels, Axles, Jaws and Boxes, Nuts and Washers, Bolts, Brass Seat Hooks and Rivets, Window and Blind Springs, Lifters and Catchers, Door Locks, Knobs and Butts, Ventilators and Rings, Car Lamps, Coach and Wood Screws, Jack and Bed Screws and Babbitt's Metal; also Plushes, Damask, Enameled Head Linings, Cotton Duck for Top Covering in width sufficient without seams, Curled Hair and all other articles appertaining to cars.

Also a new and valuable CAR DOOR LOCK, well adapted to the Sliding Door. This is decidedly the best yet introduced.

LOCOMOTIVE ENGINE LANTERNS, the best article made in the country. Whistles, Gauge and Oil Cocks, Hemp Packing, American, Russian and Italian. We are also agents for Lightner's Patent Journal Box for Car Axles, that invaluable invention, for the economical use and preservation of Car Journals.

Coach VARNISH and Japan of the best quality.

We would also offer our services for the purchase as well as for the sale of goods on commission.—Both members of our firm have had the experience of many years in the manufacture of Railroad Cars, and our Senior was a member of the well known house of DAVENPORT & BRIDGES, Car Manufacturers, Cambridgeport, Mass. With our knowledge of matters pertaining to Railroads, we feel quite confident in giving satisfaction to both buyer and seller, and hope that through assiduity and attention to any business entrusted to our care we shall merit a continuance of confidence and patronage.

BRIDGES & BROTHER.

July 22, 1851.

To Railroad Car Builders and Manufacturers Generally.

THE Cincinnati, Hamilton and Dayton Railroad Company, at Cincinnati, have ten acres of land adjoining the City and near the Ohio River—their Road running through its center—which they will lease for a term of years, or perpetually, for the establishment of a Car Manufactory, or for any purpose connected with the furnishing of Machinery for Railroads.

The Company have at their Depot grounds, at Cumminsville, about five miles north of the city, six acres of land, eligibly situated for a variety of Manufacturing purposes, which they offer for lease on advantageous terms.

They have, also, on the line of their Road, in the town of Hamilton, 25 miles north of the city, about forty acres of land, situated on the Hamilton Hydraulic Works, where a Water Power can be displayed advantageously, and the same had on favorable terms. This property is also eligibly situated for Manufacturing purposes, and will be *sold or leased* on accommodating terms.

The above described property is admirably situated for the successful prosecution of the objects referred to, connected as the Road passing through it is with other Railroads built and building into Western and Northern Indiana, and Northern and Eastern Ohio; and the first described land lying near the line of the Cincinnati and St. Louis Railroad.

To skilful and enterprizing Car Builders, possessing sufficient capital for the prosecution of that business, the inducements are peculiarly flattering.

For further particulars address, at Cincinnati,

S. S. L'HOMMEDIEU,
Dec. 20th. Pres't C., H. and D. R. R.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VII., No. 2] SATURDAY, JANUARY 10, 1852 [WHOLE No. 821, VOL. XXXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

New York and Erie Railroad....17
Returns of New York Railroads....19
Vermont Central Railroad....20
Internal Improvements in Alabama....20
Report of the Secretary of the Treasury....21
Canals of Ohio....22
Galena and Chicago Railroad....30, 23
Anthracite Coal Trade....29, 23
Ohio Central Railroad....24
Stock and Money Market....24
Bellefontaine and Indiana Railroad....25
Illinois Central Railroad....26
Western Railroad Securities....26
Cleveland and Wellsville Railroad....29, 26
Bituminous Coal Trade....27
Hudson River Railroad....29, 27
Tunnel on the Hudson River Railroad....27
Railroads in the Northern and Southern States. 27
Railroads in Southern Ohio....28
Railroad Law....28
Covington and Lexington Railroad....28
Arkansas Central Railroad....29
Rock Island and Chicago Railroad....29
Little Miami Railroad....29

American Railroad Journal.

Saturday, January 10, 1852.

Erie Railroad.

We give below some remeniscenses of the history of this road, from the various published reports of the company.

W have waited until after the negotiation of the new loan asked for, that we might not subject ourselves to a charge of hostility to the company. All the quotations we make are from its own documents.

Upon the reorganization of the company in 1845, the directors issued a circular, signed by Mr. Loder, as President, (see p. 588, vol. xix of the Railroad Journal,) in which he states:—

To complete a single track to Lake Erie, six millions of dollars are required. The cost of the work to the stockholders will then be $7,350,000; and adding a liberal amount to provide for cars and engines for the commencement of business the road, with a heavy T rail, estimated at $65 per ton, will be brought into use for *less* than $20,000 per mile. The actual cost of the road will be over $28,000 per mile, but the liberality of the State, and the surrender of half the stock of the present holders, reduces it to this very low rate.

This aggregate is made up as follows:

Old stock	750,000
Debt	600,000
Bonds to be issued	3,000,000
Stock to be added	3,000,000
	$8,350,000

This amount includes the estimate for equipment of $1,000,000.

In May, 1848, Mr. Loder published a further statement of the affairs of the company, in which he states its resources for the extension of the road to Lake Erie as follows. (See vol. xxi, p. 355 Railroad Journal.)

Due on stock subscription	450,000
State mortgage bonds not sold	2,250,000
Deposited to pay interest on 750 bonds sold	162,433
	$2,862,433

The additional amount required to complete the road is estimated at from two to three millions of dollars. In reference to this we copy the following from the above statement:

From two to three millions of dollars will be required to complete the road to Lake Erie. And within six months after the road shall have been extended to Elmira, we hazard little in saying that such results will follow one half-year's working the road, as will make the stock of the company a desirable investment, and sought after, at or above par.

The company, at that time, will, by their charter, have a balance of stock not issued, and the privilege of issuing from four to five millions of dollars, which will secure the completion of the road to the lake, and *make ample provision* for machinery, cars, etc., for running the road.

This road, when completed, *will cost the stockholders less per mile than any other road in the country*, and not exceeding half the cost per mile of the Western railroad from Albany to Boston.

The cost of the Western road at the date of the above statement was 50,000 dollars per mile. Consequently the estimated cost of the Erie road in 1848 was *less* than 25,000 per mile.

On the first day of February, 1850, the company published a further report, in which they state the financial condition of the company as follows;—

Amount of Stock issued	$5,778,891
State mortgage bonds	3,000,000
Mortgage of '59	4,000,000
Certificate of old indebtedness	500 000
Other indebtedness, payable in '50, '51.	1,150,000
Total	$14,428,891

It will be proper here, (says the report,) to exhibit an estimate of the additional amount necessary to complete the road to Lake Erie. From surveys originally made by Major Brown, and subsequently carefully examined by S. Seymour, Esq., it is found that the sum required for this purpose amounts to $2,750,000. The extension to Hornellsville, as before remarked, has already been contracted for with *responsible parties* at a sum considerably *within* the estimate of the engineers, and from the fact that near one million dollars have been expended for grading and masonry west of Hornellsville, we cannot doubt that full reliance may be placed on these estimates. It should be borne in mind that west of Corning the route is through a country exceedingly favorable for constructing a railroad, and that there is little or no heavy work to be done.

The estimated cost of the road by the above report was $17,178,000; $8,828,000 over the estimate of 1845, and $6,338,000 over the estimate of 1848. To provide this amount, a large addition having been made to the stock subscriptions, the board issued its convertible bonds to the amount of $3,500,000. No explanation is given of the increased cost of the road.

On the first of February, 1851, the company published a further report, in which they make the following statement of its financial condition:—

FUNDED DEBT.

Mortgage bonds issued in lieu of State loan	$3,000,000
Second do., redeemable in '59	4,000,000
Certificates of old indebtedness	500,000
Income bonds	3,500,000
Total amount of funded debt	11,000,000
Add to this the present floating debt	2,988,045
And the probable cost of opening the road to Lake Erie, exclusive of materials now on the ground	300,000
And the entire debt of the company will be	14,288,045

To fund the floating debt of the company, to provide the necessary machinery and cars for working the road (the remaining unissued capital stock of the company, $4,710,000, not being available for that purpose) the directors will issue bonds, transferable on the books of the company, for $3,500,000, bearing interest at the rate of 7 per cent per annum, payable semi-annually, with interest warrants attached; the principal redeemable 20 years after date, and convertable into the stock of the company at the option of the holder. Authority for which is given in the 10th division of the 28th section of "An act to authorize the formation of railroad companies, and to regulate the same," passed April 2d, '50.

Confident of the perfect security of these bonds, [the property of the company being worth at least

fifty per cent more than the amount of the entire indebtedness, a statement of which is given below] the directors offer them to capitalists with the full assurance that they will command a ready sale.

The liabilities of the company will then be:

Funded debt, as before given		$11,000,000
Bonds redeemable in 1871, and convertible into the stock of the company, at the option of the holder [present issue]		3,500 000
		14,500,000
Amount of capital stock issued		5.790,000
To which add for contingencies		210,000
Making		20,500,000

the amount expended and to be expended in opening the road to Lake Erie. At least $2,500,000 of which is chargeable to equipment account.

The whole cost of the road *with ample depot grounds and buildings, and equipments for operating the road*, together with the Newburgh branch, *and valuable and extensive grounds and docks* at Dunkirk, Newburgh, Piermont and New York, with extensive machine shops, barges, steamboats, etc., will be, at the time of reaching the lake, about $20,500,000; or, after deducting the value of the equipments, $2,500,000—$38,706 per mile—a cost by no means large, when compared with other important railroads in the country.

Increase of cost during the year $3,220,000. At the date of this report, the iron was laid upon the whole line, with the exception of 40 miles; and for this distance, the iron had been provided, and distributed along the line.

The following are the reasons given for the increased cost of the road over estimates:

This road, like other kindred works of the present day, has cost more than was originally estimated, but not more than others of less importance and value, as will fully appear by reference to their official reports.

The cost upon the western division has been augmented largely, if not mainly, by adopting a new line, other than that upon which the estimate of last year was made; by which a grade of 60 ft. to the mile continuously, for 14 miles, has been reduced to 40, and the distance shortened six miles. This has been done on the 50 miles nearest Dunkirk, and will save the company annually in working the road the interest upon four times its extra cost. Other important changes have been made in the line of the road, by which many miles of a continuous grade of 69 feet have been reduced to 50 feet per mile.

The right of way contingent upon a change of line, has been expensive, and the extra cost rendered necessary in hastening the work, in compliance with the requirement of the law of the State, to finish it within a prescribed time, together with the fact that the company have added about $1,000,000 in value to the stock of their locomotives and cars, within the last year, will doubtless satisfactorily account for the cost of the work over the estimate.

In the report just published, the company give the following statement of its financial condition:

Cost of the road			20,150,163 56
132 locomotives	Cost	1,118,152 96	
72 passenger cars		178,290 84	
1505 freight and emigrant		864,986 41	
4 barges		16,249 87	
2 steamboats		101,154 11	
Depots		382,868 03	
Water stations		129,094 80	
3 machine shops		136,248 01	
Machinery in do		59,133 00	
Duane st. pier		10,426 69	
Buildings & depot, West street		80,667 37	
Wood on hand		154,750 00	
Materials on hand		197,824 32	
Telegraph, cash on hand and debts due		170,000 00	
			3,599,836 44
Stock Buffalo and State Line road			250,000 00
Total			$24,000,000 00

Total [brought up]		$24,000,000 00
Bonds already issued	14,500,000	
Proposed issue	3,500,000	
		18,000,000 00
Stock issued		$6,000,000 00

Making the increased cost of the road to the stockholders from February to October, eight months, $3,250,000.

The following is the explanation offered by the directors for the increased cost:—

An explanation of this discrepancy is due, and the board having nothing to conceal, desire to make it. The engineers in submitting their report to the directors for constructing the road from Hornellsville to Dunkirk, western division, estimated the cost for building 128 miles at $2,123,289, and for right of way $50,000. It proved on final settlement of accounts to be $3,526,657 38.

Difference		$1,353,368 38
The convertible bonds issued last spring for $3,500,000, sold at 90 per cent, making a difference of	350,000 00	
Locomotives and cars over estimate	500,000 00	
Buildings in New York	90,000 00	
Wharves and buildings in Dunkirk	109,000 00	
Fences built during 1851, 300 miles	200,000 00	
Subscription to Buffalo and State Line road	250,000 00	
		2,852,368 38

The chief part of the discrepancy is accounted for, however, by the company's being obliged, in order to get the road through in time, to incur increased expense, in driving the work day and night amid frost and snow; in being compelled to assume work which the contractors were unable to perform; and in the heavy expense attending the transportation of materials for the superstructure.

SUMMARY.

Estimated cost of road by present board in '45	$8,350,000
Estimated cost of road by present board in '48	11,850,000
Estimated cost of road by present board February 1st, 1850	17,178,000
Estimated cost of road by present board February 1st, '51	20,500,000
Estimated cost of road by present board Dec 24th, '51	23,750,000

Annual excess of cost over estimate since the road came under its present management—$2,600,000.

Perhaps we should stop here, and leave every person to draw his own inference from the above statements, which have been put forth from time to time by the directors; but we will point out one or two more glaring inconsistencies which appear in them.

In the report of the first of February, 1851, the directors state that at least $2,500,000 of the aggregate cost of the road had been charged to the equipment account. Since that time, by their last report, 500,000 dollars has been added to that sum, making 3,000,000 for this department. Now we find in the recent exhibit, that the cost of the equipment is stated to be $2,161,430 24, showing a discrepancy here of 838,569 76 dollars. The amount charged for engines and cars are the *full cost* prices.

Again: In the last report, they estimate the cost of completing the road to Lake Erie to be 300,000 dollars. The material had all been provided, and most of it distributed along the line, and only forty miles remained to be finished. The work had been let, to use the company's language, to "responsible persons." It would be supposed that under such a state of things, a very correct estimate could be formed. No good reason to the contrary could exist. But we find that instead of 300,000 dollars, it actually cost 1,653,368 38 dollars over the estimate to complete the road from Hornellsville to Lake Erie, and this, too, after the work had been let to "responsible contractors!"

There is one more fallacy in the last report of the company which we will now expose. It is in the inference drawn from a comparison of the Erie with the cost of some of the leading Massachusetts roads. It should be remembered that most of the roads cited, are the oldest lines in the country, having double tracks, and full and complete quipment; that the cost of the above roads, at a corresponding period in their history, was *much less* than that of the Erie, and that their present large aggregate cost, has been the growth of years, and has been made necessary by the construction of double tracks, by the providing of suitable equipment, and it will require a long time and a vast outlay to bring up the Erie road to the same condition. The original estimated cost of the Boston and Worcester was only about $1,000,000. Its cost when completed in 1837 was stated to be $1,200,000. Its present cost is over $5,000,000, which is the result of a steady and uniform growth, up to the present time. The cost of the Erie road up to the present time should not be more than $30,000 per mile, compared by the standard of other roads. We believe that what has cost the Erie company over 50,000 dollars, might be done over again for 30,000 per mile. The leading Massachusetts railroads are completed, and their construction accounts *closed*. The Erie is very far from being completed, and its construction account will not be closed these five years.

Table showing the cost of some of the leading Massachusetts railroads at different periods.

	When opened.	Cost in 1840.	Cost in 1846.	Cost in 1850.
Boston and Worcester	1837	$1,840,085	2,900,000	4,882,648
Eastern			2,471,561	3,120,391
Boston and Provid'ce	1837	1,850,000	1,964,677	3,416.648
Western	1843		5,981,927	8,032 813
Fitchburg	1845		1,477,477	3,552,282
Old Colony	1845		833,536	2,293,531
Boston and Maine	1845		1,857,329	4,021,606
			17,486,616	29,309,919
				17,486,618
Increase of cost in five years				11,823,301
Annual increase				2,364,560

Annual per centage of increase—13½ per cent nearly.

Cost of Erie railroad at the same ratio at the following periods will be as follows:—

Cost Jan 1st, '52	$24,000,000
" " '53	27,130,000
" " '54	30,792 556
" " '55	34,949,549
" " '56	39,512,568
" " '57	44,846,709

In five years from this time the Erie road will cost $44,846,709 if it increase no faster than the well managed roads of New England.

The present cost of the Erie road is nearly 300 per cent over the estimate.

Rate per cent of yearly increase of cost in 5½ years, 55 nearly. (See table above.)

It should be borne in mind that all the above roads were in operation prior to January, 1845. A number of them old roads, well built and equipped; that taken together, they were much nearer *completion* at the above period than the Erie on the first of January, 1852. From 1845 to 1851, some branches were added to them, but the cost of these is slight, compared with the aggregate cost of the

trunk lines, and are not of sufficient importance to affect the value of the above table.

With the illustration properly applied and carried out, where does the Erie railroad stand, and what is it coming to?

Without multiplying instances of descrepancy between the promise and the performance, what is the answer to all these things? It is this:—the directors have been *mistaken*. Very well, *they have been mistaken;* but, most unfortunately, the mistakes of the past do not seem to secure wisdom for the future. The mistakes go on, multiplying in geometrical ratio, increasing in magnitude with the cost of the road. *The present floating debt of the company was created in a little more than eight months, which is at the rate of* 400,000 *dollars per month*, and this, too, immediately succeeding the estimate of the total cost of the road, made upon the eve of its completion. Allowing that the directors erred only in judgment, the great question for consideration now is, not what the past has been, but what is the promise of the future? If the directors have been invariably wrong in the construction account, can any reliance be placed upon the estimates of income. This is what now chiefly concerns the public.

We believe that the estimates of the net earnings of the company can be impeached with the same ease as those of the cost of the road, but we do not propose to go into this inquiry at the present time. We take the ground, and we believe we can demonstrate the fact, that the running expenses of the road have far exceeded the amount allowed by the company. No person familiar with the management of railroads believes the statement to be correct, or that it comes near the mark, and we have heard the matter discussed by a good many competent persons. It will be in charging to the construction what should be charged to the running account, that another large floating debt will be incurred before the expiration of the year, large enough, we hear, to absorb the net earnings of the road, and requiring an additional loan either to pay it off, or to provide means for a dividend.

The Erie railroad company should constantly keep in mind this grand fact, that with the great number of railroads in New York and New England, no road having rivals to contend with, can in the long run pay more than 6 or 7 per cent upon its cost, even when economically built and well managed. The reason is this: a road that can pay this is good property, and the stockholders will be content with such an income. Another reason is, that from the desire to have railroads, people in every section of the country are willing to lose a part of what they contribute, provided that they can secure the conveniences of one. A company that wastes money in construction, can no more expect to pay the dividend, that well built and well managed roads pay, than a merchant that is thriftless and prodigal in business, can expect to make as much money as the person who is careful and economical. Railroading is now reduced to a science, and money can be made only by such as have lost nothing by bad management, no more than can a manufacturing establishment, that has sunk half its capital. Now, is it not notorious, that millions upon millions have been lost upon the Erie road?

If one cent has been lost, its dividends must suffer in the same proportion.

Hudson River Railroad.

This road is completed and will be opened for business in a few days.

Description of a New Chain, invented by M. Sisco.

Experiments have been made at Woolwich Dockyard with a new description of chains, submitted by M. Sisco, a Frenchman. The new chains are made of common hoop iron of the breadth required, and wound on a reel by machinery into an oval shape, and to the same breadth as the outer surface, which is rounded off after the whole has been brazed in passing through a furnace of molten metal. The usual test of an iron chain for naval service of two inches in diameter is 70 tons strain, but many links break with the application of far less power, and yet the other parts of the chain are found qualified to pass the required ordeal. M. Sisco's chain of two inches broad and two inches thick, with stays in the centre of each of the two links, was placed in the testing-frame, attached to a testing chain of 2¼ inches in diameter, and on the hydraulic power being applied one of the links was lengthened ¼-inch and the other ¼-inch when it reached a strain of 110 tons, and the 2¼-inch testing chain broke off in two places when the strain reached 114 tons. The hoop-iron chain had some openings in one of the links, which had been imperfectly brazed, but it did not appear to have been otherwise defective.—One link of the same dimensions, 2 inches thick and 2 inches broad, was afterwards placed in the testing frame, and when a strain of 70 tons was applied to it had lengthened 1-12 inch; with 80 tons, ¼-inch; with 100 tons, 3-16 inch; with 110 tons, ¼-inch; with 115 tons, 5-16 inch; and when it resisted 120 tons strain it was considered advisable not to continue the strain, as it was so great as to loosen the stone frame on which the machine rested, and liable to damage other parts of the powerful frame of the machine. The strain applied on this occasion was one ton more than had ever been previously applied, and the hoop-chain was only slightly opened on one side. When inquiries were made as to the price at which the hoop-chains could be supplied, it was stated that they would not cost more per cwt. than the common chains, although their holding powers were so much greater in proportion.—*London Architect.*

Additional Returns of New York Railroads.

UTICA AND SCHENECTADY RAILROAD.

Capital stock, by charter, and increased by law	$4,500,000
Amount paid in as by last report	3,494,010
Total amount now paid in of capital stock	4,124,000
Total amount now of funded debt is the same as last year	102,500
Total amount now of funded debt and floating debt	105,500

	1850.	1851.
Cost of road & equipment	$1,143,918 00	$3,971,155 89
Expenses of maintaining road	72,750 26	71,982 81
Expenses of repairs of machinery	71,307 32	68,352 61
Expenses of operating the road	164,116 28	140,967 99
Earnings and Cash Receipts and Payments.		
Earnings fm. passengers	595,472 27	560,523 94
Earnings fm. freight.	255,668 47	251,599 68
Earnings from other sources	72,285 25	45,495 68
Receipts from passengers	595,472 27	560,523 94
Receipts fm. freight..	235,748 19	251,599 68
Receipts from other sources	72,285 25	75,759 11
Payments other than for Construction.		
For transportation expenses	308,173 86	281,303 41
For interest	3,587 50	8,716 19
For dividends	356,000 00	412,400 00
Amount paid canal tolls	not given.	56,976 09
Number of passengers carried	370,988	453,731
No. tons freight carried	98,695	115,750

SARATOGA AND WASHINGTON RAILROAD.

Capital stock, as by charter	$1.350 000
Amount of stock subscribed	886,200
Amount paid in, as by last report	850,400
Funded debt, as by last report	494 000
Total amount now, of funded debt	596 500
Floating debt as per last report about	66,000
Amount now of floating debt about	120,000
Total amount now of funded and floating debt, about	662.500

	1850.	1851.
Cost of road & equipment	$1,312,772 60	$1,452,635 07
Expenses of maintaining road	No report.	28,285 50
Expenses of repairs of machinery	"	11,540 59
Expenses of operating the road	"	37,243 01
Earnings and Cash Receipts and Payments.		
Earnings from passengers, about	No report.	$131,093 76
Earnings fm. freight, about	"	28,697 88
Earnings from other sources, about	"	5,092 35
Receipts from passengers, about	"	131,093 76
Receipts from freight, about	"	28,697 88
Receipts from other sources, about	"	4,912 39
Payments for transportation expenses, about	"	82,869 81
Payments for interest, about	"	27,174 77
Payments for dividends, about	"	53,172 00
Payments to surplus fund, about	"	1,487 45
Total amount of surplus fund, about	"	15,496 79
No. passengers carried, about	"	138,034
No. of tons freight, about	"	23,906

RENSSELAER AND SARATOGA AND SARATOGA AND SCHENECTADY.

The Saratoga and Schenectady road was some time since leased for a term of years to the Rensselaer and Saratoga company. The two are blended in one report, and we give the figures as they are reported. The operations of the Saratoga and Schenectady road for nine months only are embraced in this report, no business having been done during the first three months, while it was being relaid with heavy rail.

Capital, as by charter and acts	$610,000 00
Total amount now paid in of capital stock	610,000 00
Funded debt, as by last report	185,000 00
Total amount now of funded debt	25,000 00
Floating debt, as per last report	4,379 00
Total amount now of funded and floating debt	25,000 00
Expenses of maintaining road	16,370 50
" of repairs of machinery	12,332 42
" of operating the road	51,181 23
Earnings and Cash Receipts and Payments.	
Earnings from passengers	$134,288 94
" freight	42,055 63
" other sources	13,039 00
Payments for transportation expenses.	79,884 15
" interest	7,367 50
" dividends	39,300 00
Total amount of surplus funds	15,675 30
Number of passengers carried in cars.	178 740
" tons freight "	27,194

NEW YORK AND ERIE RAILROAD.

The report of this company has been received at the office of the State Engineer. From it we gather the following information in regard to its financial condition and the operations of the year closing with the 30th September, 1851. The figures of the previous year we also annex:

Capital stock as by charter	$10,500,000 00
Amount of stock subscribed	5,996,200 00
Amount paid in as by last report	5,801,285 29
Total amount now paid in of capital stock	5,932,289 29
Funded debt as by last report	9,856,568 90
Total amount now of funded debt	14,503,868 90
Floating debt as per last report	2,475 864 64
Total amount now of floating debt.	2,957,376 31
" " funded and floating debt	17,461,245 21

Average rate per annum of interest on funded debt 7 per cent.

	1850.	1851.
Cost of road and equipment	$20,323,581 09	$21,028,858 20
Expenses of maintaining road	127,140 00	149,524 13
Expenses of repairs of machinery	55,813 64	230,592 16
Expenses of operating road	335,452 89	641,533 07
Earnings and Cash Receipts and Payments.		
Earnings from passengers, mails, and rents	$541,114 56	$1,163 535 77
Earnings fm. freig't	522,835 71	1,108,138 07
Total earnings of road	1,063,950 27	2,271,673 84
Receipts from passengers, mails etc.	541,114 56	1,163,535 77
Receipts fm. freig't	523,019 86	1,029,936 02
Total receipts of road	$1,064,134 42	$2,193.471 79
Payments other than for Construction.		
For transportation expenses	518,412 66	1,073,117 60
For interest on bonds, etc	421,751 34	918,716 63
For dividends of interest on stock	339,855 37	346,853 04
Earnings by ferry.	75,425 19	88,196 86
Number of passengers carried in cars	414,727	688,789
Number tons freig't carried in cars	131,312	250,096

More Trouble for the Vermont Central Railroad.

The Boston Traveller gives the following explanation of the recent difficulty between the treasurer of the company and the directors. It says—

"It appears that Mr. Quincy in the course of his extensive negotiations in carrying along the floating debt of the Vermont Central railroad company, used their bonds as collateral security for loans in which the company was not interested, and in some instances also endorsed his own individual note in the capacity of Treasurer of the Vermont Central company. The amount of these transactions is stated at about $350,000. Mr. Quincy, we understand, alleges that this was done with the consent of the directors,—a point which on the other hand the directors do not acknowledge. Pending the dispute, Mr. Quincy, in order to protect the company, makes an assignment of real estate and other property, estimated by appraisal at a valuation of about $500,000. This assignment, we believe, has not yet been accepted by the directors, and is stated that the liability of the company for either the collateral bonds, or the indorsement of the Treasurer in the instances alluded to, is to be disputed."

The Boston Post adds:

It is now reported, however, that several of the former directors aver that Mr. Quincy *had* the consent of the Board to his proceedings. The fact of the bonds being in his possession has long been known, the directors having held his personal receipt for the same. It is also presumed that the corporation has accepted Mr. Quincy's proposition, as parties supposed to hold a surplus of collateral from Mr. Quincy, have been notified by the clerk of the company, that it had been assigned to C. O. Whitmore, Trustee.

This affair caused a considerable depression in the stock of the company.

Alabama.

Report of the Internal Improvement Committee of the Legislature upon the subject of granting State aid to Railroads.

In obedience to a resolution passed by the House, directing this committee to report on a system of internal improvement adapted to the wants of the people of Alabama, I am instructed to present the following report and bill, and earnestly to recommend to the House their adoption and passage.

The history of Alabama from the birth of the State to the present period, exhibits not one serious attempt on the part of the Legislature, to advance the great interests of agriculture, commerce or manufactures, which, by the form of our government, are subject to its protection and control.

The convention which framed our present constitution, though not illumined by the spirit of progress which so distinguishes our immediate area, was not unmindful of the vigilant aid and protection which these great interests demanded at the hands of the Legislature. The constitution which it ordained declares, in explicit terms, that "The General Assembly shall make provision by law for obtaining correct knowledge of the several objects proper for improvement, in relation to the navigable waters, and to the roads in this State, and for making a systematic and economical application of the means appropriated to those objects."

Notwithstanding this solemn injunction and admonition, the Legislature has proceeded without any regard to the duty which it owed to the citizens or any respect for the obligations of the constitution: and as far as we are informed it has never expended one dollar of its own treasure for the advancement of any great work of improvement.—The condition of Alabama has rapidly changed in the short period of her existence. She is no longer a frontier State; she has cast off the wilderness and bared her bosom to the yearly demands of the husbandman.

Fertile as her soil is admitted to be, yet this is no guarantee against that impending barrenness which is sure to follow the exhausting and ungrateful system of culture which prevails almost universally within her borders.

Other States are rich because they are old, but our destiny seems to be to grow old and poor together. The progress of our agriculturists is marked by exhausted and deserted fields; and the caravan of the emigrant tells the fate of a young State falling into premature decay, and deserted for freer lands, which, in turn, will probably be doomed to the same fate.

If Alabama wishes to become a prosperous State, she must sustain her equality in the prosecution of those improvements, which are adding wealth and power to so many of the States of the Union. She must by a wise and liberal policy, anchor her citizens to the soil; she must answer the argument, that it is easier to go further for new lands than to stay and manure old ones. This she can do by furnishing to her citizens the conveniences and profits which an enlightened system of internal improvement will afford.

Give to all parts of the State an easy access to market; annihilate distance between its extremest points by rapid means of travel, and thus take the burden from the back of the agriculturist, and in the free interchange of opinions arising from a free communion, consolidate the interests of the State.

The advantages thus afforded would greatly counterbalance with the better portions of the population the desire for wandering to the "far west"; and home will become a cherished spot, and the name of Alabama itself an inheritance.

The bill which the committee has the honor to present, in its opinion, most deliberately formed, is called for by the demands of the people of the State, and if adopted, would be the inception of that new era in our Legislature, which is destined to place Alabama at the head of the plantation States.

No State is more richly endowed by the hand of the Creator than our own. When we look to its combined capacities for agricultural, manufacturing, mining and commercial purposes, we shall ask without fear of answer, where is its superior? Shall this "goodly inheritance" be cast away for the want of that enlightened energy which alone is required to make it ours and our children's to remotest generations? This is the solemn appeal made to this Legislature, and it must give the answer.

In the bill presented by the committee, they have grouped together the leading works which have heretofore been presented to the mature deliberation of the people of the state. There are other works collateral to these, and of great importance, not included, because it was deemed best that works of the greatest interest should first be considered and acted upon by the Legislature. Their omission, therefore, is not to be regarded as indicative either of indifference or hostility on the part of the committee.

It will be seen by the bill that the appropriation of money, amounting in all to $230,000, is out of the three per cent fund. From a report on this fund, which this committee had the honor to make to the present legislature, it will be remembered that this fund was donated by the General Government to this State for the express purpose of "making public roads and canals, and improving the navigation of rivers."

The amount of this fund was stated at	$441,375 60
From which is to be deducted the am't appropriated by act of 5th February, 1850	61,395 17
Leaving	379,960 43

There is to be added to this sum the amount due by the government for three years, as the account is made up to 31st December, 1848. As this is unascertained, it is not considered necessary to assume any given amount.

In the opinion of the committee, the appropriations of the bill are such as to commend themselves to the favorable consideration of the House.

The chief sum in this list is the subscription of $200,000 to the construction of the road from the point at or near Gunter's Landing, on the Tennessee, to Gadsden, on the Coosa river. This road, though only 41 miles in length, is the most difficult and costly of any equal length of road now contemplated in this State. It is the link which connects north Alabama with the southern portion of the State, and will make us one people in fact, as we are now only in name. It is, therefore, very justly looked to with the deepest interest; and tho' the sum is large, it is considered due to the magnitude of the undertaking. It must, moreover, not be forgotten that the sum is not taken from the money of the State, but is only a partial payment made by the State out of a trust fund.

The only aid asked from the State by this bill is the loan of its credit to the extent of two millions—not by the issuing of state bonds, but by the endorsement of the bonds of the four companies therein named in equal portions.

The committee fully recognises the satisfaction which is everywhere felt in the great decrease of the public debt, and would be very far from recommending a system which, in their opinion, would lead to the re-embarrassment of our state finances. It is, however, satisfied that the security afforded by the bill is of the most ample character.

If the proposition were now presented, that the state should construct these roads, and pay their entire cost out of the state treasury, it could be easily demonstrated that the increased taxation arising from increased values in the state, and the saving of the enormous charges upon the production and consumption of her citizens, would, in a very few years, return into the treasury every dollar paid out for their construction.

But your committee does not recommend this.—On the contrary, it believes the true policy to be to permit these works to take their rise in private enterprise and skill, and for the state to come to their aid when individual capital is so far involved as to give a guarantee that the work will be economically prosecuted, and the state made safe in the assistance afforded.

The committee has asked for the most limited assistance that could be presented to the consideration of the House. If the legislature is disposed to extend any aid at all, it will not hesitate to adopt the provisions of this bill.

The application now made, though novel in Alabama, is far behind the action of our co-states upon this subject. Selecting a few of the states as an illustration, we find in the south, the state of South

Carolina, the pioneer on this subject, leading out her great road from Charleston to Augusta, which is now extending its branches in every direction aided by the most liberal spirit on the part of the legislature of that state.

Virginia has subscribed two-fifths to her various improvements, amounting to.	$8,000,000
Maryland	5,000,000
Pennsylvania	6,000,000
New York has given a bonus to a single company, the Erie railroad, of	3,000,000
Massachusetts	6,000,000
Missouri—to the St. Louis and Pacific railroad	2,000,000
Tennessee—by loan of state bonds to the Chattanooga road	1,300,000
And it is expected that her legislature now in session will make a further loan of	1,000,000
Georgia—to a single road, the Western and Atlantic railroad	3,500,000

These are a few of the states that have pursued the enlightened policy which the committee now urges upon this legislature, and the fruits of that policy are to be seen in the increased prosperity they now enjoy.

Alabama, from her geographical position, may become the great highway for all the improvements which run from the northeast to the southwest. It depends upon the energy of her citizens and the policy of her legislation, whether she will take advantage of this position and improve the rich store entrusted to her, or whether she will stand still and behold unmoved the exhaustion of her soil, and the emigration of her citizens; and yield without a struggle, the profits of her remnant of agriculture and commerce to enrich other states and build up foreign cities that add nothing to her strength and pay no tribute for her protection.

Believing that public sentiment in this state is now fully aroused to the importance of this subject, the committee submit with hope and confidence the accompanying bill. P. Phillips,

Chairman Com. on Int. Imp.

The following is a synopsis of the bill accompanying the report.

It first appropriates $2,000,000 out of the state 3 per cent fund, for the construction of a railroad running from a point at or near Gadsden, on the Coosa, to the Tennessee river.

The bill further authorises the Governor of the State to endorse the bonds of the Memphis and Charleston railroad company; the Mobile and Ohio railroad company; the Alabama and Tennessee River railroad company; and the Montgomery and Mobile railroad company—each to the amount of $500,000.

The eighth section we copy in full:

Sec. 8. Be it enacted, etc., That the charters of the Alabama and Tennessee River railroad company, the Girard and Mobile railroad company, the Eufaula and Mobile railroad company, are so amended as to permit the said companies, if they should deem it expedient, to unite with the Montgomery and Mobile railroad company, at such point or points of junction on the main trunk leading to the city of Mobile as they may desire; and the Eufaula and Mobile company may unite at any convenient point with the Girard and Mobile company, on its road leading to said trunk; and the said companies may consolidate their charters and change their names, giving public notice thereof for at least thirty days, and with the consent of their stockholders, transfer their property and subscriptions to each other as they may agree: Provided, Such consolidation and transfer shall not impair the right of pre-existing liens or liabilities. And it is further provided, That the proceeds of the bonds to be endorsed for the Montgomery and Mobile railroad company shall be expended below the point of junction where the Girard and Mobile railroad company would connect therewith, at or near Greenville, in Butler county; and the rates of charges on the main line of road shall be always proportionate and without regard to the destination of travel or produce; nor shall any preferences be given in the conduct of the business of the road in controlling the travel or produce destined to any branch of the said road.

Report of the Secretary of the Treasury.

We give below such portions of the recent Report of the Secretary, as is of especial interest to our readers:

Treasury Department,
Washington, Friday, Dec. 26, 1851.

The total receipts from all sources for the last fiscal year amounted to $52,312,979 87, which, with the balance in the Treasury on the first of July, 1850, of six millions six hundred four thousand five hundred fourteen dollars, forty-nine cents, [$6,604,514 49] gave as the total available means for the year ending 30th June last, the sum of $58,917,514 36. Of this amount, $49,017,567 92 were received from Customs.

The receipts for the quarter ending 30th September last, were $15,561,511 83, of which $14,751,909 34 were from Customs. For the corresponding quarter of the previous year, the Customs yielded the gross sum of $14,764,043 05. It is presumed that the receipts for the three remaining quarters of the current fiscal year will not exceed those of the corresponding quarters of the last year, and hence the receipts from that source have been estimated $49,000,000.

The estimated total receipts for the current fiscal year amount to $51,500,000. The total expenditures are estimated at $50,952,902 59. Total receipts for the next fiscal year are estimated at $51,800,000. In order to present the various objects of expenditure to Congress in the most distinct manner possible, I have caused the estimates for the next fiscal year to be prepared with such view and therefore the amounts required for the usual and long-established wants of the Government have been separate from such as are deemed necessary for the protection and welfare of our newly acquired Territories, and demanded in the fulfillment of our obligations, express or implied, in connection therewith.

It need scarcely be stated that a large proportion of the increased expenditures of the Government, in times of profound peace, are consequent upon the acquisition of our new Territories. The estimates for these Territories, in addition to the otherwise ordinary wants of the Government, are deemed essential to their well-being, and are submitted with the hope that Congress will pursue a liberal course of policy toward that younger and weaker portion of our country, as it cannot be doubted that when a permanent population shall possess them and consequent advancement in all the elements of civilization shall be realized, they will amply repay present expenditures, by permanent and powerful augmentation of the national wealth.

The expenditures for the ordinary wants of the Government for the next fiscal year are estimated $33,343,219 07, as will appear in the detail of estimates already transmitted to Congress. Those submitted, as required, by our new Territories, and in the fulfillment of any obligations consequent upon their acquisition, amount in part to $9,549,080 12.

Ways and Means.—The receipts from Customs for the last fiscal year, as before stated were upward of $49,000,000. Should our importations of foreign merchandise for the current and next fiscal years, equal those of the past year, the revenue from that source for the three years ending 30th June, 1853, will have been about $150,000,000.

Aside from demands upon the Treasury for our new Territories, this sum would have been sufficient to have met the ordinary expenses of the Government, and to have liquidated the entire public debt. Notwithstanding these extraordinary demands there has been effected since the first of December last, a redemption of the registered debt to the extent of $1,667,843 11.

During the next fiscal year the loan of 3d March 1843, due 1st July, 1853, must be provided for, and it is expected, may be paid in cash out of the receipts from the usual sources of revenue. The amounts of the land fund to be invested in accordance with law, will probably amount to a further sum of $61,800, making an aggregate proposed redemption of the public debt during the next fiscal year of $7,234,792 35. The premiums paid on $2,523,200 of certificates of Government stock purchased at market rates, amounted to $325,655 24 or at a cost of more than one-eighth of the entire debt purchased. These rates, if applied to the whole debt as it stood on the 20th November last, would require for its liquidation in addition to that amount about the sum of $8,071,318 57. The probability is that increased rates will follow a known demand by the Government. It may well be questioned whether sound policy does not demand that some discretion shall be given to the Department to purchase out of an available surplus revenue, sound State stocks, when it can be done at or near par value, to be held as a sinking fund toward the redemption of the public debt, as it becomes due, and thus save to the Government the large premium which otherwise will be required in the redemption by purchase at market prices of the stock of the United States. In the opinion of this Department such a course is desirable, and it is submitted for such action thereon as may be thought expedient. The language of the act of 28th September, 1850, extending the grants of lands, has prevented the warrants issued by virtue thereof from passing into the hands of the actual settlers by assignment, and consequently the receipts from that source have not been seriously affected by that act. The receipts from sales of the public lands for the quarter ending 30th September last, indicate a revenue from that source for the current year for upwards of $2,000,000. Any excess of receipts over the expenses connected therewith is already appropriated, and, therefore, those receipts, whether more or less, cannot affect the balance in the Treasury, subject to appropriation at the end of the fiscal year. The greater or less amount of public debt redeemed will depend upon the increase or diminution of such receipts. The revenue from imports consequently is the great source upon which the country has to depend for the means to carry on the Government. The unexpected addition to the boundaries of our country, covering an area of more than 526,000 square miles, has without doubt been one cause of the large and sudden increase of our foreign importations, and consequent increased receipts from custom duties. Our expenses consequent upon such acquisition have more than kept pace with the increase of receipts, and they will remain permanent charges upon the Treasury. Revenue to meet these required expenditures must be provided for, and that during a period when our public debt is maturing. It cannot for one moment be thought advisable to presuppose a renewal of any portion of such debt, and therefore it should be our aim to obtain revenue sufficient to meet these maturing liabilities, in addition to the annual expenses of the Government. The receipts from all sources for the last fiscal year amounted to $52,312,979 87. The appropriation to $51,428,414 46, being an excess of receipts of $881,565 41. The estimated aggregate receipts for the current fiscal year are placed at $51,500,000. The expenditures, as estimated and appropriated, amount to $50,952,902 59. Being an excess of estimated receipts over estimated expenditures, of $547,097 41. The receipts for the next fiscal year are estimated at $51,800,000. The expenditures at $42,892,299 19—$8,907,700 81, making an aggregate estimated excess of receipts and expenditures for three years, ending 30th June, 1853, of $10,339,363 63, subject, however, to a reduction to the extent of any appropriations which may be made for this or the next fiscal years, additional to the estimates submitted. Should Congress appropriate to meet the ordinary wants of the Government, and to cover the expenditures required by our new Territories, as submitted by this Department, the balance, at the close of the fiscal year, ending 30th June, 1852, will be more than sufficient to meet the amount required on the 1st of July following, for the redemption of the public debt due on that day.

The question presents itself, in view of the absolute necessity for a continuance of the present receipts from customs, whether in all the branches of the industry of our country, there is that healthy and vigorous action which is the basis of substantial and lasting prosperity; without this we can with no certainty presume upon any fixed amounts of continuous receipts.

The gross exports, table G., for the last fiscal year, amounted to $217,517,130, of which there

was of specie, $29,231,880; and of foreign merchandise re-exported, $9,738,695; leaving, as the exports of domestic productions, the sum of $178,516,555. This presents a large increase upon like exports of any previous year, and exceeds that of the last fiscal year, in the sums of $43,646,322. I regret that this increase is merely of an accidental nature, and likely to be confined to the year just passed.

By reference to table H., it will be seen that for the year ending 30th June, 1850, there were exported 635,381,604 pounds of cotton, at an average value of eleven twenty-three cents per pound, giving an average value of $71,984,616, while 1,026,602,269 pounds, exported the year previous, was valued at but $66,396,967. For the year ending 30th June last, there were exported 927,237,089, valued at $112,315,317, averaging twelve eleven hundredths per pound, thus exceeding an apparent excess in the value of this staple alone, over that of the previous year, of $40,330,701.

The very deficient crop of '49-50, caused an enhancement in the value of cotton, of nearly double that of the previous year, and a still further advance upon the average price of the last year, thus giving the large excess in the aggregate value of the exports before stated. It must be borne in mind, however, that these values as reported, are not always the prices realized on sales abroad, they are the declared value of the exporters of our country, against which bills of exchange are usually drawn, and not the prices received on actual sales, and it is notorious, that the immense losses on the shipments of cotton during the last year, have reduced the amount actually realized by the sales in Europe very far below the official value in the Custom House returns.

The crop of the present year has exceeded that of the last, and will from its abundance, probably restore the aggregate value to near the average of previous years. The exports of breadstuffs and provisions in 1847, were $68,701,021; in 1849, $38,155,507, and in 1851, $21,948,653, which latter exceeds the exports of 1840, when the corn laws of England were in full force, only $2,881,118.

The exports of rice for the last fiscal year, as compared with the previous year, exhibit a decrease of $460,917, and that of tobacco a decrease of $695,834. The products of planting and agriculture for the past year has been unusually large. All Europe, with inconsiderable exceptions, has been blessed with like abundance, and without some unexpected disturbing cases seriously affecting markets abroad, there is every reason to anticipate a still further decline in our exports for the coming year.

Our total imports for the last year amount to $215 725,995, producing a revenue of more than $49,000,000. The balance of trade during that period in addition to the large amounts of the various stocks of the country caused an export of upwards of $29,000,000 of specie. The export of the precious metals still continues and at a rapidly increasing ratio, having amounted already in the first month of the current fiscal year to $27,594,236 which is nearly equal to the exports for the entire year ending 30th June, 1851.

This increased ratio in the export of specie, notwithstanding the large supply of foreign exchange, predicted upon the shipment of the cotton crop, which is now rapidly reaching the seaports at the South, and is of course going forward to the European markets in very large quantities. When the bulk of this crop has been shipped, and the supply of cotton bills subsequently diminished, the export demand for specie will of course be still further increased, unless there should be a very large falling off in the heavy importations of foreign productions.

With abundant and plentiform harvest both at home and abroad, with a large excess in the production of cotton over that of the previous years, and its consequent decline in value, and with no evidence of any increased demands abroad for our general exports, the grave and difficult question of our ability to pay for these continued large importations, presents itself to the consideration of Congress.

Should the large importation of foreign fabrics continue to increase until they drive from the market the like articles of domestic manufactures, it follows as inevitable that the labor of our people now engaged in manufactures must be drawn mainly into planting and farming. They must with equal certainty produce a superabundance of the latter products with no increased market for them at home. If this state of things shall be realized, it follows that the ability of the people to purchase foreign commodities will be destroyed, importations must greatly diminish in amount, and the revenue at once sink far below its present swollen amount. It should constantly be kept in view that our system of revenue is not compulsory, but depends solely on the voluntary contributions of the people. If our citizens refuse or are unable to purchase foreign goods, the revenue now almost solely relied on must cease, and the Government be driven to direct taxation for its support and the ultimate liquidation of a large public debt. From these considerations arises the great duty of Congress so to regulate foreign commerce, if possible, as to cherish that labor at home, the proceeds of which are our sole reliance for the revenues indispensable to the wants of the Government. I respectfully refer to the suggestions on this subject in my report to the last Session of Congress. The experience of the last year has developed no facts which induces me to question the propriety of the changes in the present tariff laws which I then submitted to Congress. On the contrary, information derived from the most reliable sources has confirmed what was then anticipated. Much of the raw cotton formerly wrought into fabric by the labor of our citizens now goes abroad and returns to us for sale in a form vastly augmented in value, and to that extent the labor of our own citizens has been diminished in value and driven into other pursuits.

The history of iron manufacture for the last few years furnishes an instructive lesson to the statesmen of this country. This article enters into such general use in every occupation of life, in all countries advanced beyond the first step of civilization, that it may well take rank among the necessaries of life in this country. Thus we perceive that the actual consumption of iron, which, under high duties and prices, was steadily augmenting in quantity, is, under the present reduced rates, both in duties and prices, gradually falling off, notwithstanding the increase of population and the great extension of our farming interests. That this great interest is in a most depressed condition, the foregoing comparative production, being for the present year less than one-half the capacity of the works, sufficiently attests. From the evidence furnished to this Department it is clear that the rolling-mills, the charcoal furnaces and forges are utterly unable to produce iron at the prices at which it is now imported. During the last year many establishments were unable to survive only by carrying the iron to the highest stages of manufacture, as the making of nails and forged work. At the present time the prices are below the cost of production. If the present policy continues we must witness, in a short time, the total prostration of this industry, which, once destroyed, will require many years to replace it upon its present footing as to skill and experience, and we shall become dependant upon foreign countries for the most important materials in the arts of peace, and the most indispensable of the muniments of war. I present with this report, several tables, intended to show the sudden and extraordinary fall in the inverse value of certain articles which, prior to the tariff act of 1846, had been subject to specific duties, but which, by that law, were made subject to duties ad valorem. It must be apparent from these tables that great frauds are practised by under-valuations daily, which no expedient can prevent, unless such articles as are set forth in these tables are changed with specific instead of ad valorem duties.

Importation of Iron.

The Secretary of the Treasury fortifies his argument in reference to the Iron manufacture, with the following table:—

The importations of bar and pig iron for the year ending 30th Sept., 1842, were.....tons	100,055
The estimated production in the United States for that period was.....	230,000
Making an aggregate consumption of.....	330,055
Or 43¾ lbs. per head.	
In 1846 the importations were.....	69,625
And the production estimated at.....	765,000
Consumption.....	834,525
Or 92 lbs. per head.	
In 1848 the importations were.....	153,377
And the production.....	800,000
Consumption.....	953,377
Or 99¾ lbs. per head.	
In 1849 the importations were.....	289,687
The production.....	650,000
Consumption.....	939,687
Or 95¾ lbs. per head.	
In 1850 the importations were.....	337,532
The production.....	564,000
Consumption.....	901,532
Or 86¾ lbs. per head.	
In 1851 the importations were.....	341,750
The production.....	413,008
Consumption.....	754,750
Or 69¾ lbs. per head.	

Canals of Ohio.

Comparative statement of the gross amount of tolls, water-rents and fines collected on each of the Ohio canals; amount of tolls refunded, cost of collection and net amount paid into the State Treasury during each of the six years from 1846 to 1851 inclusive.

Year.	Gross am't collected	Tolls refunded	Cost of collection.	Net am't paid into Treasury.	Total.
Ohio Canal.					
1846.....	336,339	961	8,100	327,127	336 189
1847.....	452,530	911	8,357	444,374	453,642
1848.....	418,230	910	8,654	408,664	418,229
1849.....	362,630	580	9,073	352,977	362,63[illegible]
1850.....	391,023	2,217	9,215	379,274	390,707
1851.....	433,944	1,233	9,043	422,518	432.795
Miami and Erie Canal.					
1846.....	134,284	756	5,686	227,035	233,479
1847.....	292 813	776	6,639	285,470	292,886
1848.....	326,976	1,679	7,219	317,411	326,310
1849.....	323,764	1,520	7,294	316,041	324,856
1850.....	313,168	1,578	7,902	303,510	312,942
1851.....	353,204	1,307	9,324	327,260	337,892
Muskingum Improvement.					
1846.....	35.104	76	1,191	33,840	35,108
1847.....	50,971	138	1,089	48,429	49,657
1848.....	29,948	48	1,113	28,781	29.943
1849.....	43,018	80	1,113	41,823	43,018
1850.....	36,441	173	1,108	35,166	36,448
1851.....	47,960	196	1,498	46,220	47,915
Hocking Canal.					
1846.....	5,383	32	404	4,662	5,099
1847.....	7,323	33	395	7,185	7,615
1848.....	8,778	31	400	8,341	8,773
1849.....	8,368	13	410	7,938	8,361
1850.....	8,078	1	402	7,684	8,087
1851.....	11,814	12	385	11,416	11,814
Walhonding Canal.					
1846.....	1,190	..	100	1,090	1,190
1847.....	2,328	..	100	2,228	2,328
1848.....	1,949	16	91	1,841	1,949
1849.....	1 594	..	100	1,494	1,594
1850.....	2,555	..	100	2.449	1,555
1851.....	2,615	1	99	2 513	2,615
Total of all the Canals.					
1846.....	612,302	1,827	15,483	593,757	611,067
1847.....	805,967	1,859	16,582	787,688	806,130
1848.....	785,882	2,685	17,479	765,041	785,206
1849.....	739,377	2,195	17.992	720,275	740,463
1850.....	751,266	3.977	18,728	728.085	750 791
1851.....	849,539	2,751	20,352	809,929	833,033

Railroad from Pittsburg to Cleveland.

The Ohio and Pennsylvania, and the Cleveland and Pittsburg railroads have formed a junction at Alliance, forming a railroad communication between the two cities.

Illinois.

Galena and Chicago Railroad.—A railroad meeting was held at Galena on the 18th ult., to hear the report of Messrs. Hempstead and Drummond, the Galena directors of the Galena and Chicago railroad. These gentlemen had recently attended a full meeting of the board at Chicago, and the object of holding a meeting was to hear what had been done by the board at that session.

The Gazette says, quoting the language of Mr. Hempstead:—

The main subject before the board was the building of the third division from Rockford to Freeport. To build the third division, $600,000 were wanted, to raise which they proposed to issue bonds with coupons attached, paying seven per cent interest per annum, for which and their final redemption, resolutions were passed pledging the road and its entire property. But in order to give these bonds character in the eastern market, and to enable them to be negotiated at a fair price, subscriptions to the amount of $200,000, on which the directors promise a dividend of ten per cent until the road was completed.

This sum if subscribed by the first of February next—25 per cent of which was not demanded before January, 1853, and 25 per cent a year there after until all paid—which would enable them to let the road sometime in March, 1852, and it would be completed in 15 or 18 months. Thus, with the $200,000 subscribed and expended on the road, it would offer good security for a loan in eastern markets.

When the $200,000 was subscribed, the engineer was authorised to get ties for the whole distance, and make such preparations for bridging Rock river at Freeport, and carry them on; so thus no delay would happen at this point. The citizens of Galena, Mr. H. said, he believed had not subscribed a dollar to the second division, while those of Chicago and the east had put themselves down and paid in $400,000. He hoped they would come forward personally; the road for the last year had paid 14 per cent, and the promise was as good for the third division.

From the Philadelphia Commercial List.

Anthracite Coal Trade.

In accordance with our usual custom, we publish to-day, our annual statement of the anthracite coal trade of Pennsylvania, or rather of the United States, for in no other State has this coal been yet found to any extent, in its purity. If Pennsylvania with her inexhaustible coal fields of as good and pure coal as exists on the surface of the globe, were suddenly blotted from the map of the Union, what would be the condition of the Atlantic States for fuel? And from whence would they derive their supply? It is from her mines that the whole of our extended Atlantic seaboard, and the great lakes must soon derive their supplies of anthracite. It is this coal which will soon supersede all other descriptions of fuel for generating *steam*, for propelling the machinery used in various kinds of manufactures, for manufacturing pig iron, navigating our rivers, lakes and the ocean, for propelling locomotives on our various and rapidly increasing railroads, and for other uses besides household purposes.

Pennsylvania contains an area of 46,000 square miles, of which upwards of 15,000 square miles or about one-third part of the State is coal lands, principally lying above or near the water level.—England, Scotland, Wales and Ireland combined, according to the best authorities, contain only 11,000 square miles of coal, in an area of 120,000 square miles of territory. This coal in many cases lies from 900 to 1800 feet below the surface of the ground and is raised by machinery. In relation to the quantity of iron ore, nearly the same relative proportions exist between Great Britain and Pennsylvania. It will thus be seen that in these articles of the first necessity, and indispensable to a state of civilization, our State possesses three times as much as all Great Britain. Without iron we should soon relapse into a state of barbarism, and without coal, we should soon be destitute of fuel except at vastly increased prices.

Let us take a retrospective view of this trade, which commenced only 30 years since, when the total supply sent to market was 365 tons, a portion of which was given away, in order to induce our citizens to make a trial of it, some of whom declared that it was *stone* and would not burn. The consumption of coal increased slowly for a number of years, but as wood became scarce and prices advanced, the demand for it became more general and is now rapidly increasing. From the commencement of the trade in 1820 to the commencement of 1838—the total quantity of anthracite sent to market was only 4,063,337 tons, while the supplies brought to market in 1851, exceed 4,400,000 tons, being upwards of 300,000 tons more than the total quantity shipped for the first seventeen years; yet this vastly increased quantity has met with a steady and regular demand, at remunerating prices, and the stock in the hands of the colliers and dealers, is less than usual.

If our government had afforded adequate protection to the manufacturers of iron, at least six hundred thousand tons of coal would have been required, to have kept the anthracite furnaces and rolling mills in operation. It is well known and conceded, that the reason why Great Britain can spin, weave and manufacture all the staple articles of commerce cheaper than any other country, is mainly owing to the abundant supply of coal, and the price at which, with its aid, they can produce pig iron; the basis from which everything in mechanics is converted, from a fish-hook to an iron steamer; from a watch spring, to that of a carriage; from a sword, to a cannon; and from a shirt button, to a locomotive engine.

The coal trade furnishes employment to thousands of miners, boatmen, coal-breakers, carters, ship carpenters, blacksmiths, vessels and seamen. At present it forms the largest nursery for seamen in the United States, the whale trade not excepted.

We live in an extraordinary age. This is emphatically the age of progress. Revolution, commerce and *steam*. It appears only as yesterday, since steam has been applied as a moving power, yet it already does the work in England alone of "*four hundred millions of men, by direct labor.*"—The foundation of steam, lies in the coal mines. What cannot be accomplished by its aid? Feeble man has only to stretch out his hands over the immensity of nature, and by the aid of steam he controls the ocean, and even the winds of heaven. "It *rows, it pumps, it excavates, it lifts, it carries, it draws, it hammers, it spins, it weaves, it prints.*" In the machine shop and the factory, on the river, the ocean and the railroad, it is STEAM that now performs the labor, that overcomes resistance and vanquishes space. The sagacious president of the British statistical society says: "But for our command of fuel the inventions of Watt and Arkwright would have been of small account; our iron mines must have long since ceased to be worked, and nearly every important branch of manufactures must have been rendered impracticable."

Now let us take a retrospective view of our own country, only forty years ago, and we should in vain discover the splendid steamboats which now give life to the Delaware, the Hudson and other rivers, and the lakes; nor any of the twelve hundred steamers navigating the mighty Mississippi and its tributaries. And those floating palaces which walk the trackless ocean like a thing of life, were not even thought of, or considered within the bounds of probability. Yet all conquering steam has brought us within ten days of Europe, although separated from it by an ocean 3000 miles in width. Every new steamboat that is built requires iron for its engines and machinery, and sometimes for its hull, as well as coal to propel it. It is computed that the consumption of coal in steamers navigating the ocean alone, in 1851 was at least 160,000 tons.

If we have made such progress on the water, by the aid of steam, what have we accomplished on the land? Within the last 22 years there has been constructed in the United States, 12,000 miles of railroads, on all of which steam is the moving power, the fabulous "seven league boots," to overcome space.

During the past year there has been a great increase in the consumption of coal, and the supplies furnished by the different regions, have exceeded the expectations of the most sanguine. It must, however, be borne in mind, that most of the coal brought down on the Reading railroad prior to March 15th, went into consumption before the opening of the spring trade.

The low prices of toll upon the Reading railroad and Schuylkill navigation, enabled the operators in that region, to sell their coal at unusually low prices, which materially increased the sales of Schuylkill coal, and kept all the operators busily employed throughout the season.

The comparatively high prices obtaining for wood, in comparison with coal, the extension of railroads, on which it can be transported, and the rapid increase of the population of the different states, will account for the rapid consumption of coal, and this consumption is destined to increase steadily, as the forests give place to cultivation, until it will be the principal fuel used on the seaboard.

In our former statement of the coal trade, no account was taken of the quantity of coal consumed by the miners and inhabitants of the coal regions, nor of the quantity required to supply the steam engines in the collieries and for breaking the coal. This quantity was known to be large, but as it passed no weigh-lock, it has never heretofore been taken into account. We have no certain data to determine this quantity. There are in the Schuylkill region alone, upwards of 170 steam-engines employed in the collieries and for breaking coal, of from 5 to 90 horse-power each, making together a power equal to that of 4,900 horses. Allowing one-tenth of a ton of coal per day as the power of each horse and that the engines are each employed 40 weeks during the year, and we have a total consumption of 12,000 tons of coal in 1851. This is a moderate estimate. Add to this number the engines employed in the Lehigh 64, and Lackawanna regions 55, and the number will not fall short of 290 engines, and the consumption, 200,000 tons of coal.

Allowing two tons of coal for each inhabitant in the coal mining districts, where it is abundant and cheap and in many cases obtained gratis, or for the cost of mining, and we have the following result;—

	Population in 1850.	Tons of coal.
Schuylkill county	60,718	121,436
Carbon county	15,686	31,372
Luzerne	56,072	112,144
Dauphin (say 1 ton)	35,754	35,754
		300,706
Add coal consumed by engines, etc.		200,706
Total estimated consumption		500,694

Here then we have in addition to the ascertained supply, 500,694 tons of coal consumed in the coal regions, which will swell the total supply to 4,900,000 tons.

The annual supplies of coal brought from the different regions, will be found in our large table, which has been prepared from returns furnished us for publication, though some of them are incomplete.

If to the Anthracite coal trade of Pennsylvania, the bituminous coal mined in our state, were added, (believed to exceed 1,500,000 of tons in 1851.) and the total quantity would be about 6,300,000 tons, worth at tidewater $3,40 per ton, and we have a total of twenty millions of dollars as the value of our coal trade for the last year. The cotton trade commenced in 1790, or thirty years before our coal trade. Cotton is now cultivated in all the Southern and South-western States; but Anthracite coal is confined to Pennsylvania alone. At the present annual increase, it will not be many years before our coal will exceed in value the cotton crop of any State in the Union.

The total amount of coal shipped from the wharves of the Reading railroad company at Richmond from 1st December 1850 to 1st December 1851, was 1,211,605 tons; which was carried in the following vessels;—ships 5; steamboats 25; barks 105, brigs 488; schooners 5157; sloops 768, and boats 2075. Total, 8623 vessels.

In 1850, the quantity of coal shipped was 1,075,344 tons, in 7,549 vessels.

The quantity of coal which passed through the Delaware and Raritan canal in 1851 was 769,602¼ tons. The total quantity which passed in 1850 was 568,403½ tons.

Virginia.

Danville Railroad.—We understand that during the past week the directory of this road have concluded contracts for those sections of the work lying in the county of Charlotte, as far as the Staunton river, the sections to be finished by the end of 1852. The contracts were taken by citizens of the county, who have generally subscribed liberally to the road, and therefore will have a deep and impelling interest in the speedy and faithful execution of their portion of the road.—*Richmond Despatch, Dec.* 18.

American Railroad Journal.

Saturday, January 10, 1852.

Ohio Central Railroad.

J. H. Sullivan, Esq., President of the Ohio Central railroad, writes us that in consequence of the determination of the board of directors to make further surveys of the route from Zanesville to Wheeling, this portion of the line will not be ready for letting by the first of February, as was anticipated, and as was stated in a recent number of our paper. The line will be prepared for contract at the earliest possible moment, of which due notice will appear in our paper.

As the company are in possession of means for a vigorous prosecution of the road, contractors will do well to keep a look out for the lettings.

The division of the road between Zanesville and Newark has been completed, thus linking another important Ohio city to her lines of railroad.

Stock and Money Market.

There has been an improvement in the money market since our last, and the tendency is to still greater ease. The feeling that money is to become abundant is strengthening constantly. Our convictions are, that the rates will remain high, but that it can be had upon some terms, for the prosection of most of our works in progress. The investment in foreign account, in our best class securities, is creating openings for those of new works, equally safe, but not well known. We believe that the present is to be a successful year for our railroad enterprises.

We would still advise our friends to hold back their securities as long as possible for the purpose of allowing the market to recover its former tone. We would especially urge companies to do all they can with their own means, before coming here.—There is a willingness among capitalists to extend all reasonable credits to new projects, and those that are entitled to credit will find no difficulty in borrowing money, though from the great number of securities offering, the rates asked must continue high. A weak security is not only negociated with difficulty, but it remains an incubus upon the market after it is sold.

The Erie railroad sale of convertible bonds takes place to-day. It is reported that they will be taken at fair rates. The dividend is to be paid on Monday, out of the proceeds of the sale, we presume as the earnings of the road have probably been absorbed by the floating debt. The funding of the floating debt of the company will have a favorable effect upon the market and will relieve the company from the necessity of making temporary loans.—The fact that the present floating debt of the company grew up at the rate of $400,000 per month, and that a large portion of it has probably been renewed a number of times, will give some idea of the extent of the monied operations of that company in the street. Unfortunately for the money market, upon the stockholders in the road, we have good reasons for believing that the company will require a very large amount of money, in addition to the earnings of the road for contingencies, during the year. We have given a brief retrospect of the financial history of this road in another column to which we call the attention of the public.

The earnings of the New York canals for the year that has just closed have been as follows:—

Canal tolls	$3,531,015 33
Railroad tolls	171,055 01
Miscellaneous	20,092 77
	$3,722,163 11

Which has been appropriated as follows:—

For expenses of repairs, collections, etc	907,730 20
For the general expense of the State government	200,000 00
For payment of canal debt	1,300,000 00
For general debt fund	350,000 00
Balance applicable to the enlargement	964,432 91
	$3.722,163 11

The Controller of Tennessee has recently made a report of the finances of the State, the substance of which is as follows:

There has been paid into the State Treasury during the two years prior to the first Monday in October, 1851, from all scurces, as well as upon warrants issued within that time....$1,004,004 94
And there has been paid out of the Treasury within that time, for all purposes 933,431 25

Excess of receipts over disbursements for the two years	70,573 69
Balance in the Treasury on the 1st Monday of October, 1849	152,198 11
Leaving in the Treasury on the 1st Monday of October, 1851	$222,771 80

The receipts into the State Treasury have increased within the last two years from $790,695 53 to $1,004,004 94. The disbursements during the same time have increased from $862,439 66 to the sum of $933,431 25. Receipts over disbursements, $70,573 69.

The public debt of Tennesse is now $3,352,856.

The Ohio Life and Trust Company have declared a semi-annual dividend of 4 per cent, with a large surplus.

The Cleveland, Columbus and Cincinnati railroad company have declared an additional dividend of 4 per cent, payable in stock, which with the previous cash dividend of 4 per cent, makes 8 per cent for the first 6 months ending with December last, leaving still surplus earnings of $60,000. The gross earnings of the month will probably be $30,000.

On the 29 miles of the Cleveland, Painesville and Ashtabula road, just opened, the receipts last week were $1,040. The business on this road will be largely increased by the opening of the Erie and Dunkirk road, and the extension of the track from Erie to the Ohio State line.

New York State Stocks.—The following are the prices at which a lot of State stocks were recently sold by Mr. S. Draper:

New York 5s,	1855	$1.000	100¾
"	1858	4 000	101¾
"	1860	5.000	101½
" 5½,	1850	2,000	105¼
" 5½,	1861	4 000	105½
United States 5s,	1853	5,000	101
Michigan 6s,	1858	18,000	94

The prices obtained are rather higher than those at the Stock Board.

Banks in the United States.—The January number of the Banker's Magazine contains the following table, showing the number of Banks in the United States, their capital, circulation and coin, compiled from the latest returns:

	No.	Capital.	Circulation.	Coin.
Maine	36	$1.098,000	$3,200,000	$630,000
N. Hamp.	25	2 586,000	2,120 000	140,000
Vermont	31	2 685 000	3,377.000	180,000
Mass	137	43.350,000	17 000.000	3,000,000
R. Island	69	12 338 502	3,000.000	350,000
Connecticut	47	13,175,675	6.640.000	800,000
New York	218	58,497.345	27.200.000	7,000,000
New Jersey	25	4 019 900	3.500.000	750 000
Penn.	54	18.966.331	12 000.000	6,200.008
Delaware	9	1.440.000	1.000.000	250 000
Maryland	26	9.287.395	3,700,000	3,000,000
Dt. Col	4	1,182,300	350 000	300,000
Virginia	39	10 214 600	11 600.000	3,650,000
N. Carolina	22	4.305,000	4 000.000	2,000 000
S. Carolina	14	11,431,183	7 500.000	2,600,000
Georgia	18	5 629,215	4 300 000	1,700.000
Alabama	2	2.000,000	3.500 000	810.000
Indiana	14	2,082,151	3,650 000	1,300 000
Iowa	1	200.000	100 000	50 000
Kentucky	26	10.180.000	7,450,000	3.300 000
Louisiana	5	12,267,120	3,500.000	4.300 000
Michigan	4	762,000	650.000	150.000
Missouri	6	1,208.751	2,400,000	1,500.000
Ohio	61	7,866,376	11,635.000	2.000.000
Tennessee	23	8,405,197	5,300.000	1,900,000
Texas	1	300,000	400,000	200,000
Wisconsin	1	225,000	250.000	100,000
Mississippi	1	100,000	100,000	150,000
Total	921	248,803,061	150,052,000	50,000,000

In Illinois, Florida, Arkansas and California, there were no banks organized when this table was compiled.

Harlem Railroad.—The receipts of the Harlem railroad company continue to show a gain over last year.

The earnings in December were	$49,151 60
" " " 1850	40,770 92
Increase in 1851	8,380 68

The annexed statistics of the cotton movement show that the receipts of the ports continued to exceed those of last year, but that the exports are still behind.

The following is a statement of the movements in cotton since the first September last, as compared with the previous three years:

	'52.	'51.	'50.	'49.
Receipts at the ports	925,000	869,000	894,000	983,000
Exports to G't. Britain	297,000	258,000	259,000	352,000
Exports to France	110,000	130,000	98,000	76,000
Exports to other for. ports	45,000	67,000	56,000	75,000
Total exports	452,000	455,000	413,000	503,000
Stock on hand	387,000	431,000	437,000	466,000

Of which during the past week, included in the above:

	'52.	'51.	'50.	'49.
Receipts into the ports	85,000	89,000	82,000	120,000
Exports to G't. Britain	27,000	24,000	40,000	13,000
Exports to France	10,000	10,000	8,000	3,000
Exports to other for. ports	1,000	9,000	3,000	3,000
Total exports	38,000	43,000	51,000	19,000

From which it will be seen that the excess in receipts now amounts to 56,000 bales. The increase in exports to Great Britain is 39,000; decrease to France, 20,000; to other foreign ports, 22,000. Total decrease in exports, 3,000 bales.

The North American gives the annexed statistics of the gold and silver movements of 1851:

We publish a statement of the operations of the United States Mint in this city, by which it appears that the total coinage during the year is $52,689,878. The exports of specie, (including the shipment by the Europa) amount to $43,743,209; which is less than the coinage of the Philadelphia Mint alone by the sum of $8,946 69. The deposits at the New Orleans Mint, as will be seen by the accompanying table, from January first, to November 30th, '51, is $7,983,089; the coinage at Charleston during the same period is $301,402; at Dahlonega, 313,981 dollars. The deposits of December, (estimating the amount of the branch Mints) are as follows:

	California Gold.	Other Gold.
At Philadelphia	$5,545,320	76,000
At New Orleans	390,000	10,000
At Charlotte	3,000	45,000
At Dahlonega	10,000	20,000
	Silver.	Total.
At Philadelphia	49,480	5,670,000
At New Orleans	18,503	918,506
At Charlotte	....	48,000
At Dahlonega	....	30,000

The excess of coinage, as reported to the papers (over $52,000,000) over the deposits, grow out of the fact that the balance on hand at the close of 1850 was coined during the year. This makes the total receipts of December 6,667,300 dollars, which, added to the receipts of the year previous to December, swells the total coinage of 1851 to the enormous sum of 61,888,350. The amount of gold on hand at the commencement of this year, at the branch mints, was so trifling that we will only deduct from the above aggregate of coinage, say 3,000,000 dollars, and the gross receipts for the year will be 59,888,350 dollars. The exports of specie during the year, according to the table presented herewith, are 43,743,209 dollars—which is less than the total imports by the sum of 16,135,031. We have received from the Mint the following statement of the deposits here, and of all the branches up to December 1st:—

Deposits at the Mint and branches, Jan. 1 to November 30th, 1851;

	Phil.	N. Orleans.
California gold	$41,390,593	7,655,869
Other gold	785,416	141,391
Total gold	42,176,009	7,797,260
Total silver	478,668	185,829
Total deposits	42,654,677	7,983,089
	Charlotte.	Dahlonega.
California gold	15,110	158,501
Other gold	286,292	155,480
Total gold	301,402	313,981
Total silver	none.	none.
Total deposits	301,402	313,981

Ogdensburg Railroad.—The earnings of the Ogdensburg railroad in December, were 20,000 dollars against 17,000 dollars in December, 1850.—The road lost a week of freight transportation in consequence of heavy snows.

Buffalo and Rochester.—The Buffalo and Rochester railroad company have declared a semi-annual dividend of 5 per cent.

Debt of New York.—We copy from the recent Message of the Mayor, the following statement of the funded debt of the city of New York:

6 per ct. Building Loan Stock, No. 2, payable	Feb. 1, 1852.	$50,000
" " "	Feb. 1. 1853.	50,000
" " "	Feb. 1. 1854.	50,000
" " "	Feb. 1, 1855.	50,000
" " "	Feb. 1, 1856.	50,000
6 per ct. Washington Square Iron Railing Stock, payable	Nov. 1, 1852.	5,000
5 per ct. " "	Nov. 1, 1853.	5,000
Total		260,000

In addition to the above, there have been issued since August 1, the following:

5 per ct Public Building Stock, No. 3, payable	Nov. 1, 1857	$50,000
" " "	Nov. 1, 1858	50,000
" " "	Nov. 1, 1859	50,000
Total		150,000
New York city 5 per cent. stocks for docks and slips, payable	Nov. 1, 1867	$50,000
" " "	Nov. 1, 1868	50,000
" " "	Nov. 1, 1869	50,000
" " "	Nov. 1, 1870	50,000
" " "	Nov. 1, 1871	50,000
" " "	Nov. 1, 1872	50,000
Total		300,000
Permanent City Debt, redeemable from the Sinking Fund:		
5 per ct. Public Building Stock, redeemable 1856		$515,000
5 per ct. Building Loan Stock, No. 3, '70.		50,000
5 per ct. Fire Indemnity stock, 1868		6,525
5 per ct. Water Loan stock, 1858		3,000,000
" " " 1860		2,500,000
" " " 1870		3,000,000
5 per ct. Water stock of 1849, 1875		255,600
5 per ct. Water Loan stock, 1850		2,147,000
5 and 6 per ct. Croton Water stock, 1890.		850,000
7 per ct. Water Loan stock, 1852		889,207
" " " 1857		990,488
Total		14,578,920

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK JANUARY 10, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	104⅞
U. S. 6's, 1862	112½
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	117⅛
U. S. 6's, 1868	115⅜
U. S. 6's, 1868—coupon	118½
Land Warrants	140a145
Arkansas 6's	52a53
Alabama 5's	91a92
Indiana 5's	84½
Illinois 6's, 1870	65a68
Kentucky 6's, 1871	104½
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	97⅛
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1855	103⅜
Ohio 6's, 1860	111
Pennsylvania 5's	90½

RAILROAD BONDS.

Atlantic and St. Lawrence, 6 per cent	85
Baltimore and Ohio, 1867	90
Boston and Providence 6's, 1855	101
Boston and Worcester 6's, 1855, convertible	107½
Bost., Concord and Mont. 6's, 1860, mortgage	97½
Cheshire 6's, 1860	91½
Connecticut River 6's, convertible	89
Erie 7's, 1859	102
Erie 7's, 1868	106
Erie income 7's	94½
Hudson River 7's, 1853	101½
Michigan Central, convertible, 8's, 1856	104½
New York and New Haven	102
Norwich and Worcester, mortgage, 1860	80a85
Old Colony, 1854	97½
Ogdensburg 7's, 1859	92½
Portsmouth and Concord	80a85
Passumpsic 6's, 1859	94½
Rutland 7's, 1863	89
Reading mortgage, 1860	78
" " 1870	72
Sullivan, mortgage 6's, 1855	67
Vermont Central 6's, 1852	93
" " 6's, 1856	85
Vermont and Massachusetts 6's, 1855	83

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Jan. 7.	Dec. 31.
Albany and Schenectady	89½	97
Atlantic and St. Lawrence	60a65	—
Androscoggin and Kennebec	30a35	—
Boston and Maine	103½	102½
Boston and Lowell	106½	106
Boston and Worcester	99½	98
Boston and Providence	85	81
Bost., Concord and Montreal	35	35½
Baltimore and Ohio	64½	61½
Baltimore and Susquehanna	34	—
Cheshire	47	45½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Connecticut River	58½	56
Delaware and Hudson (canal)	99½	99½
Eastern	95	95½
Erie	81⅞	80½
Fall River	99⅛	97⅛
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	68½	67½
Hartford and New Haven	115	115
Housatonic (preferred)	—	—
Hudson River	69	67
Kennebec and Portland	50a55	—
Little Miami	—	—
Long Island	16	15½
Mad River	—	—
Madison and Indianapolis	90	93
Michigan Central	95	95½
Montgomery and West Point	—	—
Michigan Southern	103	102½
Manchester and Lawrence	86	82½
Morris (canal)	14½	14½
New York and New Haven	111	109½
New Jersey	—	130
Northern	65	64½
Nashua and Lowell	104½	104
New Bedford and Taunton	116	116
Norwich and Worcester	55½	55½
Norfolk County	14½	13½
Ogdensburgh	27½	27
Old Colony	64½	64
Passumpsic	65	63½
Pennsylvania	—	—
Pittsfield and North Adams	95	—
Philadelphia, Wilm'gton & Balt.	29½	30
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	60½	59⅜
Rochester and Syracuse	114	112½
Rutland	57	57
Stonington	51½	48½
South Carolina	—	—
Syracuse and Utica	123½	—
Sullivan	10a20	35
Taunton Branch	109	109
Troy and Greenbush	90	—
Tonawanda	—	—
Utica and Schenectady	129	127½
Vermont and Canada	99½	99⅜
Vermont Central	24½	25½
Vermont and Massachusetts	26½	25½
Virginia Central	—	—
Western	100½	99½
Wilmington and Raleigh	56	—
York and Cumberland (Pa.)	18⅜	18⅜

Ohio.

Bellefontaine and In. Road.—The annual election of officers of this road took place on the 10th ult., James H. Godman was elected President, and W. M. Roberts, Chief Engineer.

Owing to disappointment in the non-arrival of iron in time to be shipped by canal to the lake this season, the laying of the track has been postponed until spring. The iron will be brought to Cleveland on the opening of navigation, and it is expected to open the road from Galion west, about the 4th of July next.

We are afraid that the above company will have to foot the bills of "*that dinner.*"

Illinois Central Railroad.

It is now certain that Mr. Walker has not succeeded in securing a loan for the above road.

We regret this want of success, as we are extremely desirous of seeing the road built at an early day; but we are not surprised at it. The company were not in a position that entitled them to a loan. What are the facts in the case? The General Government donated to the State of Illinois something like 3,000,000 acres of land, to be appropriated to a line of Railroad of 700 miles in extent. This donation the State virtually sold to a New York company. The company was organized, and although the road was estimated to cost about $17,000,000, the *stock subscription* was confined to $1,000,000, for the purpose of enabling a small knot of capitalists to monopolize the magnificent boon of the General Government; and the road, when it should be completed. The next thing was, to get *outsiders* to furnish the money to build the road, and by so doing, to take in fact all the risk of its success. If it turned out well, a splendid operation would be made, if badly, all that the managers could lose, would be what they had paid in, which probably was intended to be limited to the bonus deposited with the State, and the cost of the surveys. To effect this object the company went to work to figure out their profits, and they claimed to prove that the lands would build the road, which would, when completed be worth some $26,000,000! They issued, or proposed to issue, bonds to the amount of the cost of the road, $17,000,000, and sent Mr. Walker to Europe, to sell them.

The great mistake that the company committed was in making out too strong a case. There is a way of overdoing things, which often creates greater distrust than a lack of proof. So with the Central Railroad. If all were true that was claimed for it, there was certainly no necessity to go abroad for money. It would be just the scheme to take with the New Yorkers, who prefer to use their money where large ventures are at stake, leaving the more reliable, but less paying securities to the foreigner who thinks more of the *safety*, than the *amount* of return upon his investment. Men who part with their money, prefer at least, to keep it in the regular business channels with which they have been familiar. They would naturally distrust a project that promised such magic results as those claimed for the Central Road, and what would confirm their suspicions still more, is the significant fact, that the company had done nothing to show their own confidence in the undertaking by investing their own money, before attempting to loan of others. They have, in our opinion, been equally wide of the mark in giving a speculative character to the project. It was a mistake to attempt to make so much out of the lands as they proposed. They should have been content to allow the purchaser to make something. They will find that they have done themselves more harm, by their exhibit, in alienating the good will of the people of Illinois, than it can possibly do themselves good. The company have blundered from the start. They must follow the advice they would give to others, similarly situated, and illustrate their faith by their works, before they can inspire faith in others.

But the project is a good one notwithstanding, and we have strong confidence that it will be carried out. If it could be divested of its monopolizing character, and offered to the *public*, the whole amount sufficient to build and equip the road, would be *taken in this market in a day*. There is not a doubt of this. But, if instead of pursuing such a course, dictated alike by sound policy, by a regard to public good, and probably to the best interests of the present stockholders, they still persist in pursuing the monopolizing spirit that has characterized their movements, they may find it very difficult to get money on any terms, and they will certainly find the whole community arranged against them; some from feelings of envy, some from a desire to extort something from them, and a still larger number, from a sense of the injustice of their claims.

The company may be assured of this fact, that the public will build the road, if they can share in its profits, but they will be very unwilling to help forward a project, which is to inure to the benefit of a few capitalists, most of whom now possess more than they can wisely spend.

The failure of the negotiation is attributed to the *coup d'etat* in France. It is said that the Rothschilds were about to give a favorable answer, when the negociations were broken off by the above event.

Western Railroads and Securities.

The roads that stand in most need of foreign aid, are our western projects. All of our western states, with the exception of Missouri, have divested themselves, by constitutional enactments, of the power to aid private enterprises. Railroad companies in such states are thrown upon their own resources, and in a year or two more, many of them will have to depend entirely upon private subscriptions, and their own securities, for means—as all further county subscriptions are prohibited in Ohio and Indiana, which now constitute the great theatre of western improvement.

In the eastern states, private means are adequate to the construction of most of our works. The capital of the country is accumulated in the eastern cities, and can easily be made applicable to works coming within range of the daily observation of capitalists. In the south, many of the planters have accumulated large sums of money with which they carry forward their own enterprises to a considerable extent, without aid from abroad. In the west, property is more generally distributed, consequently is less available to the prosecution of railroads. It is that portion of the country, where railroads are calculated to be the most useful, and at the same time the most profitable, that can now contribute the least towards their construction.

In the west, there is an abundance of property, but, comparatively speaking, no money. The opportunities of investment are too great, and too tempting, to allow people to hoard. Every dollar is invested as soon as earned. Every kind of agricultural property exists in the greatest abundance, an active commerce exists, and all that is wanting to the full development of the vast resources of this section of the country, are means by which its products can be cheaply and expeditiously forwarded to a market.

New York has furnished a considerable portion of the means for every western project of any magnitude, by purchasing the bonds of companies for investment. The result thus far has been most favorable. The earnings of the roads as fast as they have been opened, have invariably exceeded the most sanguine calculations of their projectors.—The first bonds that were brought into market, and which were sold at a very low figure, have steadily advanced, and are now sought for at a price very nearly up to their par value. In some instances, the stocks have advanced in very nearly the same ratio. Western projects and western securities are now looked upon in this market with constantly increasing favor, and legitimate projects find but little difficulty in obtaining money at what are considered fair rates, provided their affairs are in a position to demand it.

If a western railroad company can raise at home one-half the cost of a railroad: in other words, if they can prepare the road bed for the iron, including bridges, etc.; if their line be looked upon as a promising one, and if their affairs have been well managed, they will find but little difficulty in obtaining sufficient money in this market for the iron and equipment. While this is so, it is certainly unwise for any company to come here for money that cannot make an exhibit that comes up to the test we have given. A community that cannot do this, would not probably furnish sufficient business for the support of a road; and if they can get money at all, it will be upon terms that will prove ruinous to the value of their stock.

Railroad companies will find it for their advantage to follow the hints we have given. If they will only place themselves in a proper position, they can succeed without difficulty. If they cannot, nor will not, they do not deserve success. We make these remarks for the benefit of such as may come to this market, and from a knowledge of the terms that those have been compelled to submit to who have not complied with our suggestions.

Cleveland and Wellsville Railroad.

We copy the following letter, of the correspondent of the Cleveland Herald, in reference to the proposed railroad from Wellsville, the southern terminus of the Cleveland road, to Wheeling, Va. The project is a very important one, and we take pleasure in calling public attention to it:—

Messrs. Editors:—I attended to-day the convention of delegates from the different towns on the Ohio river, between the mouth of Yellow Creek, where the Cleveland and Pittsburg railroad approaches the Ohio river, and Bridgeport, opposite Wheeling.

A full delegation was in attendance from all the towns on the line, including Wheeling. The best of feeling prevailed, and a spirit was awakened that augurs well for the early commencement of the Wheeling branch of the Cleveland and Pittsburg railroad.

Few of your citizens, I apprehend, understand or appreciate the importance of this branch of your road. It connects with the Baltimore and Ohio railroad, securing the business of Wheeling, which is now largely engaged in manufacturing, and is one of the largest and most flourishing towns on the Ohio river. With this you secure access to the business of Western and Southern Virginia, with Baltimore and the seat of government, and still this is not all—you connect with the Ohio Central railroad, also with the Marietta railroad, passing through the southern river counties from Cincinnati to Wheeling, which will enable you to compete successfully for a large portion of the business of these roads. You also connect at this point with the Steubenville and Indiana railroad. Then add to this the business of Steubenville, with her population of some seven or eight thousand, who are more largely engaged in manufacturing than any other town on the west bank of the river, except Cincinnati. There are many other thriving towns at favorable points for transacting a large produce business. It appears to me that we are entirely justified in saying that this is one of the most important branches that the Cleveland and

Pittsburg railroad will have; and it is not only important to the road, but in fact is more important to Cleveland, looking at all its bearings, than any other branch. We may not then ask your capitalists and property holders to examine it with care, and if they do so we believe they will do themselves and the Cleveland and Pittsburg railroad justice, (which we might say with great propriety they have not done,) by subscribing to this branch *one hundred thousand dollars*. With this amount from Cleveland, the work could be put under contract early in the spring, and completed in one year from that time.

Shall this be done? It remains for your city to say. Other points will, I have no doubt, promptly do their part. Committees were appointed to secure subscriptions and the right of way along the line.

The line is a very favorable one for the whole distance, 38 miles, and will cost as per Mr. Linton's estimate, eighteen thousand dollars per mile, including equipments sufficient for the first year's business.

There will be no grade of over fifteen feet, and no radius less than twenty-eight hundred feet.—With these grades and curvatures the road can be run at high speed, and draw much of the business of the valley to this line.

Bituminous Coal.

The quantity of Bituminous coal brought to the city of Baltimore from the mines in Allegheny county, by the Baltimore and Ohio railroad is as follows:—

In Jannary	tons	10,320
February		10,157
March		9,685
April		8,286
May		10,506
June		13,547
July		14,180
August		14 660
September		12,568
October		7,927
November		7 001
Total		118,837

By the Chesapeake and Ohio canal 84,718, making the entire export for the year, with the exception of the month of Dec. by railroad, 203,555 tons.

Hudson River Railroad.

We learn that W. C. Young, Esq., has resigned the offices of President and Engineer of the above road. We are not informed of the cause of Mr. Young's resignation, whether the company were dissatisfied with him, or he with the company. All we know is, that a rupture has taken place, which has resulted as above.

One thing is certain; the management of the Hudson River road, since its opening, has reflected credit upon no one. The promise and expectation held out, have by no means been fulfilled. Neither business nor travel have been properly accommodated, and the company have lost all the *prestage* of success, so important at the opening of every new work.

We learn that Mr. Young has heretofore complained that he has been hampered and thwarted in his plans by the directors, that he could not carry out his own views; consequently, that he was not responsible for the bad management in the operation of the road. We think it very probable that his functions, as chief manager of the road, have been usurped by some of the directors, by virtue of the large sums furnished by them for its construction. Some men have an idea, if they contribute largely to a railroad, that this fact vests in them the offices of President, Engineer, Superintendent, and in fact every office of trust or responsibility. This feeling has worked mischief in more roads than the Hudson River.

Hon. E. D. Morgan, of this city, succeeds Mr. Young; but until the close of his senatorial duties, his place will be filled by Mr. Jones, the Vice-President of the road.

List of Railroads, with the Names and Addresses of their respective Presidents.

	Roads in operation.	Roads in progress.
ILLINOIS.		
Illinois Central — Robert Schuyler, N. York Prest.	..	699
Galena and Chicago — Jas. B. Turner, Chicago, Prest.	94	88
Rock Island and Chicago — James Grant, Davenport, Iowa, Prest.	..	180½
Central Military Tract — Wm. McMurtry, Galesburg, Prest.	..	125
Peoria and Oquawka — James Knox, Knoxville. Prest.	..	100
Ohio and Mississippi — James O'Fallon, St. Louis, Prest.	..	145
Northern Cross road	..	51
Sangamon and Morgan. — Robt. Schuyler, N. York. Prest.	54	..
Alton and Sangamon. — H. A. Coit, N. York, Prest.	..	72
Aurora branch	13	..
St. Charles branch	7	..
O'Fallon's Coal road	8	..
	176	1463½
KENTUCKY.		
Frankfort and Lexington — W. A. Dudley, Lexington, Prest.	28	..
Louisville and Frankfort — James Guthrie, Louisville, Prest.	65	..
Maysville and Lexington — W. H. Waller, Maysville, Prest.	..	70
Covington and Lexington — J. S. Morgan, Covington, Prest.	..	78
Lexington and Danville — James Barbour, Danville, Prest.	..	37
Louisville and Nashville — L. L. Shreeve, Louisville, Prest.	..	180
Mobile and Ohio — Sidney Smith, Mobile, Ala.. Prest.	..	39½
	93	404½
TENNESSEE.		
Nashville and Chattanooga — V. K. Stevenson, Nashville, Prest.	70	89
East Tennessee and Georgia — L. D. Keys, Athens, Prest.	42	68
East Tennessee and Virginia — S. B. Cunningham, Jonesboro', Prest.	..	130
Memphis and Charleston — J. P. Burne, Huntsville, Prest.	..	281½
Winchester and Huntsville	..	60
Mobile and Ohio — Sidney Smith, Mobile, Prest.	..	119½
	112	748
ALABAMA.		
Montgomery and West Point — J. T. Pollard, Montgomery, Prest.	88	..
Mobile and Ohio — Sidney Smith, Mobile, Prest.	33	29½
Alabama and Tennessee — J. W. Lapsley, Selma, Prest.	..	160
	121	189½
MISSOURI.		
Pacific — Thos. Allen, St. Louis, Prest.	..	315
Hannibal and St. Josephs — R. M. Stewart, St. Josephs.	..	200
		515

TABLE showing the number of miles of railroad in progress and in operation in the Northern and Southern States, respectively.

NORTHERN STATES.	Miles in operation.	miles in progress.	Total.
Maine	315	127	442
New Hampshire	489½	47	536½
Vermont	380	59	439
Mass	1089	67	1156
Rhode Island	50	32	82
Connecticut	547	261	808
New York	1826	745	2571
New Jersey	226	111	337
Penn	1146	774	1920
Ohio	828	1892½	2720½
Michigan	427	....	427
Indiana	600	905	1505
Illinois	176	1463½	16394
Wisconsin	20	421	441
Total	15,024½		
SOUTHERN STATES.			
Delaware	16	11	27
Maryland	376	125	501
Virginia	478	818	1296
N. Carolina	249	385	634
S. Carolina	340	298	638
Georgia	754	229	983
Alabama	121	189½	310½
Miss	93	273	366
Louisiana	63	..	63
Texas	..	32	32
Tennessee	12	748	860
Kentucky	93	404½	497½
Missouri	....	515	515
Total	6 723		
Total in U. S.	21,747½		

The New Hamburg Tunnel on the Hudson River Railroad.

The following is a description by the Engineer who superintended the work of the principal tunnel on the Hudson River railroad. It will interest the engineering fraternity, generally, as well as others in this State who are agitating the question of the cost of the Hoosac Tunnel on the Troy and Greenfield line:—

SIR:—At the request of the president I furnish you below all the information I can draw together during the short interval before the departure of the mail.

The tunnel at New Hamburg is approached on both sides by such heavy rock cutting as rendered it necessary to commence operations through shafts,

Firstly.—The tunnel is 836 feet long.

Secondly.—The area of the tunnel is 15,603 cubic yards, (15,603-1,000) per lineal foot. The specification herein quoted gives the outline. Grading for a double track. The tunnel to be twenty-four feet wide at the grade-line, eighteen feet high at the center, seventeen feet high at a distance of five and a half feet each side of the center, [these points being nearly perpendicular to the center of the smoke pipe of the locomotive,] and ten feet high at the springing points of the arch, distant twelve feet each side of the center. The bottom to be excavated one foot below grade for ballast to imbed the sleepers, and also side drains two feet below grade. The roof is a curve of three centers.

Thirdly.—The total time occupied from the removal of the first cubic yard to its completion was sixteen months. The excavation was commenced and carried north and south in the first shaft, during September, 1848. The excavation was commenced and carried both ways in the second shaft in December of the same year. North end of the tunnel commenced early in February, 1849. South end commenced middle of June, 1849. From the middle of June to December 27th, 1849, the time of completion, workmen were employed on an average of four faces. The drifts, ten feet by six feet, nearly, at the top center of the tunnel, were driven day and night from the very commencement until their completion in October, 1849.

Fourthly.—The cost of excavation of 13,011 cubic yards of rock, embracing the tunnel proper, was

$4,249-1,000 or nearly $4,25 per cubic yard. Also 6,000 cubic yards hoisted through shafts at 75 cents —$4,500. Also 608 cubic yards of shaft excavation, at $5,00—$3,040; all of which included, made the cost about $4,51 per cubic yard.

Fifthly.—There were two shafts, one forty-five feet, the other thirty five feet in depth from the natural surface to the top center of the arch. Distance between the two shafts 245 feet. The work, though expedited by more than half, was increased in its cost by the use of shafts. 1st.—From the fact that all the material thus excavated was hoisted. 2d.—By the removal of 2,000 to 2,500 gallons of water per day, during the greater portion of the spring and autumn months, and perhaps half that quantity during the remaining seasons from each shaft. 3d.—The necessity for pumping fresh air to remove the smoke from the blasts and to displace carbonic acid gas, which would have rendered the shafts otherwise untenantable. 4th.—Lights, and higher wages, and time lost in ascending and descending.

The rock was throughout a compact limestone of different degrees of purity, free from seams or layers of earth, so much so that every inch was made by blasting. The contour laid down in the specifications was carefully observed by the workmen, and the tunnel is beyond all question safe in every part.

I would remark in addition, that had the tunnel been worked only from the extremities, and the time for its completion prolonged for more than another year, the excavations might have been made for $4 per cubic yard, yielding to the contractor nothing more than a fair profit.

Very respectfully, your obedient servant.

THOMAS C. MEYER, Civil Engineer.

Railroads in Southern Ohio.

The Marietta Intelligencer, in an article upon the great want that exists for a railroad through Southern Ohio, parallel with the Ohio river, to furnish an avenue for the travel and commerce of that portion of the State, and for the Western portions of Virginia and Pennsylvania, gives the following summary of the Railroad prospects in that quarter:—

The Great Valley Road of the Ohio River is no longer a "castle in the air"—a "chimerical scheme"—but its construction is a "fixed fact"—one of the things sure to be done, and that soon.

From the recent interesting movements in Pittsburg, Wheeling, Steubenville, Wellsburg, etc., it requires no prophet's eye to see that a railroad must soon be constructed from Pittsburg to Wheeling. All the interests named agree in opinion as to its importance. All they need to secure its early construction is harmony and concert of action. Their only disagreement is as to routes. That settled *correctly*, and the work at once will go on, and result in prosperity to the people, and profit to the stockholders. A wrong settlement of the route will sooner or later result in the building of a second road, upon the shortest line (as to time) between the cities. The exigencies of trade and travel demand it, and of course this shortest line will become *the road*. We trust this question will be speedily and properly settled by our friends along the upper part of the valley.

The next link is from Wheeling to Marietta. One of the great and enlightened Statesmen of our country, recently said of this link: "This extension, the exigencies of important interests must speedily accomplish. By this line the Hempfield road will form a link in the avenue or connection by the shortest and most direct route, between South-Eastern Ohio, Kentucky and Tennessee and Philadelphia, New York and Boston."

And the scarcely less distinguished Pennsylvanian at the head of the Steubenville and Pittsburg road, would doubtless add to the above, that *the interests of Pittsburg also demand* the continuation of this road to Wheeling that the Iron City may thereby have a direct connection with the shortest and most direct route into South-Eastern Ohio, Kentucky and Tennessee—a region of country which has poured a vast amount of business and wealth into Pittsburg.

We next come to the western part of the "Marietta and Cincinnati Railroad," and its southern *tributaries and connections*. The construction of this road may safely be regarded as a settled question—depending only upon the money markets, and the consequent value of its securities—which may be considered as established, in view of the fact that *recent* sales of the first 7 per cent bonds it placed in market brought $95 in New York—a much higher rate than any other western company has obtained since the stringency in the money market commenced.

This road is under contract from Vinton county westward to its temporary connexion with other Cincinnati railroads. Additional individual subscriptions to the amount of about one hundred thousand dollars only are needed to justify the directors in putting the road under contract from Vinton county to Marietta. This doubtless will be accomplished early next spring. Commencing here, the road passes through the county of Washington, the rich mineral counties of Athens and Vinton, across the broad and fertile Scioto valley, and through the productive agricultural counties of Ross, Highland, Clinton, Clermont and Hamilton, to Cincinnati.

Its junction with the Scioto and Hocking Valley road, which is formed in Vinton county, can scarcely be too highly estimated. It is the point of connection between the eastern and western, and the great Southern, Kentucky and Tennessee lines. This road is under contract, and the work upon it is pressed forward with commendable energy. So also is the Ironton road, another important tributary, and active measures are being taken to secure the early construction of a road from Gallipolis to the Ironton road. This latter (the Ironton) is we believe already *completed* to some of the furnaces, and a locomotive has recently been placed upon it.

Thus we have given a programme of the system of Southern Ohio Railroads. They will all be constructed, and we hope that in less than three years every one of them will be in successful operation. They—with the Maysville road, which passes along the valley opposite the counties of Brown and Adams—will give to *every river county in Ohio* [Meigs only excepted, and there is enterprise enough there to prevent her long remaining in the back ground] the advantages of railroad communication, not only with each other, but with the whole railroad world, and relieve them from *dependence* upon the Ohio river as a means of travel and transportation. Our trade and commerce will not be subject to long and ruinous interruption whenever drought or ice obstructs the navigation of the river, but at some rates it may be continued at all seasons of the year.

Railroad Law.

The following decision in reference to the liability of railroads as common carriers, was recently made by the Supreme Court of New Hampshire:—

C. C. P. Moses vs. *Boston and Maine Railroad.* This was an action on the case commenced in the Court of Common Pleas, in Hillsborough county, at the August term, 1848, against the defendants as common carriers, to recover the value of a large quantity of paper lost in the defendant's depot in Dover, at the time it was destroyed by fire in 1848. A verdict was taken for the plaintiff in the Court of Common Pleas, subject to the opinion of the Court above upon certain questions of law raised by the defendants.

The principal questions were:—Can one carrier who delivers goods to another carrier to be forwarded or further transported, be a competent witness for the owner of the goods in an action for the loss of them against such other carrier, without a release? Can railroad corporations, as common carriers, limit their common-law liability by notice? Can the defendants show that the truckman who delivered the goods to the defendants, at the time of their delivery gave certain directions in relation to their disposition, in consequence of which they were lost: and are the defendants protected by such instructions, without showing that the truckman had authority from his employers to give them? Can a party bringing an action against another as a common carrier, setting out in his declaration the liability of the defendant as a common carrier only, recover against the defendant as a warehouseman, notwithstanding he might be liable for the loss of the goods entrusted to his care as a warehouseman?

The three first questions, in a very elaborate opinion delivered by Judge Perley, were decided in the negative, and the last in the affirmative.

This opinion settles the law of this State in relation to railroads as common carriers, and one upon which claims to a very considerable amount have been depending. The result in this case is a judgment on the verdict of the plaintiff.

The Right of the Directors to Remove the President—The case of F. O. J. Smith et als. *vs.* John A. Poor et als., was finally disposed of, in the Supreme Judicial Court, on Saturday last, before Judge Wells. This was an application for a *quo warranto* by Smith and others, claiming to be directors of the York and Cumberland Railroad, and asserting that the defendants had usurped possession of the road, and were using it without authority, praying for an injunction against them, and a surrender of the possession of said road to the petitioners. Application was made to the Court at Augusta, in October last, and a motion, in notice on the defendants, to answer, was made on the 18th of November last, by Messrs. Fessenden and Deblois, counsel for Smith.

Judge Wells, in disposing of the motion on Saturday, remarked that in consultation, the Judges had examined into the question, and were of opinion that the order of notice would be of no advantage, as the defendants were rightfully in possession of the road, and that the petitioners could take nothing by their motion.

The facts of the case are familiar to our readers. F. O. J. Smith was removed by vote of the directors, from the office of President of the York and Cumberland Railroad, for procuring an alleged unlawful issue of bonds, and putting $20,000 of this issue in circulation. Notwithstanding his removal, he still claimed to act and attempted to preside at the annual meeting of the stockholders on the 12th of August last, but was forcibly expelled from the meeting. He has since claimed to have been legally chosen a director with Geo. Odeon and others, and to have been made President of the new board, and brought this suit for the possession of the road, against the old board. The decision, therefore, puts an end to the controversy, and establishes the right of a board of directors to remove their President from office.—*Portland Adv.*

Kentucky.

Covington and Lexington Railroad.—It affords us great pleasure, says the Covington Journal, to announce that Mr. A. L. Greer, agent of the Covington and Lexington railroad company, has contracted for iron for 53 miles of the road. The iron was purchased at the lowest cash prices, to be paid for in the bonds of the company at par. The iron is to be delivered immediately after the opening of navigation next spring.

Mr. Greer at the same time disposed of the remainder of the first issue of Covington bonds on very favorable terms.

It is the confident expectation of the directory that the road will be opened to the public from Covington to Falmouth during next year.

Election of Directors.—At the annual election for directors of the Covington and Lexington railroad company, recently held in Covington, the following gentlemen were elected:

John S. Morgan, Covington.
F. G. Gedge, "
C. A. Withers, "
M. M. Benton, "
A. L. Greer, "
Garret Davis, Bourbon county.
M C. Johnson, Fayette county.
A. Robbins, Pendleton county.
Thos. T. Garnett.

At a subsequent meeting of the board, Col. J. S. Morgan was elected President, J. S. Walker, Treasurer, and F. Wise, Secretary.

Arkansas.

Arkansas Central Railroad Company.—The Little Rock Gazette publishes the charter of the "Arkansas Central railroad company," (the title adopted by the company to carry out the project of a railroad from Little Rock to the Mississippi river.) The capital is fixed at two millions of dollars, in $100 shares, and the company is to be organized as soon as shares to the amount of $50,000 shall have been subscribed. The office of the company is fixed at Little Rock. The object of the company is more fully shown in the following extract from the second section of the charter.

"The objects and purposes of said company are, and shall be, the construction of a railroad, on the most direct and eligible route, from the Mississippi river, in this State, opposite the city of Memphis, in the State of Tennessee, to Little Rock, and from thence to Fulton, on Red river, in Hemstead county, and from thence, in a direct line, to the Texas boundary, on such a scale as shall serve for the "main trunk" of a continuous line of communication between those points, and such other points, in this State, as may be connected therewith, by means of other companias and corporations, and other portions of the United States.

Anthracite Coal Trade for 1851.

The amount of Anthracite coal sent to market from the Pennsylvania mines for the year 1850 has been as follows.

	1850. tons.	1851. tons.
By Reading Railroad	1,423,977	1,599,428
Schuylkill Canal	288,030	989,251
Total Schuylkill	1,712,007	2,118,584
By Lehigh Canal	722,688	980,251
Delarware and Hudson	613,886	788,485
Wyoming	275,109	336,107
Lyken's Valley	35,000	53,130
Pine Grove	62,809	enlar'g canal
Shamokin	19,921	23,989
Dauphin and Susquehanna	.....	20,000
	3,371,420	4,389,476

Increase in 1851 over 1850 1,018,056 tons.

Of the shipments on the Schuylkill canal 112,697 tons stopped on the line of the canal.

American vs. English Railroads.

"The American people number 23,000,000 of souls, to whom, besides the natural yearly native increment, an addition is made by emigration of between 400,000 to 500,000 settlers, mostly in the prime of life, and many with hard cash in their pockets. Wages are in the States so high, and the whole population so well off, that they can afford to spend money in travelling more universally and to a greater extent, than the inhabitants of any other country. Intensely migratory, and proverbially locomotive themselves, the annual influx of strangers and emigrants passing on to their settlement, or travelling through the country, fill every medium of conveyance to every quarter, and to overflowing. Wood is to be had everywhere for the cutting. Irish navigators present themselves on the arrival of every ship. Land may be had for nothing—premiums even offered to railway projectors by proprietors to carry their lines through their properties. There are no lawyers and jobbers to run up enormous bills in Parliamentary contests. Economy is uniformly consulted—cheapness always commended. The result reluctantly acknowledged, and hastily slurred over, by our stags, our capitalists, and the common jackalls of the press, is neither more nor less than this. Twenty-eight millions of British have 7,000 miles of railway, and 24,000,000 of Yankees have 10,000. The English paid £250,000,000 for their 7,000 miles, while the Americans constructed and furnished 10,000 miles for £66,654,000. In a word, British railways cost £35,700 per mile, and Yankee railways average £6,500, or little more than one-sixth of the cost of our own. It is obvious from these data, that if the London and North-western can afford to divide 5½ per cent, the line from New York to Albany or Buffalo should yield 33 per cent; and it may, on the most assured evidence, be with great safety concluded, that the account contained in our last, of American dividends ranging from 6, 8, and 10 to 15, and even 19 per cent, scarcely comes up to the most moderate estimate of the probabilities of the case.—*London Dispatch.*

Hudson River Railroad.

In giving the following account of the business of the Hudson River railroad company, it is proper to state that during the year ending Sept. 30th, 1851, with the exception of three and a half months of the year, only one half of the road has been in operation. During this portion of time the income of the road has been mostly derived from the local or way travel from New York to Poughkeepsie, and but an imperfect connection maintained for through passengers to and from this city by means of steamboats in summer and stages in winter to and from Poughkeepsie.

On the 16th of June last that part of the road between Albany and Hudson was opened for travel. On the 7th of July it was extended to Oakhill, on the 4th of August to Tivoli, and on the 1st Oct., the whole line of road was brought into use for the transportation of passengers.

Capital stock as by charter	$4,000,000 00
Amount of stock subscribed	3,719,239 23
Amount paid in as by last report	3,310,552 17
Total amount now paid in of capital stock	3,703,229 23
Funded debt, as by last report	3,486,750 00
Total amount now, of funded debt	5,646,884 92
Floating debt, as per last report	111,151 37
The amount now of floating debt	159,427 58
Total amount now of funded and floating debt	5,806,312 50
Average rate, per annum of interest on funded debt, 7 per cent.	
Cost of road and equipment as per last report	6,666,681 51
Cost of road and equipment to present time	9,305,551 09
Length of road, 144 miles, length of double track, including slidings, 46 miles.	
Expenses of maintaining road	45,405 23
Expenses of repairs of machinery, including $5,000 on hand	51,082 03
Expenses of operating the road	244,793 71
Earnings from passengers	361,653 75
" " freight	37,095 35
" " other sources	6,800 41
Receipts from passengers	360,849 80
" " freight	36,302 11
" " other sources	6,800 41
Payments for transportation expenses	336,225 04
Number of passengers carried in cars	749,124
Number of tons freight carried	12,915

Illinois.

Rock Island and Chicago Railroad.—The annual meeting of the stockholders of the Rock Island and Chicago Railroad Company, for the election of Directors and the transaction of business generally, takes place at Chicago, on Monday the 22d inst.

It is hoped that the stockholders will re-elect the present Directors. The success of the road under their management has exceeded the expectations of the most sanguine. A few months ago the Chicago and Rock Island Railroad project was not thought of, save by a small number of the friends of the measure. Now, the entire road is under contract, and thousands of men are at work upon it, and much of it is ready for laying down the rails. The contractors are pushing ahead the work, as fast as the efficient corps of engineers connected with the road can prepare the specifications and make the necessary measurements.

We learn that the stockholders in this vicinity, and in fact along the whole line, are in no ways backward about paying the instalments as they become due. This is an excellent indication, and proves that they have confidence in the course pursued by the present Board of Directors.

The Atlantic cities are already directing their attention to the completion of the Chicago and Rock Island Railroad, as the medium of the most direct railroad communication with the upper Mississippi. Commercial men discover the advantages of the route over any other, and consequently are anxiously awaiting the completion of a road that will open such a world of wealth to them.

Under this state of facts, stockholders must see that a change in the arganization of the board is uncalled for. The Directors are all active business men, and the way they have managed the concerns of the road, prove that the interests of the Company, are safe in their hands. They have been successful in their plans hitherto, and it is hoped that they may be continued to carry them out.—*Joliet Signal.*

Ohio.

EDITOR RAILROAD JOURNAL:

Dear Sir—It was my good fortune to attend the convention at Steubenville on the 11th of January, called for the purpose of considering the propriety of connecting the Cleveland and Pittsburg with the Baltimore and Ohio railroad. Delegates from the different towns along the north bank of the Ohio attended, and gave evidence of their deep interest in the speedy commencement of that important link.

The distance, I learned, from the mouth of Yellow creek, where the Cleveland and Pittsburg railroad approaches the river, to Bridgeport, opposite Wheeling, is but 38 miles. The line is extremely favorable, with no grade exceeding 15 feet, and no curve with a radius less than 2800 feet. The estimated cost with equipment is eighteen thousand dollars per mile. Wheeling, as well as the towns upon the Ohio side, promise prompt and efficient aid, and with an ordinary degree of exertion the short gap may be filled up by the time the Baltimore and Ohio road is completed to Wheeling.—Resolutions were passed appointing committees to secure subscriptions and right of way.

Cleveland, Dec. 24, 1851.

Ohio.

Little Miami Railroad.—The report of the business of the Little Miami railway for the year just closed presents the affairs of that company in a very favorable light. The entire track, from Cincinnati to Xenia, is now laid with a heavy T rail, except a short distance in the street, adjoining Cincinnati. The track from Xenia to Springfield will be relaid the coming season. The passenger cars are of modern construction, and all the machinery of good quality and of requisite power. There are 14 first class passenger cars, 7 second class, with baggage and mail cars, 230 box platform cars, and 20 locomotives, 6 having been put on the track the last year. The gross receipts for the past year amount to $487,815 89, against $405,697 24 the previous year. This shows an increased income of $82,118, or near 20 per cent, while the increase in the expenses is only $8,129 for the same time. The number of passengers for the year number 174,039, showing an increase over the previous year of 29,603, or about 20 per cent. The reports show a steady increase of business and profits on this road.

The net earnings this year being	$297,457 57
Net earnings last year	223,468 66
Difference in favor of this year	$73,988 91

A dividend of five per cent. for the last six months has been declared, payable in stock, leaving a surplus fund of $134,121 15. With this surplus, and a prospect of increased business, make it evident that a regular semi-annual dividend will hereafter be made, and leave an adequate contingent fund to meet any diminution of business, from casualty or other cause. This road has been managed with care, economy, and safety to the passengers and property transported on it. No passenger has lost his life during the past year by any accident on the road.

The company have stipulated that on and after the 1st day of June next, the dividends shall be paid in money, and that books for the transfer of its stock shall be opened and kept open in this city

Illinois.

Galena and Chicago Union Railroad—Third Division.—Books of subscription are to be opened on the 1st of January, at New York City, Utica and Whitestown, N. Y., and at Chicago, Rockford, Freeport and Galena, for the sum of six hundred thousand dollars to the capital stock of the Galena and Chicago Union Railroad Company, for the construction of the Third Division of the road, from Rockford to Freeport. The last two semi-annual dividends of this road amounted to fifteen per cent. exclusive of a reserved fund, upon the cost of the portion completed at the time the dividends were declared. The business done upon it has invariably exceeded the estimates. Its full paid stock is eagerly sought after, by those desirous of a safe and profitable investment, and commands readily a handsome premium. The road is in the hands of experienced, energetic and faithful managers. It passes through a region of country unsurpassed in fertility, the abundance and variety of its products, and which is rapidly filling up with an enterprising class of citizens. The completion of the division, for which it is now proposed to raise the necessary funds, will bring it into connection with the Galena Branch of the Illinois Central Railroad, opening up a channel of communication with the mineral regions of Illinois, Iowa and Wisconsin, through which a large increased freighting and passenger business will be obtained. Almost all the merchandise for Northern Illinois, Iowa, Minnesota and Western Wisconsin, will pass from the lakes over this road, while the bulk of the cereal and mineral productions of the same country will likewise seek the Eastern sea-board through this channel. These facts indicate what the character of the investment is to which the company now invite the attention of capitalists.

The only fear we have upon the subject is that Eastern capitalists will take too large a proportion of the stock. We like to see works of this character, which pay so handsome a profit, and which are so intimately connected with the prosperity of the country, owned, as far as possible, by our own citizens. The company have an excellent credit abroad. We doubt not the entire sum wanted could have been raised upon its bonds at a fair rate of interest, and one view of the subject would induce the wish that it had been done. On the other hand, however, debt is anything but a blessing, either to individuals or to corporations; and the Galena and Chicago Company have ever manifested a most commendable prudence in this regard. Perhaps their policy is the wisest, if it should not turn out to be the most profitable. But this is neither here nor there. The company have determined upon their course. Books will be opened as announced by the Secretary, Mr. Larrabee, in our advertising columns. We have only to say to our Illinois friends, who have the requisite ability, to see to it that too much of this valuable stock is not permitted to slip through their fingers, to enrich the capitalists of other States.—*Chicago Tribune.*

To Contractors.

IN gross, will be received until the 25th day of January, 1852, proposals for the grading and entire construction of the Ohio and Indiana Railroad, extending from Crestline, the point on the Cleveland and Columbus Railroad where the Ohio and Pennsylvania railroad terminates, to Fort Wayne, Ind., 131 miles long.

The location, stock subscription, and releases, are in condition to warrant an early commencement and vigorous prosecution.

This road is the third link in the great chain of roads from Philadelphia to Chicago.

W. MERRIMAN, Pres't.

Bucyrus, Ohio, Dec. 25, 1851. *

To Civil Engineers and Contractors.

THE advertiser, an Engineer recently from England, is desirous of an engagement, having been employed on some of the principal lines in that country and France. Satisfactory testimonials from parties in England and America. Address A. B., at the Railroad Journal office.

January 1, 1852. 1m*

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.



Winter Arrangement.



The Passenger Trains will run as follows until further notice:

TRAINS GOING EAST.

Leave LaPorte, 7·30 a.m., White Pigeon, 10·40 a.m., Adrian, 3·10 p.m.

Arrive at Toledo and Monroe, 5·45 p.m.

TRAINS GOING WEST.

Leave Monroe and Toledo, 8·15 a.m., Adrian, 11 a. m., White Pigeon, 4 p.m.

Arrive at LaPorte, 6·30 p.m.

E. P. WILLIAMS, Sup't.

Adrian, December 22, 1851.

Straughan, J. R.,
Ohio and Indiana Railroad, Bucyrus, Ohio.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING
OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

American Lap Weld Iron Boiler Flues.

MANUFACTURED by the Reading Iron Tube and Boiler Flue Works, from 1¼ to 7 in. diameter, and in lengths to eighteen feet, made from the best Pennsylvania refined cold blast charcoal iron, and equal in finish to any imported. Also made to order a but welded flue with patent lap welded ends, and when preferred they will be finished with a screw and ferrule on the ends. All the above will be made of any thickness of iron ordered. Also, welded wrought iron Tubes for water, steam and gas. Extra heavy tubes made to order, for sale by our agent, A. B. Wood, 23 Platt street, New York, and Samuel Griffiths No. 15 North 7th street, Philadelphia, or at our works.

SEYFERT, McMANUS & CO.,
January 3d, 1852. Reading, Pa.

THE FIFTH EDITION OF
NEW YORK:
Past, Present and Future,
BY E. PORTER BELDEN, M. A.,

HAS been issued, by PRALL, LEWIS & Co.—We have made arrangements by which we have bound, and will continue to bind with each Edition of the above, the

AMERICAN ADVERTISER,
A Reference-Work for Purchasers,

Containing the Cards of Merchants and Manufacturers in every line of business. Price, including both of the works, 25 cents and upwards.

STURGES ON THE GAME OF DRAUGHTS,
Second American Edition. Price, in muslin, 75 cents—in paper 50 cents.

The Cheapest Almanac of the Season!

AMERICAN COMMERCIAL ALMANAC, 1852,
Containing, besides the Astronomical matter, numerous statistical details relative to the government, judiciary, population, resources and commerce of the Union, all the details of inland and foreign postage, and the *Constitution of the United States* in full, the latter of which alone usually sells for twice the price of the Almanac. Price 6¼ cents single, $1 per hundred, $35 per thousand.

PRALL, LEWIS & CO., Publishers,
76 Nassau street, N. Y.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

New England Car Spring Co.,

No. 104 Broadway, New York,

MANUFACTURERS OF

INDIA RUBBER CAR SPRINGS & HOSE,

Of F. M. Ray's improved form, and dealers in every description of Rubber Goods for Railway purposes.

All Goods manufactured by this company are warranted of the best materials, and the same composition which has established the reputation of F. M. Ray's India-rubber Car Springs.

F. M. RAY, Agent.

Railroad Iron.

THE undersigned offer for sale 1000 tons Railroad Iron, (about 56 lbs. to the yard,) now at Brooklyn.

CHOUTEAU, MERLE & SANFORD,
Oct. 1, 1851. 51 New st.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

PREMIUM

RAILROAD CAR SPRINGS,

AND OTHER

India-rubber Goods.

TWO Prizes were awarded me last month by the American Institute—one for *best Car Springs*, the other for *best Overshoes*. This proves the superiority of the Goods made by me.

HOSE and STEAM PACKING, and all other India rubber goods for Railroad purposes, on hand and for sale cheaper than any other house.

Car Springs, 50 cents per lb. for cash—of the best quality and of all sizes, (Fuller's patent.)

I now give notice that Fuller is the original and true inventor of the India-rubber Spring, and companies who use Springs made by other parties will eventually have to pay me damages. H. H. DAY,
23 Courtlandt st., New York.

Inventor and owner of 17 I. R. Patents, and the oldest Manufacturer of India-rubber in the U. S.

December 6, 1851.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Civil and Mining Engineers and Surveyors.

A YOUNG MAN having lately completed an engagement of six years with an eminent Civil and Mining Engineer in Scotland, is desirous of a situation in that capacity. Has had considerable experience in the mines of Scotland, and is in possession of all instruments necessary for land and mining surveying. Address A. S, care Mr. D. H. Arnot, 50 Wall St., N. Y.

Dec. 13th. 1m*

Railroad Iron.

2000 TONS of an approved pattern 59 to 60 lbs. per lineal yard, now manufactured in England, and ready for immediate shipment, from thence.

Also, 2,500 tons of different patters in port and expected to arrive within sixty days. For sale by

DAVIS, BROOKS & Co.
28 Beaver Street, New York.

CONTRACTS made for Railroad Iron at a specific price delivered in England, or at port in the United States.

TO FOUNDRYMEN, AND Contractors for Iron Castings.

THE Proprietor of the Rossie Furnace, St. Lawrence County, N. York, having lately erected at their works a Casting House 125x75, with suitable Cupolas, Cranes, etc., and a Machine Shop, furnished with a considerable stock of tools, and a water wheel of 30 horse power—the whole carried out in the most substantial manner—offers the use of these premises, in connection with the sale of Rossie Iron, to manufacturers and contractors for castings and machinery.

There are 2000 tons of hot and cold blast iron now at the works, any part of, or more than which, might be contracted for in connection with the above; and as liberal terms of credit would be extended to parties offering satisfactory security, it is supposed that the conditions contemplated may present no ordinary advantages to persons desirous of a large business on a limited capital.

It may be useful to add that the Cold Blast Iron made at these works is of a very superior quality for Car Wheels.

Rossie is 6 miles from the River St. Lawrence, and connected by a good Plank road all but 1 mile. For further particulars, apply to D. W. Baldwin, Agent, at the works, or at the office of the subscriber, Ogdensburg, St. Lawrence Co., N. Y.

G. PAIRSH.

December 20, 1851. 6t*

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

LOWMOOR IRON.

THE *LOWMOOR* IRON COMPANY having appointed WM. BAILEY LANG their sole agent in America and Canada, he is now prepared to receive and execute all orders for Railway Tire Bars, bent, welded, and blocked Railway Tires, Axles, Piston Rods, and Boiler Plates. Also, plain, angle, rivet and every other description of Lowmoor Iron.

All communications respecting the above are requested to be sent to Wm. Bailey Lang, at his Steel Warehouse, No. 9 Liberty Square, Boston, or to the Lowmoor Iron Works, Bradford, Yorkshire, England. 30th Sept., 1851.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Stone Masons.

THE NEW ALBANY AND SALEM RAILroad Company have about 10,000 c. yards of Abutment Masonry to let at private contract, to be completed by the 1st of July, 1852.

To contractors who can produce testimonials of character for ability as STONE MASONS, fair, remunerating prices will be given.

Early applicants, by securing the work now offered, will gain advantages over competitors for the erection of an additional 15,000 yards, to be let out early next spring, in bridging the streams between Bedford and Michigan City, via Bloomington, Gosport, Crawfordsville and Lafayette, (the most productive and healthy region in Indiana,) by the knowledge they will have acquired of the resources of the country.

Application may be made in person, or by letter addressd to the undersigned, at New Albany, Indiana. S. B. WILSON, Engineer.

Engineer's Office, New Albany, Sept. 29th, 1851.

To Chief Engineers, Directors of Railroads, Canals, etc.

A Civil Engineer and Surveyor, who has been professionally engaged under the British Government, East India Company, etc., is desirous of obtaining employment as an Assistant. No objection to the South or West. Address for one month to C. E. & S., American Railroad Journal office.

August 16, 1851.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
C. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Iron.

THE undersigned, Agents for British Manufacturers, continue to sell Railroad Iron of the best quality, and of any weight or pattern required; deliverable at any part of the United States or Canada.

They have now on hand, ready for delivery New York:

2,000 tons of an approved pattern, weighing about 60 lbs. to the yard.

WM. F. WELD & CO.,
42 Central Wharf. Boston.

To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address

J. B. GRAY, Philadelphia.

July 10, 1851. 4m

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30. 1851. No. 51 New st.

THE NEWCASTLE MANUFACTURING Co continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack Screws, Wrought Iron Work and Brass and Iron Castings, of all kinds connected with Steamboats. Railroads, etc.; Mill Gearing of every description; Cast Wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

Practical and Scientific Books

PUBLISHED BY

HENRY CAREY BAIRD,

SUCCESSOR TO E. L. CAREY, PHILADELPHIA.

For sale by Dewitt & Davenport, Tribune Buildings, New York, and Booksellers generally throughout the United States and Canada.

Now being published in Twelve Parts, price 25 cents each, the PRACTICAL MODEL CALCULATOR, for the Engineer, Machinist, Manufacturer of Engine work, Naval Architect, Miner and Millwright.—By Oliver Byrne, Compiler and Editor of the Dictionary of Machines, Mechanics, Engine Work and Engineering, and Author of various Mathematical and Mechanical works—illustrated by numerous Engravings; forming, when completed, one large volume, octavo, of nearly 600 pages.

It will contain such calculations as are met with and required in the Mechanical Arts, and establish models or standards to guide practical men. The tables that are introduced, many of which are new, will greatly economise labor, and render the everyday calculations of the *practical man* comprehensive and easy. From every single calculation given in this work other calculations are readily modeled, so that each may be considered the head of a numerous family of practical results.

The examples selected will be found appropriate, and in all cases taken from the actual practice of the present time. Every rule has been tested by the unerring results of mathematical research, and confirmed by experiment, when such was necessary.

The Practical Model Calculator, will be found to fill a vacancy in the library of the practical working man long considered a requirement. It will be found to excel all other works of a similar nature, from the great extent of its range, the exemplary nature of its well selected examples, and from the easy, simple and systematic manner in which the model calculations are established.

Parts 1, 2 and 3 now ready.

American Miller and Millwright's Assistant, By W. C. Hughes. 12mo., illustrated...$1 00
Byrne's Practical Model Calculator. In 12 parts, each..... 25
Byrne's Treatise on the American Steam Engine. 8vo. [in press].....
Booth's Encyclopedia of Chemistry. In one vol. royal 8vo, 974 pages, sheep..... 5 00
Builders' Companion. By A. C. Smeaton.—Seventy illustrations, 12mo., cloth..... 1 00
Cotton Spinner and Manufacturers' Companion. By Scott and Byrne. In one vol. 8vo., cloth, with large working drawings..... 3 50
Cabinet Maker and Upholsterer's Companion. 12mo., cloth..... 75
Dyer and Color Maker's Companion. 12mo., cloth..... 75
Elwood's Grain Tables. A new edition, in one vol. 12mo., cloth..... 1 00
Encyclopedia of Useful Knowledge. 8vo., illustrated..... 5 00
Fisher's Photogenic Manipulation. 16mo., cloth..... 62
Gregory's Mathematics for Practical Men. Illustrated, 8vo., cloth..... 1 50
Household Surgery, or Hints on Emergencies. By J. F. South, M.D. 12mo., cloth..... 1 25
Leslie's Complete Cookery. 41st edition, 12 mo., sheep..... 1 00
Morfit's Perfumery: its Use and Manufacture. 12mo., cloth..... 1 00
Morfit's Treatise on Tanning, Currying, and Leather Dressing in General. In one vol. large 8vo., [in press].....
Norris' Hand-book for Locomotive Engineers. By Septimus Norris. 12mo., cloth..... 1 50
Neill's Fruit, Flower and Kitchen Garden. Illustrated by numerous plates, 12mo. cloth. 1 25
Overman on the Manufacture of Iron and Steel. Illustrated, 8vo., cloth, new edition. 5 00
Practical Metal Workers' Assistant. By C. Holtzappfel, with numerous illustrations, 8vo., cloth..... 4 00
Painter, Gilder, and Varnishers' Companion. New edition, 12mo., cloth..... 75
Randall's Sheep Husbandry in the South. Illustrated, 8vo., cloth..... 1 25
Steam for the Million. 8vo., paper..... 37

Best Cast Steel Axles & Tires,

(A NEW ARTICLE,)

For Railroad Carriages and Locomotives.

THE quality of this Steel is sufficiently attested in the announcement that it has carried off the first prizes awarded at the World's competition of 1851, in London. The axles are in general use on the Continent, and are now offered in competition with any other that can be produced; and to be tested in any way that may be desired by the Engineers of the United States, either by impact or by torsion. This Steel is manufactured by Fried. Krupp, Esq., of Essen, in Renish Prussia, represented in the United States by

THOS. PROSSER & SON,
28 Platt st., New York.

November 1.

To Railroad and Canal Companies, Contractors, etc.

THE Undersigned wishes to direct the attention of Chief Engineers and Contractors to the facilities he possesses for supplying them with workmen laborers, etc. of any description, and also to remove them that he forwards such men to whatever destination they may be required.

Companies or Contractors desirous of receiving peaceable and industrous men, will be promptly supplied at the shortest possible notice.

C. B. RICHARDS,
No. 85 Greenwich Street, New York.

REFERENCES:—Chas. H. Webb, Esq., Supt. of the St. George's and British Protective Society, New York; Messrs. Harris and Leech, Philadelphia, Wm. P. Malburn, Esq., Albany.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Trautwine on R. R. Curves.

By JOHN C. TRAUTWINE, Civil Engineer,
Philadelphia, Pa.

JUST published, accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by Wm. Hamilton, Actuary of the Franklin Institute, Philadelphia. Price $1.

Also, "*Trautwine's Method of Calculating Excavation and Embankment.*"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidity, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, $1. For sale by Wm. Hamilton.

June 28, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

Bridges & Brother,

DEALERS IN

RAILROAD AND CAR FINDINGS,

64 Courtlandt street, New York.

Having established a general Depot for the sale of articles used in the construction of Railroads, Locomotive Engines and Railroad Cars, we would invite your attention to our establishment. We have already in store a good assortment of CAR FINDINGS and other articles used in the trade, and feel justified in saying, that should you desire anything in our line, we can supply on terms perfectly satisfactory, and in the event of your desiring to order, you may feel assured that your terms will be as good as though you were here to make your own purchases.

Among our goods may be found Railroad Car Wheels, Axles, Jaws and Boxes, Nuts and Washers, Bolts, Brass Seat Hooks and Rivets, Window and Blind Springs, Lifters and Catchers, Door Locks, Knobs and Butts, Ventilators and Rings, Car Lamps, Coach and Wood Screws, Jack and Bed Screws and Babbitt's Metal; also Plushes, Danask, Enameled Head Linings, Cotton Duck for Top Covering in width sufficient without seams, Curled Hair and all other articles appertaining to Cars.

Also a new and valuable CAR DOOR LOCK, well adapted to the Sliding Door. This is decidedly the best yet introduced.

LOCOMOTIVE ENGINE LANTERNS, the best article made in the country. Whistles, Gauge and Oil Cocks, Hemp Packing, American, Russian and Italian. We are also agents for Lightner's Patent Journal Box for Car Axles, that invaluable invention, for the economical use and preservation of Car Journals.

Coach VARNISH and Japan of the best quality.

We would also offer our services for the purchase as well as for the sale of goods on commission.—Both members of our firm have had the experience of many years in the manufacture of Railroad Cars, and our Senior was a member of the well known house of DAVENPORT & BRIDGES, Car Manufacturers, Cambridgeport, Mass. With our knowledge of matters pertaining to Railroads, we feel quite confident in giving satisfaction to both buyer and seller, and hope that through assiduity and attention to any business entrusted to our care we shall merit a continuance of confidence and patronage.

BRIDGES & BROTHER.

July 22, 1851.

To Railroad Car Builders and Manufacturers Generally.

THE Cincinnati, Hamilton and Dayton Railroad Company, at Cincinnati, have ten acres of land adjoining the City and near the Ohio River—their Road running through its center—which they will lease for a term of years, or perpetually, for the establishment of a Car Manufactory, or for any purpose connected with the furnishing of Machinery for Railroads.

The Company have at their Depot grounds, at Cumminsville, about five miles north of the city, six acres of land, eligibly situated for a variety of Manufacturing purposes, which they offer for lease on advantageous terms.

They have, also, on the line of their Road, in the town of Hamilton, 25 miles north of the city, about forty acres of land, situated on the Hamilton Hydraulic Works, where a Water Power can be displayed advantageously, and the same had on favorable terms. This property is also eligibly situated for Manufacturing purposes, and will be *sold or leased* on accommodating terms.

The above described property is admirably situated for the successful prosecution of the objects referred to, connected as the Road passing through it is with other Railroads built and building into Western and Northern Indiana, and Northern and Eastern Ohio; and the first described land lying near the line of the Cincinnati and St. Louis Railroad.

To skilful and enterprizing Car Builders, possessing sufficient capital for the prosecution of that business, the inducements are peculiarly flattering.

For further particulars address, at Cincinnati,

S. S. L'HOMMEDIEU,
Pres't C., H. and D. R. R.

Dec. 20d, .

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 3] SATURDAY, JANUARY 17, 1852. [WHOLE No. 822. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Southwestern Railroad Convention.....33
Contractors on the Erie Canal.....34
Arkansas Central Railroad.....35
Reading Railroad.....35
Sunbury and Erie Railroad.....37
Little Miami Railroad.....37
Finances of St. Louis.....39
" Ohio.....39
Stock and Money Market.....40
Erie Canal.....42
Augusta and Waynesboro' Road.....42
New Orleans and Opelousas Railroad.....42
Cost of Massachusetts Railroads.....42
Mississippi and Atlantic Railroad.....43
New York and Erie Railroad.....43
Buffalo and Conhocton Valley Railroad.....43
York and Cumberland Railroad.....44
Importation of English Metals.....44, 45
Commerce of N. Y. Canals.....44
Louisville and Nashville Road.....44
Galena and Chicago Railroad.....45
Sandusky and Indiana Railroad.....46

American Railroad Journal.

Saturday, January 17, 1852.

Southwestern Railroad Convention at New Orleans.

We have begun to receive our accounts of the great Southwestern Railroad Convention, held at New Orleans on the 5th inst. We are indebted for our account to the N. O. Commercial Bulletin.—Numerous delegates were in attendance from the States of Mississippi, Missouri, Florida, Alabama, Tennessee, Kentucky, Virginia, Texas, Arkansas and Louisiana.

The meeting was called to order by Maunsel White, Esq, President of the N. Orleans and Opelousas railroad, who addressed the meeting as follows:

Gentlemen Delegates from our sister states, we tender you a cordial and hearty welcome. We recognise you as friends and brothers, come among us by special invitation to deliberate on a matter worthy of American enterprise; in which the whole of the southwestern States are deeply interested.

Our design offers abundant inducement for the ready co-operation of all who may honor us with their attention.

Viewed as public undertakings, the whole Union must acknowledge their importance, and even in the smaller consideration of individual interests, perhaps there never were roads contemplated of higher promise.

Now, gentlemen, it will be for you to choose and elect the officers whom you desire to preside over this convention, as we feel ourselves bound in courtesy to yield you that privilege, confident that in the exercise of this duty, you will be actuated by the sole desire of doing ample and even-handed justice to all the various interests that may be involved.

This friendly meeting of representatives of popular interest for the common consideration of so profound a question, is entirely in accordance with the character of our age and day, and we sincerely trust, gentlemen, that the result of our deliberations will be equally compatible with the all-accomplishing genius of our country.

Again, gentlemen, we bid you welcome.

The meeting is now prepared for organisation. May He who alone presides in an unquestionable wisdom, bless and direct your proceedings.

On motion of J. E. Caldwell, C. S. Tarpley, of Mississippi, was chosen President, pro tem., and J. M. Burke, of Lafayette, Secretary pro tem.

Mr. Tarpley, on taking the chair, said he was profoundly sensible of the high compliment that had been paid him, in being chosen to preside temporarily over the deliberations of so great a convention. Should a suitable occasion present itself, he would give his views on some of the great matters that would engage the attention of the body. But this, he trusted, would be a working convention, and the first proceeding in order was for the chairman of delegates to hand in a list of the delegates.

Joshua Baldwin, of New Orleans, moved that a committee of three persons from each State represented in the convention be appointed to nominate permanent officers, and after some discussion the resolution was adopted with an amendment substituting two instead of three delegates from each State.

On motion of M. M. Cohen, of New Orleans, the convention voted an invitation to the ladies to attend its deliberations.

A recess of half an hour having been taken, and the convention having again come to order, the following committee on officers was announced:

Mississippi—General Acee, Rev. R. T. Gladney.
Missouri—H. Choteau, Wm. Wade.
Florida—J. M. Landrum, Joseph Forsyth.
Alabama—J. P. Parham, T. B. Goldsby.
Tennessee—Col. Herman, Col. G. W. Peck.
Kentucky—Wm. Loery, J. N. Beadles.
Virginia—Wm. M. Burwell, James McDowell.
Texas—John T. Mills, J. G. Wright.
Arkansas—Albert Pike, John Martin.
Louisiana—James Robb, J. H. Overton.

Several propositions as to the mode of electing officers pending, the convention at half past 1 adjourned to 6 P. M., to allow the committee on officers time to report.

EVENING SESSION.

The convention, pursuant to adjournment, met punctually at 6 o'clock.

Mr. Robb, from the Committee on Officers, reported the following; and the nominations, as they were announced, *serialim*, were unanimously approved, with applause:

Ex-Gov. ALEX. MOUTON, of La., President.

Vice Presidents—C. S. Tarpley, of Mississippi; Joseph Forsyth, of Florida; Gen. Lucius Polk, of Tennessee; Wm. N. Burwell, of Virginia; Amos Moore, of Texas; H. Chouteau, of Missouri; P. P. Parham of Alabama; J. N. Beadles of Kentucky; Judge Jas. Campbell, of La.; Absalom Fowler, of Ark.

Secretaries—John Calhoun and Victor Wiltz, of Louisiana; R. C. Farrely, of Arkansas, and John Duncan, of Mississippi.

Governor Mouton, on taking the chair, expressed his thanks for the honor that had been conferred on him, and declaring that he assumed the position with diffidence, but with confidence in the disposition of the gentlemen whom he was addressing to assist him and conduct their proceedings harmoniously, he complimented highly the intelligence and elevated motives of the delegates.

Mr. Robb, with a few introductory remarks of an explanatory nature, offered a resolution, which was adopted, providing for the appointment of a Committee on Routes, a Committee on Ways and Means, and a Committee on Resolutions, all resolves having reference to the objects for which the convention was convened to be referred to the latter.

An inquiry from one of the delegates as to the powers of the Committee on Routes, and the scope of its actions, brought Mr. Robb again on the floor, and, in a speech of about fifteen minutes, he strongly deprecated all attempts to dissipate the power and influence of the convention, and declared that the committee referred to was proposed with the view of concentrating the action of the body upon plans of improvement feasible in themselves and best calculated to benefit the southwest.

Mr. Hampson, of Texas, presented a resolution limiting the vote of each State, represented in the convention, to an unit.

Mr. Cohen then suggested that it would be acceptable to the convention if gentlemen from neighboring States would give their views. The suggestion met with approbation, and Messrs. Burwell, of Virginia; Pike, of Arkansas, and J. S. Yerger, of Mississippi, were successively called, and each delivered a speech, showing the necessity of railroads, centering at New Orleans, to secure for the city the commerce and trade nature designed she should have; to develope the resources of the southwest; to strengthen the political power of the south, by increasing her population, and industrial labor and wealth, and to cement more strongly the union of the States of the confederacy.

To be continued.

Canal Lettings.

Award of Contracts—December 30, 1851.

ERIE CANAL—EASTERN DIVISION.

SECTION WORK.

Sec. 13, 14—M. Sawin & Co.
15—J. Cullen & Co.
16—Thomas Hitchins.
17—Vandekar & Co.
18, 19—James Brady & Co.
30, 37, 60, 127, 128—M. C. Story.
31, 40—Aaron Swart & Co.
33, 34—Wm. H. Morell.
35—H. Van Slyck & Co.
36—Willis Phelps.
41 to 45—J. Livermore.
51 to 56—J. Healy & Co.
57—Isaac Jackson & Co.
58—Solomon Bowen.
59—C. Gardinier & co.
60—Alexander H. Schultz.
61—C. T. Van Horn & co.
62—Vanderburgh & Wait.
75—J. R. Rose & co.
78—H. P. Alexander & co.
83—J. S. N. Barthydt.
84—John School.
112—J. C. Shippey.
125, 126, 130—Squire Utley.
129—Thomas H. Bates.
131, 132—Alexander Ray.
134—Woodman, Kimball & co.

LOCKS.

No. 2—Luke Noon & co.
24, 42—E. Cole & co.
34—James Stewart.
38—Wm. Coleman & co.
39—Jesse Van Tile.
40—A. H. Prescott & co.
41, 42—J. E. Elwood & co.

AQUEDUCTS.

Printups—E. K. Van Everer & co.
Olstona—P. H. Dykemon.
Lashers—A. T. Dunham & co.
Phillips—M. C. Story.

WASTE WEIRS.

On sec. 30—P. D. Beticher.
56—A. J. Yates.
120—T. H. Fisher & co.
126—N. Vandebogart.
134—Alexander Ray.

CULVERTS.

On 16 and 17—Wm. Morrell.
330 to 40—M. C. Story.
59, 60 and 75—W. Barton & co.
Stone culvert on 111—T. H. Fisher & co.
Composite culvert on 111, 112—J. C. Shipley.
On 118, 120, 120, 131, 121—J. P. Whipple.
On 127, 128, 129, 130—T. H Fisher & co.
On 133, 134—H. H. Bennett.
Mohawk River dam and bulkhead at Rome to Jesse Mattison.

BLACK RIVER CANAL.

DELTA FEEDER.

Section work and guard lock—Frazee & McDonald.
Bridges—Brayton & Clark.
Culvert—J. C. Shippey.
Lock house on Section 18—J. M. Slater.
" " 22 to 31—G. H. Gould.

DAMS.

At High Falls—Whittlesey & Shed.
Carthage—P. S. Stewart & co.
Williamsville—Mitchell & Brown.

RESERVOIRS.

Woodhulls—Phelps & Ray.
North Branch, South Branch, No. 1 do., No. 3—Mitchell & Brown.
Sluices around locks—Squire Utley.
Road bridge at High Falls—G. H. Gould.
Culvert on sec. 30—Whittlesey & Shed.
Valve gates to Seymour & Wood.
Black River Improvement, to W. W. Wright.

BRIDGE ABUTMENTS.

3 to E. K. Van Everer & co., 2 to M. Savin & co., 2 to John Upton, 4 to B. Birchard & co., 2 to P. B. Dykeman, 1 to R. Johnson & co., 5 to W. H. Williams. 2 to James McDonald, 4 to David Rogers. 1 to A. J. Yates, 3 to W. C. Wemple, 1 to D. Wilds & co.

Bridge between Frankfort and Utica, including 260 rods of road, to J. Borden & co.

Bridge abutments on 112 and 113 between Oriskany and Rome, to A Myers & co.

Abutments from Rome to New London and at New London to H. E. Storrs & co.

New London to Higgins's, to W. Candee & co.

Iron Bridges on Eastern Division, to E. Corning & co.

Wood Superstructures for Bridges, to B. Birchard & co.

Valve gates to Seymour & Wood.

ERIE CANAL—MIDDLE DIVISION.

SECTION WORK.

Sec. 135, 136—Wm. Lewis & co.
137, 138—J. S. Parker.
139—W. Norton & co.
140, 141—Henry S. Webb.
142—O. P. Root.
143—F. Pratt & co.
144, 145—O. B. Howe.
146—J. Crouse & co.
147—A. Myers & co.
148—N. H. Decker.
149, 150—J. B. Rice & co.
151—Wm. Barker & co.
192—A. Sutherland.
193—S. P. Jacobs.
195—Emory Rosebrook,
197—McQuig & Foster.
199—Stokes & Lester.
203—George Smith.
204—Levi Dimmick.
205—James R. Webster.
206—Wm. A Sackett & co.

CULVERTS.

Sec. 8. To Brown, Beebe & co.
3. To Israel S. Parker.
4. To Otis B. Howe.
1. To Fisher & Groat.
3. To J. B. Rice & co.
3. To Emory Rosebrook.
2. To S. P. Jacobs & co.
1. To A. J. Willey.
3. To McCarty & Bishop.
2. To Samuel Bell & co.
Chitteningo Aqueduct, to Wells & Thomas.
Dam and guard gate, to Fisher & Groat.
Waste weir, to Otis B. Howe.

BRIDGE ABUTMENTS.

Sec. 3 to Birchard & co., 2 to I. Shannahan, 5 to Swain & Nodwell, 3 to McQuig & Foster, 4 to H. E. Storrs & co., 2 to S. P. Jacobs & co.

Valve gates, to Seymour and Wood.

Iron Bridges, to E. Corning & co.

OSWEGO CANAL.

Lift locks 1 and 2—Robert Gere & co.
" 3 —Dodge & Comstock.
" 6 —Peter Dunn.
" 7 —W. J. Murlett & co.
" 11 and 12—A. B. Dickinson.
" 13 —A. G. Sage & co.
" 14 —Robert C. Kenyon.
" 15 —William Baldwin.
" 17 —Philo Stevens.
Guard lock No. 1—C. W. Steves & co.
" 3—C. H. Sage & co.
" 5—James McDonald.
Section No. 38—Robert C. Kenyon.
Valve gates to C. C. Bradley & co.

ERIE CANAL.—WESTERN DIVISION.

SECTION WORK.

Sec. 207—Wm. A. Sackett & co.
208—H. B. Bradshaw.
209—C. T. Chamberlain.
210—Ethan Clark.
211—H. Cady & co.
212, 213—Rogers & Layton.
214, 215, 216—Charles Nichols & co.
217—E. P. Price & co.
218—A. B. Williams & co.
228—G. W. Barnard.
229—R. S. Nellis.
232—A. O. Lamoreux.
233, 234—John Vernam & co.
235—J. W. Goodrich.
236—E. & W. H. Ennis.
239—Richman & Morley.
241 to 245—E. Ennis & co.
246, 247—Clark & Larned.
248—A. P. McDonald.
249—Walter S. Church.
250—Clark & Larned.
251, 252—D. H. Richardson.
253—Walter S. Church.
254—D. H. Richardson.
255—George Law.
256—Norman & Hughes.
257—H. V. Colt.
258—G. W. Baldwin.
259—N. E. Paine & co.
260—L. A. G. B. Grant.
262—Oliver Charlick.
266—George J. Whitney & co.
267—Wm. Candee & co.
268—J. Jenkinson & co.
269—A. Barnard.
270—W. N. Marsh.
271—A. Barnard.
272—D. Sharp & co.
273—H. P. Mills & co.
274—Jno. L. Clark & co.
275—C B. Thomson.
276—J. Cochrane & co.
277—J. Baker & co.
278—W. C. Bloss & co,
279—Utley Spencer.
280—Orville Clark.
281—E. T. Bridges & co.
282—J. B. Moss.
283—W. Candee & co.
285—A. P. McDonald.
286—J. Breed & co.
287— do.
288—J. W. Britton & co.
Independent line—Jno. H. Nichols.
290—C. J. & H. De Graw.
291—M. A. Harrington & co.
292—B. Pringle.
294 to 296—H. P. Mills & co.
297, 298—H. U. Soper & co.
299—J. N. Stage.
300, 301—H. U. Soper & co.
302, 303—S. Clark & co.
304—A. Collins.
305—O. Clark.
307 to 310—B. Pringle.
311—W. P. Collins.
312—D. Hunter.
313—B. Pringle.
314—C. A. Donalds.
315—M. E. Hitchcock & co.
316, 317—J. N. Stage.
318—Barton & O'Maley.
319—S. C. Holden.
320—H. N. Hewes.
322—Thompson & Nelson.
323—Parmelee & White.
324—Chamberlin & Edgerton.
325, 327—Ryan & Swan.
326—J. N. Stage.
328—Orville Clark.
329—Hawley & Barton.
330—John P. Smith.
331—George H. Boughton,

332—Gideon Hard.
333—N. G. King & co.
334—Geo. Raynale & co.
335—Thomas King.
336—Hawley & Barton.
337—W. & H. Lewis.
338 to 353—Cauncey Joslin.
354 to 359—Oswald & Buel.
360—John McCabe & co.
361—Jacob Hinds.
362—T. D, Barton.
363—Oswald & Buel.
364—Martindale & Ferrell.
365—G. M. Lawman.
366—Williams & Palmeter.
367—Clark & Tift.
368—Sutton & Philips.
369—Wood & Clark.
370—Ball & Barton.

STRUCTURES.

Guard Lock at Black Rock to Sutton & Philips.
Lock 64—Kingsley & James.
65—Lewis Seeley.
66—George Williams & co.
Guard Lock & Feeder, Genese river, to Lewis Sely.
Mud Creek Aqueduct, railroad crossing, to Peter Boyoe.

BRIDGE ABUTMENTS.

On section 207, 208, 209, 212, 214, 215, 217, 226, to Robert Ennis.
On 210, 246 to 262, 266 to B. Birchard & co. on 213, 231, 336 to Chamberlin & co., on 332 to 339 to Levi P. Chase, on 241 to 245, to S. J. Hunt, on 267, 268 and 3 on 270 to Isaac Hall, 2 on 270 and 9 on 271, 277 to L. Jones Peck, on 278 to 281 to A Wilder, 2 to Wm. Walker, 2 to G. Hard, 2 to H. Brintnall & co., 1 to J. B. King, 5 to M. A Harrington, 4 to Soper & Fields, 4 to J. Ellicott & co., 6 to Ryan & Swan, 1 to C A. Donalds, 6 to Hawley & Barton, 3 to Sutton & Philips, 1 to M. W. Baldwin, 2 to J. Pierce & co., 9 to Clark & Tift.

GENESEE VALLEY CANAL.

Lock 105—H. M. Severance.
106—Chester, Kays & co.
Section 91—Nelson Hewitt.
98—E. Hammond.
107—James Napier & co.
Oil Creek Reservoir to Ab'm Vernam.
Rockville Reservoir to Wm. Ridsdale & co.
Ischua Feeder do.
Ischua Aqueduct and Bridges on Section 107 to Nelson Hewitt.
Valve gates to Seymour & Wood.

CULVERTS.

Irondequoit creek culvert and Allen's creek culvert to J. H. Sherrill & co.
On sec. 207—H. E. Storrs & co.
208—Robert Ennis.
209—J. N. Stage.
210, 11 and 14—Chamberlin & co.
215—Williams & Palmeter.
216—H. E. Storrs & co.
218—J. Leach & co.
228—R. Ennis.
229—S. Moore.
232—H. E. Storrs & co.
234, 238—D. Kenyon.
239—J. Vernam.
246—J. H. Sherrill & co.
253—B. Pringle.
260—Elias Knapp.
Culvert under Genesee feeder to J. L. Clark.
Sections 265, 267, 270, 275, 277—J. R. Thompson.
271, 274, 276—Butler & Stanberry.
278—A Wilder.
279—H. E. Storrs & co.
280—Gideon Hard.
281—E. S. Reed & co.
281—W. S. Lewis & co.
287—Reed & St. John.
288, 291, 292, 293—Benj. Pringle.
290, 298—Ryan & Swan.
296—A. D. Wood & co.
300—O. Butler & co.
302, 304—Soper & Fields.
305—J. N. Stage.
307, 308, 309—C. A. Donalds.
311—O. Butler.
312, 313, 314—S. Kneeland.
316—O. Turner.
317—J. N. Stage.
318—Barton & O'Maley.
319,322,329,333,336,360,362—S. Parmalee & co.
323, 326, 327—Thomas King.
330—H. N. Hewes.
331 to 335—Hawley & Barton.
332—Gideon Hard.
334—S Pierce & co.
348 to 359 to 367—H. S. Wells.

WASTE WEIRS.

Secs. 1 to J. N. Stage, 1 to Ethan Clark, 3 to J. W. Clark, 1 to L. Seeley, 2 to J. R. Thompson, 3 to O. Butler & co., 1 to J. M. K. Hilton, 1 to Hilton & Tenney, 1 to B. & J. Carpenter, and 1 to A. Webster.

Arkansas.

Arkansas Central Railroad.—Below we give the memorial of the Arkansas central railroad company to Congress, for a grant of land to aid in the construction of that work. If Arkansas could carry out a judicious system of internal improvements, she might soon take high rank with her sister States. In natural wealth she is hardly inferior to any one; but her resources have remained undeveloped, for the reason that they have been inaccessible.

People will not settle in new States without the prospective benefits of railroads, which Arkansas has not yet held out. That State will remain as she is, unless she offers to immigrants and capital, the same attractions presented by the other States. To secure this end she has only to open up her territory with a few leading lines of railroad, and all her other material interests will take care of themselves.

MEMORIAL TO CONGRESS.

To the Senate and House of Representatives of the United States, in Congress assembled:

Your Memorialists, the undersigned, for themselves and other Stockholders, in the "*Arkansas Central Railroad Company*"—

And for the benefit of the citizens of Arkansas generally, in view of the utility and nationality of the great work resolved upon, respectfully ask your honorable body for a grant of the public lands, to be made to said company, for the purpose of aiding in making the railroad, designed in the accompanying charter, from Memphis, by the way of Little Rock, to the boundary of Texas, embracing alternate sections, for six sections in width, on each side of said road, with the privilege of selecting other lands, where these have been appropriated, and subject to such restrictions, conditions, and reservations, as may be just and proper, analogous to grants heretofore made to Illinois, Alabama and other States, for similar objects.

And in presenting his application, we desire especially to call the attention of Congress to the fact that this work is not, in its character, merely *local;* but is emphatically, in its main features, and its certain effect, *general* and *national;* connecting, at one of its termini, with the Mississippi river, and with one of the principal points of concentration of the great railroad system east of that river, it traverses the centre of our State, and, with the other, it doubly annexes Texas to the Union, points directly to the vulnerable part of our frontier, and to distant California, to which it must finally be extended; thus binding the Union together with iron cords of interest and affection—affording at all times a highway for the transportation of troops and munitions of war, for defence, as well as the arts of peace and civilization.

This road will also serve as a basis for a system of roads, west of the Mississippi, by an extension from Little Rock or White river to St. Louis, and from some convenient southern point to New Orleans, to be connected with the river at suitable points by lateral roads. From this basis, railroads will doubtless be extended, within a few years, far up the valleys of White river, the Arkansas, and Red river, into the boundless prairies of the west, developing the vast native resources, peopling, and extending civilization, to one of the noblest regions of country under the sun.

The State of Arkansas, in salubrity and variety of climate, soil, and production, when these advantages shall have been fully developed, is, perhaps, surpassed by no State in the Union. As a planting and agricultural, as well as a manufacturing State, she has immense advantages; and her undeveloped mineral resources, including immense beds of superior coal, are of themselves sufficient to sustain an empire. She only needs a great central highway, connecting her with her sisters, and with the marts of commerce, unfolding the dormant wealth within her borders; and attracting industry and capital to come and enjoy, in order to relieve herself in proper time from the embarassments which early and perhaps short-sighted legislation threw around her, and to occupy the elevated position for which she was by nature intended.

It would be useless for us to suggest to your enlightened body, that grants of this kind, carefully guarded, and protected from misapplication, are often much more economically and usefully expended for the public good, under the direction of individual and incorporated enterprise, acting under the high responsibilities of interest and of character, than when placed directly under legislative control. To give examples would be equally out of place. And in requesting this grant, we can only pledge ourselves, personally, as far as personal action and influence can extend, for ourselves and our associates and successors, that if made, as we trust it will be, it shall be faithfully applied to its legitimate objects—the making of the road, and the best interests of the State and the country.

Respectfully,
ROSWELL BEEBE, *Chairman.*
GEORGE C. WATKINS,
THOMAS W. NEWTON,
ABSALOM FOWLER,
WILLIAM E. ASHLEY.

Little Rock, Arkansas. December 15, 1851.

Reading Railroad.

General Account of the Philadelphia and Reading Railroad, November 30, 1851.

Railroad		$13,350,521 90
Depots		212,396 39
Locomovive engines and cars		2,276,576 36
Real estate		485,827 35
Capital per report Nov. 31st, 1850		16,325,322 00
Railroad from Broad and Willow sts. extending 3¼ miles to the junction with this road on the west side of the river Schuylkill, purchased from the state and charged to the capital account, per resolution of the stockholders in January, 1851, when securities for $350,000 were authorised to be issued		324,183 43
		$16,649,505 43
ASSETS, VIZ:	Dr.	
Balance of capital account		$324,283 43
Cash	145,828 28	
Bills receivable	9,496 48	
Freight and toll bills receivable first week in December, 1851	62,456 92	
		217,781 68
Real estate purchased in 1851	90,116 01	
Office on 4th st	40,058 65	
		130,174 66
Debts due to the comp'y	437,310 98	
Less probable loss	24,188 57	
		413,122 41
Stocks and bonds held by the company, chiefly bonds of the company, payable in 1860		221,725 70
Materials on hand, current business of the road		207,963 44
Renewal fund		18,716 29
Sinking fund, 1836–60	3,953 66	
" 1849–70	83 27	
		4,036 93
Total		$1,537,804 54

LIABILITIES, VIZ:		
Bills payable	746,666 27	
Debts due by the comp'y.	281,770 79	
		1,028,437 06
Coupons to Jan. 1, 1852.	281,433 00	
Interest due on R.E. bonds	4,224 15	
Dividends due on preferred stock	56,840 00	
State tax on dividends. Preferred stocks, Nos. 5 and 6	5,506 55	
		348,003 70
Div. fund, 1850	11,666 10	
" 1851	149,697 68	
		161,363 78
		$1,537,804 51
		Cr.
Stock	4,159,832 00	
Preferred stock	1,551,800 00	
	5,711,632 00	
Stock entitled to dividends earned after November, 1852, amount created in lieu of same amount of 1836-60 and 1849-70, bonds cancelled	393,700 00	
		6,105,332 00
LOANS:		
5 per ct. bonds, 1836-60.	849,600 00	
6 " 1847-56.	136,000 00	
6 " 1843-60.	1,572,800 00	
6 " 1844-60.	1,488,000 00	
6 " 1848-60.	1,500,000 00	
6 " 1849-60.	1,424,000 00	
6 " 1849-70, and bonds due in 1850.	3,039,400 00	
		10,009,800 00
Bonds and mortages real estate		210,100 00
Balance of capital account carried to debts and assets account viz:		
Securities to be issued in payment of R. R. purchased from the state, and charged to capital account, per resolution of the stockholders Jan. 1851	324,183 43	
Bond and mortgages real estate paid off	100 00	
		324,283 43
		$16,649,515 43

Transportation and Income Account for 12 months, ending November 30, 1851.

CREDIT.

Travel, 127 500, equal to 57,593 thro' passengers		152,431 64
Freight on merchandise, 63,807 tons.		123,672 34
Do. on coal, 1,650,270 tons at 122½ c.		2,018,870 79
U. S. mail		9,400 00
Miscellaneous receipts		9,955 63
Total receipts		$2,314,330 40

DEBTOR.

Working expenses	493,671 09	
" account	272,826 98	
Depot account	34,845 70	
Superintendent's account.	68,534 06	
Lateral road expenses	3,077 10	
Roadway department	160,568 53	
Dumpage	98,842 06	
Freight on missing coal	4,563 22	
Motive power on lateral railroads	8,120 99	
Rents and ground rents	24,258 15	
State, county and city taxes	5,355 34	
Profit and loss, interest, damages and sundries	14,096 18	
		1,188,936 61
Net profit for the year		$1,125,393 79
Total interest on bonded debt for the year		$606,684 09
Renewal fund		716,531 28
Dividend fund for the year		408,862 51
Common stock dividend fund for 1851		149,697 63

The increase over the previous year in coal transported over the road, is 298,768 tons, and the number of passengers and quantity of merchandise have augmented in about the same proportion.

The cost of transportation for the year has been diminished thus:

On coal..... 7 31-100 per ton.
On merchandise.. 5 70-100 per ton.
On passengers...17 49-100 per through passenger.

The managers believe that the fund appropriated for renewals is ample for all ordinary purposes, and as these salutary improvements have been made to guard against serious damage by freshets, that the balance of $18,716 29 to the debit of this account will be repaid by the usual appropriations of the coming year.

The double track railway, of 3¼ miles in length, purchased of the commonwealth of Pennsylvania, has been relaid with new rails and superstructure, and the bridge across the river Schuylkill thoroughly repaired and strengthened. Such parts as required it have been renewed, and the bridge is thus adapted for the use of locomotives, in lieu of horse power as heretofore.

The entire cost of this work, and improvements upon it, is $324,183 43. The advantages of this purchase are already clearly exhibited, inasmuch as the expenses on this portion of the road for the past year have diminished $25,836 61; although a much larger business has been done; and it will hereafter show more favorable results, as until January last, horse power was required on the long bridge across the Schuylkill, a heavy item in the transportation of an article of great weight.

The instalments to the state, which have matured, and the renewals of the road and bridges am't to $224,470 97. The remaining payments, for which the notes of the company have been given, are $99,712 46, which mature in ten monthly payments.

The assets of the company have been again valued. There has been some depreciation in a portion of them, while others are enhanced in value. The accruing interest, however, has not been sufficient to meet interest paid, and to cover this deficiency, and provide for any depreciation of the assets, it has deemed proper to appropriate the surplus dividend fund of 1849, amounting to $19,757 09, for these purposes, for which it is deemed sufficient.

The "debts due the company," include those incurred in the current business and immediately available, amounting to		68,171 02
Do. abundantly secured by real estate..		95,003 50
Do. with security (chiefly of real estate)	209,220 73	
Do. without securit/	64,915 75	
	274,136 46	
Less probable loss	24,188 57	
		249,947 89
Total		$413,122 41

The stocks and bonds held by the company consist chiefly of those bonds payable in 1860, which were appropriated to settle the then floating debt. For reasons already stated, the managers have not thought it proper to dispose of these securities.

The increase of floating liabilities amounts to $588,222 34, which is represented by the following assets, viz:

State railroad	324,183 43
Real estate purchased in 1851	90,116 01
Sundry assets now secured by real estate worth the amount	78,097 29
Increase in materials on hand for workshops, etc	32,996 62
Increase in stocks and bonds held by the company	32,105 70
Excess of debts due the company in current accounts	30,723 29
	$588,222 34

The very great increase in the business of the company rendered it apparent that, for immediate use, and to meet the future demand, more track room at the terminus of the road at Richmond was necessary, and especially would it become essential when new wharves on the present unimproved river front at the depot were erected.

The managers, therefore, felt it their duty to assume the responsibility of securing additional ground to the extent of fifty feet in width, for tracks from the wharves to the engine house, a distance of about 1¼ miles.

Induced by the same reasons, and influenced by the resolutions of the stockholders, at their last annual meeting, directing improvements on the railroad purchased of the commonwealth, they have secured sufficient ground for a large passenger and merchandise depot, at the corner of Broad and Willow-sts., which improved by the erection of suitable buildings, will enable the company to start the trains with the locomotive attached, from the very heart of the city, and entirely avoid all the expense and delay necessarily incident to the use of horse power.

This, even with the present passenger and merchandise business, is most desirable; but, if it is permitted to look forward to the completion of the great lines of road now projected, to connect the works of the company with others extending to Lake Erie, to the completion of the Lebanon Valley, railroad, the connecting link at Reading with the Pennsylvania railroad, extending from Harrisburg to Pittsburgh, and thus with various lines westward, the policy and necessity of securing such advantages for present and future purposes cannot be doubted. A few months might prevent their being obtained at all, except at such exaggerated prices as these prospects would command.

The managers are, however, able to state that if the acquisition of this real estate does not meet your hearty approval, it can be at once disposed of without loss; it could not be again purchased on as favorable terms. Should it, however, meet approbotion, provision should be made for its payment.

Some few lots of ground at other points, which the company had heretofore leased, were offered for sale and purchased, their use being indispensable.

These purchases amount to $90,116 01, independent of the mortgage and ground rents for $88,704.

The bonded debt of the company is reduced by the investment of the sinking fund $117,800, there having been over invested in previous years $4,976,92.

The managers not having disposed of the bonds or other securities, authorized at your last annual meeting, for the reasons already assigned, and having obtained the very valuable real estate heretofore referred to, the company is thus left with an increased floating debt, and the important question naturally arose as to the proper disposition of the surplus profits.

Two years since it was adopted as the permanent policy of the company, that the profits should be annually divided. It was then determined that, even if the assets did not equal the floating debt, other provisions should be made for the payment, rather than resort to the appropriation of the annual profits for that purpose.

The investments in the sinking funds have seriously diminished the cash dividend fund. If this sum had not been so expended, it would have equated six per cent, and it is to be remembered that this investment is for account of the stockholders, and that in January next, the accumulation for 4 years will then be divided among them, in stock, and will equal about twelve and a half per cent, of which about nine and a half per cent is now in the possession of the company; and that thereafter the division will be made annually.

The prospect for the future was never more encouraging for all, directly or indirectly interested in the anthracite coal trade. Without glutting the market, without depression in prices, with profitable results to producer, carrier, and consumer, 1,101,051 more tons have been transported during the past than the preceding year. With the peace and prosperity of the country, the demand seems surely to increase. New channels of trade, and its application to new purposes, are daily presenting wider fields for its consumption. The supply is inexhaustible, and no one can safely venture to place a limit to the demand for future years.

It may well be, that in 1852, all other channels

for the trade will be employed to the extent of their capacity, and that this company may be compelled to use to the uttermost all their means for transportation. The machinery, with such locomotives as may be purchased from renewal fund, in the coming year, may be equal to 1,900,000 tons, and this may supply for that time the wants of the consumer. But it may be proper for you, even now to consider what will be the condition of the company and the trade of 1853. If the other works are employed to their utmost capacity, upon this road will then be cast the necessity of transporting every ton which the increased demand may require.

It rests with you to decide how far it may be prudent to authorize the managers, should the business of the present year, in their judgment, warrant it, to prepare for such results, by erecting more wharves upon the property already owned at Richmond, and purchasing such machinery as may be thus required. The cost of erecting a wharf upon the company's property, of sufficient capacity to ship from 200,000 tons per annum, is about $15,000, and the expense of machinery will be—

3 locomotives at $8,5000 each $25,500
280 coal cars, at $130 each $36,400

or, at the rate of say $62,000 for each additional 100,000 tons transported. The machinery, even at the low rates of the past year, produces a net profit of 59 cents per ton, or $59,000 per annum.

The results of the business for the past year, now communicated to you, are regarded by the managers as a just subject of congratulation. It is true that the severe competition has, in some degree, diminished the profits; but, even if it should continue, the proprietors have the satisfaction to know that, while contending under such unfavorable circumstances, six per cent upon the whole capital has been earned.

The small advance of only ten cents per ton on the average freight, (which cannot fail to satisfy the public) will, without any increase in the tonnage, equal $165,000, or, in other words, an additional profit of 4 per cent the amount of common stock.

That the demand for Pennsylvania's great staple will continue to increase, none can doubt. It has become, by its price, by its ease of transportation, by its economy in use, forever connected with the steam engine, and is thus inseparable from the commerce and manufactures of our country. In their progress will be found the secure basis of the prosperity of this company.

Sunbury and Erie Railroad.

We copy the following letter of the president of this road, which is annexed to an address to the people of Pennsylvania in reference to the above project. It contains a large amount of statistical information which will interest our readers.

PHILADELPHIA, Nov. 6, 1851.

Esteemed Friend:—In reply to thy note of yesterday, it affords me pleasure to state that the charter of the company, which is one of the most liberal ever granted by the Legislature of Pennsylvania, authorises the construction of a railroad from Sunbury to Erie, a distance of 286¼ miles.

We propose *first* to build that portion of the road between Williamsport and Erie, a distance of 240 miles.

This accomplished, will form, in connection with the "Cattawissa," "Little Schuylkill" and Reading roads, a *continuous chain of railroads from Philadelphia to Erie*, without transhipment.

The *entire route* is within the State of Pennsylvania

The *distance* is only 425 miles, being 80 miles nearer than to New York, and 193 miles nearer than to Boston.

The *highest grade* will be 52 8-10 feet to the mile, and that for only 8 miles.

We propose to pay interest on the instalments from the date of payment, in the same manner as is done by the Pennsylvania railroad company.

The time necessarily required to complete the road will be short. We are informed, on the authority of the first engineering talent of the country, that no portion of the work need exceed two years in construction.

The *cost of the road*, graded and bridged for a double track—with a single track laid, and with sixty miles of siding—completed ready for the locomotive, it is estimated will not exceed six millions.

It is believed that at least *one-fourth* of the whole cost can be raised by subscriptions to the stock of the company, along the line of the route, and that the road can be built and all the materials furnished upon the most favorable terms by responsible contractors and friends of the enterprise, payable one fourth or more in stock at par.

The present low prices of iron and provisions, and the abundance of labor, would enable contracts to be made at prices materially below those paid by most railroad companies now in operation.

The estimate of cost is based on the report of Edward Miller, the engineer, by whom the route was surveyed.

The advantages possessed by our terminus are very great; the *harbor of Erie* is by far the best and safest on the lake, if not the only one worthy the name.

Its capacity is very great, being about six square miles in extent, and having an average depth of about 20 feet.

It is free from obstruction by ice considerably earlier in the spring and later in the fall.

It is the point at which the competition between the Atlantic cities must take place for the passenger and freight trade of all the railroads running westward from it, by reason of the law of our last Legislature compelling the break of gauge between the Eastern and Western railroads to occur there.

We shall *connect at Erie* with the entire network of railroads, penetrating in every direction through the western and northwestern States, the aggregate length of which roads, built and in progress of construction, exceeds 3000 miles.

There is probably no country in the world traversed by a railroad, the extent and variety of whose sources of intrinsic wealth exceed those of the country lying between Philadelphia and Erie.

The *forest* not only offers an opening for the most extensive lumbering operations, but also abounds in the most valuable ship timber.

The *Mines* possess an inexhaustible supply not only of anthracite and bituminous coal, but also of iron ore.

The *Land* embraces a vast extent and variety of soil, of great agricultural capacity, much of it of the limestone formation.

The construction of the proposed road must inevitably induce a very extensive improvement in each of those branches of industry, and develop an incalculable amount of wealth now comparatively unproductive for want of such an outlet; while in time those improvements will add largely and rapidly to the business and profits of the road and revenues of the State.

The great Western Lake country with which the proposed road will unite us, contained, in 1810, a population of only 272,000. The five States which have been formed out of the Northwest Territory, bordering on the lakes, now number a population of four millions and a half: being 50 per cent more than the entire population of the United States at the time of the Declaration of Independence.

The territory embraced between the Ohio river and the lakes, from the western boundary of Pennsylvania to the Upper Mississippi, containing about 180 millions acres of arable land, measures 280,000 square miles, being nearly twice as large as France, and about six times as large as the whole of England.

The trade of the lakes, with which we seek a direct connection, in the aggregate of foreign and domestic imports and exports at the several ports, largely exceeds $200,000,000 per annum.

The present avenues of travel between the lakes and the seaboard, are not only all doing a profitable business, but they are entirely inadequate to the prompt and satisfactory execution of the business already offering.

I have thus hastily thrown together some of the facts and reasons which we think should induce the citizens of Pennsylvania to furnish the means for building the Sunbury and Erie railroad, and thus open a connection with the lakes shorter and cheaper than any now in existence or projected.

With this, I also send some statements and tables showing—

The estimated cost of the proposed road.

The comparative distance by it and other routes.

The cost, receipts and expenditures of the present lines of communication between Lake Erie and the east.

The trade of the lakes.

The increase of the population of the Northwestern States bordering on the lakes.

Which, if thought proper, may be annexed to the report.

Very respectfully,
D. MILLER, Jr.

Estimated cost of building the road from Erie to Williamsport.

Grading and bridging 68½ miles, Erie to Warren	$498,923 00
Grading and bridging 171¼ miles, Warren to Williamsport	1,715 000 00
Superstructure—240 miles of single track, at $5,000 per mile	1,200,000 00
Superstructure—60 miles of siding, at $5,000 per mile	300,000 00
Laying 300 miles at $2,000 per mile	600.000 00
Other expenses	350,000 00
	4,663,923 00
Engineering and contingent expenses, 10 per cent	466,392 00
Interest on stock during construction, and margin to cover contingencies, and toward the equipment of the road	869,685 00
	$6,000,000 00

Ohio.

Report of the Directors of the Little Miami Railroad, submitted Dec. 1, 1851.

The gross receipts of the present year have amounted to $187,815 89, while the same item for the last year was but $405,697 24, making an increase in favor of this year of $82,118 65, or nearly *twenty per cent* upon the receipts of last year.

The expenditures for transportation this year have been $190.358 32, against the same item last year of $182 228 58, making an increase of expenses of only 8,129 74 dollars.

The net earnings of the road for this year are	$297,457 57
The net earnings of last year were	223,468 66
Difference in favor of this year	73,988 91

From this exhibit it appears that while the gross receipts of the road have increased in the last year about 20 per cent, the expenses have increased less than 5 per cent, and the net profits have increased about 33 per cent.

The number of passengers carried this year is	174,089
The number carried last year was	144,486
Difference in favor of this year	29,603

Making an increase in the whole number of through and way passengers of about 20 per cent.

It appears from these figures that the business of the road has sustained the same regular increase during the present year, which has characterised it from the commencement; and which we have reason to believe will be continued for some years to come, by the growth of the country, the development of its resources, and the extension of railroads. The slight addition to the running expenses of this year over the last, on the other hand, amounts to a sensible reduction, if viewed in connection with the increased business carried over the road. The increase of the net earnings therefore, is not only very satisfactory in itself, but bears with it the evidence of a healthy growth, which affords assurance of its probable permanency.

Under these circumstances, the board have been enabled to declare the usual dividend of *five per cent*, payable in stock, and to reserve out of their profits a surplus of $134,121 15—a result which we trust will be satisfactory to our stockholders. We indulge the confident hope that all future dividends will be made payable in cash, and with this prospect in view, so desirable to the holders of our stock, I deem it a suitable time to recur to the recommendation contained in my report of December, 1848, namely, the adoption of a fixed rate of

dividend, to be maintained from year to year, and the annual reservation of a surplus, to be used as a contingent fund in case of any accidental diminution of our revenue, and in adding to the efficiency of our road, and the safety and comfort of our trains. It is now evident that the net earnings of the road will exceed *ten* per cent. annually, and presuming that a regular annual income of that amount, would satisfy those who hold our stock for investment, we again suggest, that while every proper exertion and all proper economy be used to maintain the half yearly dividends at 5 per cent, so that the stockholder shall have every reasonable assurance of receiving not less than that rate, all the surplus over that, shall, after retaining a liberal contingent fund, be expended upon the road, depots, machinery, and facilities for business.

Having alluded at some length, in several former reports, to the railroads leading to Cincinnati, which were then contemplated, or under construction, I consider it unnecessary to repeat the information contained in those communications, but shall confine myself to such additional remarks, as are suggested by the more recent progress of the railroads leading to that point. The railroads made and projected in Ohi , are numerous, yet it may be safely asserted of the most, and perhaps of all of them, that their prospects for usefulness and profit are highly favorable. The great fertility and abundant resources of our country, ensure full employment to all the avenues of trade, and must give a valuable local business to railroads leading from the interior to places of sale or shipment, while the central position of this State renders it a natural thoroughfare for a very large portion of the trade and travel of other parts of the Union.

The completion of the railroads connecting this city with Cleveland, has opened, as was expected, a highly popular route of travel. Leaving our road at Xenia, it passes over the fine track of the Columbus and Xenia railroad, to the former city, and thence by the Cleveland, Columbus, and Cincinnati railroad, to the lake, where steamboats of the first class are in readiness to proceed to Buffalo or Dunkirk. The alternation of land and water conveyances, with the advantage of resting at night on board of comfortable steamboats, give to this route great attractiveness, and caused it to be thronged with passengers during the past season. Being the first year of this line, the connections with the more Eastern conveyances proved imperfect, and delays occurred of a very vexatious character, which we have reason to believe gave satisfaction to those who passed over them, and we have no hesitation in believing that this will continue to be a favorite route for travel during the summer months.

The Lake Shore railroad connecting with the last mentioned at Cleveland, and running thence by the margin of Lake Erie to Erie, Dunkirk, and Buffalo, is in a state of rapid progress, which we understand will bring it to completion in the early part of the ensuing year. This is a very important road for Ohio, as it will supply the link in this chain, which is cut off by the closing of the lake navigation in the winter, while it will dispense entirely with the necesity of crossing the water, at any season, for those who do not prefer it.

Several interesting railroads, which had previously been projected, or commenced, have, we think, received new impulse from the very serious inconvenience experienced during the last summer and autumn, from the dry weather, and the consequent suspension of river navigation; as well as from the growing conviction, of the imperative demand for this form of conveyance, to carry on the great and rapidly increasing business of the country.

The enterprising citizens of Pittsburgh are pushing forward their communications with our State, by two railroads, one of which will connect them directly with Cleveland. and both of them with Cincinnati; and within a few months we hope to see an active and naturally profitable intercourse, between these cities, carried on over our land.—Other connections between the same points are contemplated, by way of Washington, Pa. Wheeling, and Zanesville, and also by way of Steubenville, offering advantages which will probably lead to their construction at an early day. In a few months also, the communication between Pittsburg and Philadelphia, by railway, will be complete, and the distance between the latter city and Cincinnati, will be passed over in about two days, through a country of unrivalled fertility and resources, and which will attract passengers by the beauty and diversity of the scenery through which it will pass.

We have heretofore called attention to the several routes by which our city will be connected with the Baltimore and Ohio railroad. The railway from Columbus to Zanesville, and thence to Wheeling, has been commenced under favorable auspices, and passing, as it does, through a country abounding in resources for its construction, and for its profitable maintenance, cannot fail to proceed rapidly to completion. Another road, leaving ours at Morrow, and passing through Circleville and Lancaster, will also seek its eastern connection at Zanesville; and this, likewise, will traverse a country abounding in resources, and become a valuable tributary to the business of Cincinnati.

The Cincinnati and Marietta railroad is partly under contract. This crosses the fertile valley of the Scioto at Chillicothe, and passing through a region of inexhaustible deposits of coal and iron, strikes the Ohio river at Marietta; and also, as we understand, by a short branch, reaching the same river opposite to Parkersburgh, and there connecting with the Baltimore and Ohio railroad. From Marietta, it is proposed to stretch eastwardly by railway to Wheeling, and thence to seek a connection with the Pennsylvania Central road, by what is known as the Hempfield road.

A section of the Belpre railroad is nearly finished, from Loveland's, where it leaves our road, to Hillsborough. It is proposed to extend this road across the Scioto valley south of Chillicothe, and over the same mineral region alluded to above, to the Ohio, near Parkersburg, to unite there with the Baltimore and Ohio railroad. We have no definite information as to the state of progress of the extension of this road; the part completed will connect with a fine agricultural region, and form a valuable avenue for trade.

Having spoken of the Dayton, Hamilton and Cincinnati railroad, in a former report, it is only necessary to add here, that this fine avenue for travel and commerce, is now in full operation, with fair prospects of fulfilling the most sanguine expectations of its friends. The connections of that road with Indianapolis, and with northwestern Ohio, which are in rapid progress, will complete an immense system of railroad intercommunication, between this city and an agricultural region of vast extent and unrivalled productiveness.

I have also alluded heretofore to the importance of the great avenue which is to connect this city with St. Louis, and with the broad country lying intermediate; and only remark further that its completion, which it is hoped will not be long delayed, would form an era in the history of each of the cities interested in it, and would constitute an important event in western commerce, and in the prosperity of a large scope of country traversed by it.

The very interesting road, connecting the cities of Covington and Lexington, and which will give to Cincinnati a channel of business extending into the richest counties of Kentucky, and thence to reach still further south, is, I am happy to say, proceeding prosperously to an early completion.

During the low water of the last autumn, while the business and intercourse between this city and Louisville were much interrupted, the subject of a railway connection between these cities was agitated, and the project received with such favor by public, as to leave no doubt that it will be immediately carried into effect. A highly favorable act of incorporation has been granted by the Legislature of Kentucky; and the country has been examined sufficiently to authorize the belief, that a location, not only practicable, but very favorable, may be obtained, over which a road may be constructed, at a moderate expense, which will not exceed one hundred miles in length. The success of such a road cannot be doubted. It cannot fail to become a crowded thoroughfare, profitable to the holders of its stock, and of immeasurable benefit to the flourishing cities, which will form its termini, and which, whatever rivalry may exist between them in other respects, have in this great enterprize a mutual and predominant interest.

JACOB STRADER, President.

The report further states that the long continued drought, during the year, throughout the west, by drying up the streams, and by the general check it gave to business diminished the amount of freight, while from the impossibility of using the Ohio river as a route of travel, the number of passengers has largely increased. The harvests in Ohio the past season have been most abundant, and still remain to be sent to a market over her roads. "One cause of the great increase of travel," says the report, "which may be considered permanent, may be mentioned the attractiveness of the route, thro' Ohio to Cleveland, and over the lakes, by which the trip, either by Buffalo or Dunkirk, to the eastern commercial cities, is accomplished with a degree of speed and comfort heretofore unknown, and with scarcely any danger or fatigue; while, for those who journey for health or pleasure, our connections with the great northern lakes, and with the fine railroad and steamboat lines leading to Niagara, Saratoga, Newport, Montreal, Quebec, and other places of resort, give to our road great advantages."

The report speaks in the highest terms of the superintendent, and the operations of this department of the road. No accident has occurred during the year involving loss of life, nor any very serious destruction of property.

During the year, the work of improvement has been prosecuted with unremitting attention, and the whole track from Cincinnati to Xenia has been relaid with a heavy rail. Similar repairs would have been carried to Springfield, but for the detention of the iron, by low water. This work will be completed in the spring. The whole road is in good order, and will compare favorably with our best constructed roads in every respect.

The board propose to commence immediately the laying of a double track, to begin at Cincinnati. They intend to put down five or six miles next year, and continue it from year to year till it is carried all the way to Springfield.

The entire cost of the road, 84 miles, is $2,409,748 99. The bonded debt of the company is $1,097,000, being an increase of $381,000 on the past year. These bonds were issued for the purchase of iron, with which to relay the road, and pay off the floating debt. The capital stock of the company has increased by the sum of $208,221 by the conversion of bonds into stock, and by the payment of debts by issue of stock, together with the two dividends of 5 per cent each. Of the new loan, $158,040 44 has been disposed of.

The whole receipts during the past year have been $857,852 45. The expenditures $819,859 93, leaving $37,992 52 in the hands of the treasurer.

The cost of running the trains the past year has been 63.11 cents per mile, against 63.77 for 1850, and 77.08 for 1849. The net current expenses have been only 39.02 per cent of the current receipts.

The total number of through passengers taking Xenia and Springfield as points, has been 90,531; way, 83,558; total, 174,089. Amount received from passengers, $224,737 99; freight, $216,591 17; mails, $16,516 73; total, $16,516 63. The company own 25 engines, 18 passenger, and 234 burden cars.

New York.

The Lake Shore road, from Dunkirk to Erie, Pa., has been opened for traffic, leaving only about 66 miles of staging between Dunkirk and Cleveland.

Finances of St. Louis.

As the securities of the City of St. Louis are soon to come into market, to a considerable extent, to pay off her subscriptions to the stocks of the Pacific and the Ohio and Mississippi Railroads, we give the following view of her financial condition taken from the recent Message of the Mayor, to the City Council, and the Comptroller's Report accompanying it.

The total debt of the City amounts to $1,536,-096 10. A considerable portion of this has been incurred for River and Harbor and for various City improvements, and has been judiciously expended. The above sum includes $75,000 of stock issued to the Pacific Railroad. The following is from the Comptroller's Report:

The following statement shows the amount of debt falling due in each year:

$105,000	in	1852	$95 500	in	1865
43,600	"	1853	70,000	"	1866
5.000	"	1854	50,000	"	1867
43,000	"	1855	100,000	"	1868
28,700	"	1856	200,000	"	1870
10.000	"	1857	357.000	"	1871
33,000	"	1858	23,000	"	1872
34,000	"	1859	70,000	"	1876
22,000	"	1860	25,000	"	1890
90,000	"	1862	50,000	"	1895
4,000	"	1863	1,400	at various dates from 1853 to 1861.	
75,000	"	1864			

For the payment of harbor bonds ($117,000) and the common sewer bonds [$42,000] with the interest on the same, there is a fund provided by special tax.

The interest on the bonds issued in payment of stock in the "Pacific Railroad Company," is guarantied by the company until such time as they shall declare dividends of the profits upon any portion of the road, equal to six per cent. per annum, upon the cost of the whole road, or otherwise, so soon as the road is completed and in operation.

Under that provision of the charter which provides that the surplus revenue of one year over the preceding, shall be appropriated only for the payment of bonds or the erection of water works, there has been appropriated of the surplus revenue of the present year one hundred and eleven thousand four hundred dollars, and $86,400 of bonds already due have been paid, and the balance will be applied to the payment of twenty-five thousand dollars of harbor bonds due Jan. 1, 1852. By this appropriation we have been enabled to retire and cancel the ninety-three bonds issued to liquidate bonds maturing in April, May and June, and I have accordingly cancelled them, and destroyed the coupons by burning them in the presence of the Mayor, Auditor and Treasurer.

From the foregoing statement, giving the amount of bonds falling due in each year, it will be seen that the amount maturing in any one year prior to 1870, is less than what has been provided for out of the surplus revenue of the present year; and with an equal prosperity in the future, the bonds may be met from this source without the necessity of renewal. The increase of the revenue of the present year over last, is over 30 per cent., while an increase of 15 per cent. next year, over this, will give ample funds to pay the bonds then maturing, and an increase of ten per cent. per annum, on the revenue of the present year, will pay all the bonds now outstanding, as they become due, with the exception of those falling due next year.

It gives me great satisfaction to be able to inform you that the credit of the city is steadily and rapidly appreciating in the estimation of capitalists abroad, as is evidenced by the applications at this office for the purchase of city bonds, and by recent sales.

I recently made sales of $20,000 six per cent. bonds at 93½c here, and have since learned that a part of the bonds issued to the "Pacific Railroad Company" have been sold in Europe at a price which netted the company 95c. In view of these facts, and with ample funds in the treasury to meet all the engagements of the city for several months to come, I have, with the approbation of the Mayor, instructed the fiscal agents of the city to withhold the bonds in their hands for sale, unless they can be sold at 95c. or more; and I have good reason for believing that they will soon be able to dispose of all the bonds on hand at that price, and probably a higher figure.

That the policy of using the credit of the city to procure means for construction of permanent and necessary improvements is correct, I think is clearly demonstrated by the increased value of property in those neighborhoods where these improvements have been recently made; and a few years more of a judicious use of this policy, will enable the city to complete all improvements of this kind, and will render it unnecessary to use her credit further for this purpose. While the increased value of property throughout the entire city, induced by these improvements, will render it an easy matter to liquidate the indebtedness as it becomes due, at a comparative low rate of taxation.

The total amount of receipts into the Treasury for the past year were $714,195 80. Of this sum, $348,275 81 were received from merchant and harbor taxes, $273 443 27 from loans, and the balance from various sources of permanent revenue, making the aggregate income, independent of loans, $440,752 63. The expenditures for the same period were $470,791 44. Of this sum over $100,000 have been expended for works of permanent improvement, such as the new Water Works, City Hall, Market House, etc., which will yield handsome revenue when completed.

The City will soon incur further contingent liabilities to the amount of about $1.000,000, being the aggregate of the loans voted to the Pacific Railroad, which is now in progress from St. Louis to the west line of the State, and to the Ohio and Mississippi Railroad, from Cincinnati to the former city. Both of these works will be of great utility to the city; vastly more so than the amount of aid to be extended to them. But as there is good reason to believe that both projects will prove good investments, the stock taken in them by the city, will not, in reality, be any additional burden upon its finances.

The population of the City of St. Louis increased from 16,000 in 1840, to 80,000 in 1850, notwithstanding its terrible suffering from the cholera and from the great fires in 1849 and 1850. It is destined to be one of the first cities on the continent. Its rapid growth for the past ten years may be taken as a pledge of its future progress. Situated centrally on one of the greatest rivers in the world, and near the junction of three of its most important tributaries, the Missouri, the Ohio and the Illinois, soon to be the centre of important lines of Railroads, it cannot fail always to maintain an important rank among our leading cities.

Finances of Ohio.

We give below such part of the late message of the Governor of Ohio as relates to the finances of the State.

The public credit has been maintained and the public faith preserved inviolate. The ability of the citizens to meet, promptly, every public engagement, admits of neither question nor doubt.—The management of the public works, including the State Capitol, has been economical and satisfactory. * * * * * * *

It will be seen, in the statement of the Auditor, that our public debt, notwithstanding it has gradually diminished, is still large; but our resources, with judicious management, and with rigid economy in the administration of our financial affairs, in all the departments, are believed to be ample to meet any exigency that will, probably, arise; to pay the ordinary expenses of the State Government, and, eventually, to liquidate the debt, without any essential increase to the burthens of the people.

The receipts and disbursements of the current year are as follows:

RECEIPTS.

Proceeds of taxes for 1850, for general revenue, canal and school funds, including miscellaneous items	$1,429,207 39 5
Canal tolls, water rents, dividends on stock in canal, railroads and turnpikes, and tolls on Western Reserve and Maumee roads, and on National road	938,732 96 0
Proceeds of sales of canal lands and school and ministerial lands	141,594 86 3
Principal and interest on surplus revenue fund of counties	280,699 99 4
Received from fund commissioners for redemption of State bonds and miscellaneous items	26,498 53 0
Taxes received from banks and foreign insurance companies	61,922 97 0
	$2,878,656 71 2
Balance in the Treasury, 15th November, 1850	130,412 12 0
Amount applicable to the disbursements of 1851	$3,009,068 83 2

DISBURSEMENTS.

Bills drawn upon the Treasury and old claims and uncurrent funds credited to the Treasurer	$478,685 84 7
Payments made on account of interests and State debt	1,241,071 49 0
Payments from the Treasury, on account of principal of State debt	264,077 87 6
School funds paid to counties, being Common School fund and interest on trust fund	298,425 61 9
Paid on checks of commissioners of board of public works, for repairs of canals and public works owned by the State	126,122 94 0
Miscellaneous items, Sandy and Beaver canal three per cent fund, etc	7,975 80 4
Amount of payments out of the Treasury, during the year ending Nov. 15, 1851	$2,606,369 57 6
Balance remaining in the treasury 15th Nov. 1851	$812,669 25 6

Our State debt is as follows:

Five per cent. stocks	$1,175,600 00 0
Six per cent. stocks	13,901,793 17 0
Domestic bonds, bearing interest	448,101 71 0
Total amount of State debt, and annual interest thereon	$15,584,893 88 0

There is, besides, the irreducible fund, composed of school and trust funds, arising from the sale of school, ministerial, salt and university lands, paid into the State Treasury prior to the 15th November, 1851, upon which the State pays six per cent. interest forever, to wit:

School section No. 16	$1,227,926 84 4
Ministerial section No. 29	41,368 59 4
Virginia military school lands	141,674 35 7
United States military school lands	120,272 12 0
Connecticut western reserve school lands	177,495 86 8
Moravian school lands	2,662 97 0
Salt lands	41,024 05 2
Ohio university lands	1,897 39 0
Total amount of school and trust funds held by the State, upon which six per cent. is payable forever	$1,754,322 19 5

As the interest on this amount, and on the principal, is to be paid by the State, the principal is not classed as a part of our public debt.

Missouri.

Pacific Railroad.—The directors of this road for the current year are as follows: James H. Lucas, Hudson E. Bridge, James E. Yeatman, Edward Walsh, Louis A. Labeaume, James Harrison, Luther M. Kennett, John C. Rust, Thomas Allen,

Daniel D. Page, Joseph Charless, Joshua D. Brant George Collier.

American Railroad Journal.

Saturday, January 17, 1852.

Stock and Money Market.

There has been a decided improvement in the money market since our last. The rates on paper and call loans are lower. Investments both in railroad stocks, and securities are more freely made, though the improvement in this respect as yet consists in the greater activity of the market, rather than in appreciation of prices. The demand for our best securities for foreign investment is good, and a much larger amount of this class than is at present upon the market, would find a ready sale. All this has a very favorable effect, as it enables the holder of a security that is marketable abroad, to fill its place with one equally good, but not so well known. These last, will in time fill the condition of the foreign demand, and soon give place to others.

On the whole there seems to be every indication that all our new projects that can make a good show of means, will be able to sell their securities at what are considered fair rates, say at from 80 to 90 per cent. We may state it as a general rule, that all good projects that can with their own means prepare their road bed for the rails, will find no difficulty in borrowing sufficient in this market to complete their roads. There is a good feeling toward western projects and with an easy money market, there will be every disposition to help them forward.

Railroad securities may be divided into two classes; 1st, those of roads completed; 2d, those of roads in progress. It is very easy to see that the former have a great advantage over the latter, as far as the foreign market is concerned. Our own people are governed more by prospective than immediate results. Not so with the foreigner. If he puts his money into our roads in progress, he guarantees its judicious and economical application, as well as the prudent management of the road. He assumes a double risk. But after it is completed, and has developed its capacity for business, he has all the data before him necessary to a correct estimate of the value of the property. The only thing problematical is the future management of the road. It is for these reasons that the bonds of roads in operation are so much quicker in the market than those in progress, and that we have so often urged upon companies not to press their securities upon the market, until after the completion of their roads.

There has been and is still a good demand for western county bonds, those of the Ohio counties in particular. They properly rank among our best class securities, as only a small amount is issued by any one county, and as the whole public and *private*, or individual property in the county is pledged for their payment, and in default of this may be seized on legal process. No better security can be made, than an issue of $100,000 by a county having a valuation say of $10,000,000. The county bonds are generally issued in payment of stock subscriptions, and if the road turns out well, as is generally the case, the stock will sell at par, which relieves the counties of the burthen. At the same time, no road can pass through any county either in Ohio or Indiana, without at once adding millions to the value of its property. A road thus creates the very means for the payment of the securities named. The amount of this class of bonds is limited, as neither the States of Ohio nor Indiana permit any further issue. And it only in a few of the western States that they have been resorted to.

We give this week the report of the Miami railroad. It will be seen that its affairs are in a most prosperous condition, and promise for the future a regular cash dividend of at least 10 per cent.—We believe that all the bonds of the company entitled to that privilege, are being converted into stock. The above may be taken as a good illustration of the success of western railroads as paying projects. Every one that has yet come into operation has, we believe, been uniformly successful.

In another column will be found a list of the successful bids for the New York and Erie railroad loan. Though the rates bid average about 87½, yet the net to the company is only 86, on account of the back interest allowed. The discount on the sale is $420,000, equal to a 7 per cent dividend upon the stock of the company. After the proceeds of the same shall be applied to the liabilities of the company, there will still remain a floating debt of nearly $1,000,000, and nothing yet accomplished towards a double track. How this is to be provided for is not apparent to our minds.

The report of the Reading railroad company will be read with interest. We give it entire.

The earnings of the Norwich and Worcester railroad for the month of December were $18,731 16, against $18,118 10 for 1850.

The Watertown railroad company has declared a semi-annual dividend of 5 per cent. The Delaware and Raritan canal and Camden railroad company has declared a semi-annual dividend of 5 per cent.

The earnings of the Ogdensburg railroad in December were:

Freight department	$24,533 89
Passenger department	4,484 05
Total	$29.017 94
Earnings in December, 1851	17,258 87
Increase over Dec. '50	11,759 07

The Macon and Western railroad company has declared a dividend of 4 dollars per share on the consolidated stock and 2 dollars per share on the unconsolidated stock.

We have received the last annual report of the Philadelphia, Wilmington and Baltimore railroad, which we shall give in our next number. The following is a brief statement of the operations for the past year:

Receipts	$580,723 68
Expenses	379,199 38
Net receipts	201,524 32
The total receipts of the Newcastle company for the same period were..	137,286 74
Total expenses, including tax on capital, and interest	133,993 10
Surplus	3,293 64
Joint surplus	204,817 96
1½ per cent dividend, Oct. 1st, and tax.	135,905 00
Surplus after dividends	68,912 96
Wilmington and Baltimore railroad	$46,926
Newcastle co	21,000
	67,926 00
Leaving a sum of	986 96

Which, added to balance of revenue account, per last report, $52,211 20,

The operations of the United States Mint from January 1st to January 10th, inclusive, were as follows:

	Deposits.	Coinage.	Payments.
Gold	$2,152,600	836,252	2,993,071 98
Silver	13,000	4,500	1,722 60
Total	$2,165,600	840,752	2,994,794 58

The shipments of specie for the past week were $805,081. The shipment by the steamer of Wednesday was $600,253. The receipts of California gold for the week per the Daniel Webster and the El Dorado, are estimated at $1,900,000.

The gross receipts of the Columbus and Xenia railroad, (54 miles long,) the connecting link between the Cleveland and Columbus and the Little Miami road for 6 months, ending the 31st December last, was $132,104 16. The gross receipts for the year ending the same day were... $212,227 51

The entire expense of running, interest on its debt, salaries, depreciation of machinery and all other expenses was..... 76,125 21

Leaving net earnings for the year.... $136,102 31

The company will be able to declare a dividend of 6 per cent for the last six months, with a large surplus.

The above receipts for the past year embrace two or three months early in 1851, when the Cleveland and Columbus road was not open, and four months before it was in complete operation.

The president of the company estimates the receipts of the coming year at $50,000 more than the last year's earnings.

The gross earnings of the Hudson river road the past year have been $403,952 32. Expenses for the same period $338,277 97, leaving for net profits $65,674 35, which is only about 15½ per cent of the gross receipts, certainly a very discouraging result.

The Hudson River road will cost at least $12,000,000. It will, next to the Erie, be the most expensive road in the United States. The amount of stock paid in is $3,310,552 17 leaving $8,689,447,83, to be raised in its bonds. It will take $608,261,34 to pay the interest on this amount. From the low rate at which the road must carry both passengers and freight to compete with the river on one side, and the Harlem railroad on the other, we estimate running expenses at 66⅔ per cent. of the receipts. (We have seen that for the past year the proportion of expenses and receipts, have been as 84½ to 15½.) The road must earn $1,824,784, or $152,000 per month to pay interest on its indebtedness. Can it do this? If not what is to become of its stock? At a cost of $12,000 the cost per mile will be $83,500. The Boston and Worcester road cost about $72,500 per mile. The length of that road and branches is 69 miles. It earned last year only a fraction over $700,000. We doubt whether the Hudson River can earn as much per mile. If so, the gross earnings of the latter would fall a little short of $1,500,000. Deducting from this the running expenses of the road 1,000,000 dollars and we have only 500,000 dollars to meet interest on bonds, not enough for this purpose by 108,261 34 dollars.

Our belief is that the Hudson River road after it shall be completed with its double track, cannot exceed 125,000 dollars per month. The Harlem road has the advantage of the Hudson in being so much more accessible from every part of the city A person stopping as far up town as the New York or Metropolitan Hotels, will find it much more convenient to take the latter, than the former, for Al-

bany. The great trouble with our New York roads is that they cost too much money.

We are beginning to receive accounts from the great South-Western Railroad Convention held at New Orleans the 5th inst. We are looking for the full report of its proceedings with much interest. The Convention was the commencement of an organized Southern movement in the cause of internal improvements. Up to the present time, the most of the Southern States have remained in the contented enjoyment of their natural advantages, without an effort to increase their value by the application to them of the contrivances and improvements of the present age. The result has fully shown, that the superiority of their position and resources, unassisted by artificial appliances, has been no match to the superior enterprise of their Northern neighbors, who have, by their Railroads and Canals, virtually changed the course of the Mississippi River, making its outlet at New York, instead of New Orleans. The latter city, which is the life and soul of the movement referred to, feels herself compelled to act from the sheer necessity of the case. Unfortunately for her, the Northern States will have nearly accomplished their projects before she has moved in hers. She has now a double task before her; to build her proposed works, and change the current of trade after they shall be completed. We are glad to see that she is in no way intimidated by the magnitude of the task before her.

The following are the successful bids for the recent Erie railroad loan:

Ward & Co	$600,000	87	50
Do.	400,000	87	50
N. R. Cobb & co	250,000	87	50
T. J. Townsend	550,000	87	50
Do.	250,000	87	55
W. & J. O'Brien	100,000	87	51
Do.	5,000	87	52
Cammann, Whitehouse & co	30,000	87	50
Benj. Loder	100,000	87	50
W. S. Hoyt	50,000	87	50
Do.	50,000	87	50
Weeks & co	100,000	87	60
Dan. S. Miller	50,000	87	51
H. Shelden	50,000	87	51
A. B. Baylis	50,000	87	50
S. B. Chittenden	10,000	87	55
Shep'd. Knapp	50,000	87	51
Pollard. Jenkins & co	5,000	87	51
G. W. Pratt	15,000	87	52½
W. L. Seymour	15,000	87	50
Norman White	15,000	87	50
W. H. Smith	20,000	87	50
G. Morris	10,000	87	50
F. W. Edmonds	5,000	87	50
D. G. Miller	50,000	87	51
DeLannay, Iselin, & Clarke	70,000	87	51
Almut Reed	10,000	87	50
W. Mather	5,000	87	50
H. Suydam	20,000	87	51
Samuel Marsh	50,000	87	53
A. L. Lynn	5,000	87	50
Do.	5,000	88	00
H. Brewer	1 000	88	00
H. Baylis	5,000	89	00
W. E. Dodge	50,000	87	50
J. B. Garner	20,000	88	00
Stephen Whitney	20,000	87	55
H. Ramsdell	40,000	87	51
F. R. Griffin	35,000	87	51
W. E. Dodge	50,000	87	55
T. Dwight	3,000	87	50
H. Hotchkiss	50,000	87	51
C. Smith	75,000	87	55
H. J. N. Phelps	75,000	87	55
Theo. S. Draper	100,000	87	52
Powell, Ramsdell & co.	100 000	87	50
Do.	50,000	87	53
E. Riggs	10,000	88	50
W. Marsh	40,000	87	55
D. Clarkson	10,000	87	54
Do.	10,000	87	56
Do.	10 000	87	58
A. G. Jones	20,000	87	51
B. Loder	50,000	87	51
Willets & co	10,000	87	51
C. M. Leupp	60,000	87	61
Horace White	25,000	87	55
C. R. White	25,000	87	55
J. J. Van Nostrand	10,000	87	50
J. Thompson	30,000	87	51
G. W. Gale	50 000	87	55
N. G. Smith	25,000	87	55
C. and U. J. Smith	25,000	87	55
W. Murphy	4 000	87	52
E. J. Brown	10,000	87	52
Moses Allen	25,000	87	51
Do.	25,000	87	51
W. B. Skidmore	20,000	87	50
H. V. Shelden	100,000	87	50
M. O. Roberts	50 000	87	50
W. Marsh	50 000	87	50
Do.	30,000	87	52
H. Hotchkiss	20,000	87	51
P. Hall	9,000	87	50
G. B. Hall	3,000	87	50
D. H. Nevins	20,000	87	50
Do.	30,000	87	52
H. P. Morgan	25,000	87	51
Do.	25,000	87	50
R. and B. Skidmore	5 000	87	50
L. and B. Kirby	15,000	87	50
Wm. Burt	30,000	87	50

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK JANUARY 17, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	104½
U. S. 6's, 1862	113½
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	116½
U. S. 6's, 1868	115½
U. S. 6's, 1868—coupon	118½
Land Warrants	140a145
Arkansas 6's	52a53
Alabama 5's	91a92
Indiana 5's	84½
Illinois 6's, 1870	65a68
Kentucky 6's, 1871	106
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	97½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	——
Mississippi	——
New York 6's, 1855	103½
Ohio 6's, 1860	109
Pennsylvania 5's	99½

RAILROAD BONDS.

Atlantic and St. Lawrence, 6 per cent	85
Baltimore and Ohio, 1867	89
Boston and Providence 6's, 1855	101
Boston and Worcester 6's, 1855, convertible	107½
Bost., Concord and Mont. 6's, 1860, mortgage	87½
Cheshire 6's, 1860	91½
Connecticut River 6's, convertible	89
Erie 7's, 1859	102½
Erie 7's, 1868	109½
Erie income 7's	94½
Hudson River 7's, 1853	101½
Michigan Central, convertible, 8's, 1856	104½
New York and New Haven	102
Norwich and Worcester, mortgage, 1860	80a85
Old Colony, 1854	97½
Ogdensburg 7's, 1859	92½
Portsmouth and Concord	80a85
Passumpsic 6's, 1859	94½
Rutland 7's, 1863	80
Reading mortgage, 1860	78
" " 1870	72
Sullivan, mortgage 6's, 1855	67
Vermont Central 6's, 1852	93
" " 6's, 1856	85
Vermont and Massachusetts 6's, 1855	83

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Jan. 7.	Jan. 14.
Albany and Schenectady	89½	97
Atlantic and St. Lawrence	60a65	—
Androscoggin and Kennebec	30a35	—
Boston and Maine	103½	103½
Boston and Lowell	106½	106½
Boston and Worcester	99½	99
Boston and Providence	85	85½
Bost., Concord and Montreal	35	35½
Baltimore and Ohio	61½	63½
Baltimore and Susquehanna	34	—
Cheshire	47	46½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Ambey	—	—
Connecticut River	58½	58½
Delaware and Hudson (canal)	99½	99½
Eastern	95	94½
Erie	81½	78½
Fall River	99½	99½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	68½	69
Hartford and New Haven	115	115
Housatonic (preferred)	—	—
Hudson River	69	66
Kennebec and Portland	50a55	—
Little Miami	—	—
Long Island	16	16½
Mad River	—	—
Madison and Indianapolis	90	98½
Michigan Central	95	94½
Montgomery and West Point	—	—
Michigan Southern	103	102½
Manchester and Lawrence	86	87
Morris (canal)	14½	14½
New York and New Haven	111	113
New Jersey	—	112½
Northern	65	64½
Nashua and Lowell	104½	104½
New Bedford and Taunton	116	116
Norwich and Worcester	55½	49½
Norfolk County	14½	14½
Ogdensburgh	27½	27½
Old Colony	64½	62½
Passumpsic	65	65
Pennsylvania	—	—
Pittsfield and North Adams	95	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	60½	57½
Rochester and Syracuse	114	106
Rutland	37	31
Stonington	51½	50
South Carolina	—	—
Syracuse and Utica	123½	—
Sullivan	10a20	20
Taunton Branch	109	109
Troy and Greenbush	90	—
Tonawanda	—	—
Utica and Schenectady	129	127½
Vermont and Canada	99½	99½
Vermont Central	24½	24
Vermont and Massachusetts	26½	26½
Virginia Central	—	—
Western	100½	102
Wilmington and Raleigh	56	—
York and Cumberland (Pa.)	18½	17½

Massachusetts.

Petersboro' and Shirley Railroad, N. H.—The track of this road has been completed as far as Mason village, in N. H., so that the branch now extends from Groton Junction to Mason village. The whole line is over twenty miles in length, about fifteen of which belongs to the Massachusetts company, terminating at the line of the State, and the balance to the New Hampshire corporation. The cars have run into Mason village several times, and will soon make their regular trips to that point. It is not probable, we learn, that this road will be extended beyond this point at present.

Erie Canal.

The work of enlargement on this canal, under the recent provision of the Legislature, has now commenced in good earnest. We give the names of the contractors in another column. It is supposed that the entire cost of the enlargement will fall within $9,000,000. It will be completed in three years. The canal when enlarged will have a depth of 6½ feet of water, and will allow the passage of boats of 224 tons burden: equal to the tonnage of a good sized brig. The capacity of the canal will be more than doubled by the enlargement. It is estimated that a traffic of seven millions of tons can be easily accommodated, and a much larger amount, should the canal be taxed to its utmost capacity.

When the enlargement shall be completed, the western division of the canal, from Buffalo to Montezuma, will be fed from Lake Erie, a distance of 160 miles. The present limited capacity of the canal will not allow a sufficient flow of water for this purpose. The enlargement will in a great measure relieve the drain upon the Genesee river, and leave its water for the manufacturing establishments at Rochester, from which it is now drawn in the dry season, to the great injury of that flourishing city.

The long level of 70 miles occupies the summit, and corresponds to the passage of the crest of the Alleghenies by other works. This level is fed by the Black river, which is diverted from its natural course to Lake Ontario. The supply from this source can be made equal to any emergency.

It is estimated that after the enlargement, property can be moved upon the canal at a cost not exceeding *three mills* per ton per mile. Allowing two mills more for tolls, the cost of transportation, including all charges, will be reduced to five mills per ton per mile, or about $1 75 per ton from Albany to Buffalo, a distance of 350 miles, or $2 from this city to Buffalo, adding 25 cents per ton for freight from Albany to New York, 150 miles; making it the cheapest artificial route of commerce ever constructed. After the lakes are reached, a whole world of interior navigation is open to us. As soon as the Falls of the St. Mary are canalled, a vessel may clear from Buffalo to the head of Lake Superior, a distance 1500 miles!

The city of New York owes all its greatness to the Erie canal. It is the only work by which she can maintain it. Our rivals can make a better show of railroad connections, but railroads can never take from the canal the trade between the eastern and western states. Now that the enlargement is secured, it will be beyond all the fear of competition.

Pennsylvania.

Sunbury and Erie Railroad.—A mass meeting of the citizens was held in Philadelphia, on Friday evening of last week, to adopt measures to secure the early commencement and completion of the Sunbury and Erie railroad. Gen. George Cadwallader was called to the chair. Addresses were delivered, severally, by Hon. H. A. Muhlenberg, Jno. W. Maynard, Esq., and Judge Strutherland, showing the importance and necessity to Philadelphia's interests of a continuous railroad through the State from Philadelphia to Erie, in securing the Western trade and in combining the shortest possible route from the lakes to the Atlantic. The estimated cost is six million dollars, one-third of which is pledged along the line and in the county of Erie.

Georgia.

Augusta and Waynesboro' Railroad.—We have received the report of the directors of this road, submitted to the stockholders January 1, 1852.—The directors state that they fully expected at the time of their last report, that the road would be finished to Waynesboro' before the close of the year 1851. The reasons they give for not fulfilling the expectations held out is, that the supply of labor within their reach, during the first half of the year, was totally inadequate to the demand; that two years only have elapsed since the preliminary surveys were commenced from the Central railroad to Waynesboro', since which time the work has been constantly progressing. The impression which seems to exist that there has been an unusual delay in constructing the road, has in their opinion been derived, partly from the exceedingly short time in which the contractors engaged to have the work completed, and partly from the number and the distribution of the interests, to be favorably affected by the opening of the road.

The supply of labor is now abundant. Contracts have been closed for the grading, masonry and bridging to Augusta, and the contractors are already on the work with a force sufficient to carry it on rapidly.

The Central railroad company has agreed to work this road for the present; that company paying six per cent per annum on the cost to the different way stations, and seven per cent on the entire cost, as soon as the road is completed to Augusta.

The same company subscribed $95,000 to the stock of the Augusta and Waynesboro' railroad last March, having previously subscribed $5,000. In May the stockholders of the Georgia railroad subscribed $100,000 upon certain terms, as soon as the work was under contract to Augusta. The receipts from capital stock, etc., of the road, up to the 31st December, 1851, were $370,377 17; the disbursements, $306,358 99; and the funds on hand at that date, $64,018 18.

The above road will connect the eastern terminus of the Georgia road with Savannah, and is a project of great importance to that city, and to the eastern portion of the State.

Louisiana.

New Orleans and Opelousas Railroad.—In the system of railroads which the city of New Orleans is marking out for herself, the above road occupies a conspicuous place. This line of road is not to be limited to Louisiana, as its name would indicate, but is to be extended through the State of Texas, to the *El Paso del Norte*, with a view to its ultimate extension to California. The distance by the line of the proposed road from New Orleans to El Paso, will be about 900 miles. The chairman of the executive committee of this road, Col. B. H. Payne, Esq, of New Orleans, has recently addressed a communication to the Governor of Texas, urging the co-operation of that State in carrying out the work. He proposes that Texas shall apply 8 of the $10,000,000 due from the General Government, to the above project, and argues that the State would gain largely by such a step, as it would vastly increase the value of her unsold lands, which now amount to 111,000,000 of acres, and develop her vast resources, which now lie dormant for the want of suitable avenues for trade. The cost of the road, it is stated, would not exceed $10,000 per mile.

All this is very true: yet we fear that there is little prospect that the project will be carried out, at least in the manner proposed, for many years. In the first place, Texas will not probably appropriate any portion of her credits with the General Government towards its construction. The whole burden is thrown upon private hands, which, thinly settled as Texas is, can contribute but little to railroads. The want of the dense population of the northern States, is the great obstacle to the success of railroads in the south. Many of the southern roads have to be completed before they can come into profitable use, in consequence of the small amount of local traffic. The people there are very unwilling to take stock in a road, unless a sufficient sum is secured to complete it, before commencing work.

As far as the State of Louisiana is concerned, the above road will undoubtedly be completed to Opelousas, and perhaps to the west line of the State, as the city of New Orleans will lend efficient aid to the Louisiana portion of it.

STATEMENT of the annual cost of several Massachusetts railroads, as given by their respective returns to the State Legislature upon the first of January of each year:

	1838.	1839.
Boston and Worcester...	$1,000,000	$1,700,000
Boston and Providence...	1,682,900	1,782,000
Boston and Lowell.....	1,575,663	1,575,663
Western.....	.....	.....
Eastern	.....	.....
	1840.	1841.
Boston and Worcester...	1,799,255	1,934,981
Boston and Providence...	1,782,000	1,782,000
Boston and Lowell.....	1,608,460	1,729,242
Western	.....	.....
Eastern	.....	.....
	1842.	1843.
Boston and Worcester....	2,373,547	2,726,102
Boston and Providence...	1,782,000	1,892,831
Boston and Lowell.....	1,834,893	1,973,286
Western.....	5,255,026	5,692,007
Eastern.....	2,267,000	2,267,000
	1844.	1845.
Boston and Worcester...	2,900,000	2,914,078
Boston and Providence...	1,894,831	1,886,131
Boston and Lowell.....	1,863,529	1,902,555
Western.....	5,757,529	5,919,260
Eastern	2,388,631	2,388,044
	1846.	1847.
Boston and Worcester...	2,900,000	3,485,000
Boston and Providence...	1,964,677	2,109,455
Boston and Lowell.....	1,932,598	1,940,418
Western.....	6,120,307	6,409,590
Eastern.....	2,471,561	2,494,268
	1848.	1849.
Boston and Worcester...	4 113,609	4,650,392
Boston and Providence...	2,544,475	3,031,106
Boston and Lowell.....	1,956,719	2,013,687
Western.....	6,987,240	7,975,452
Eastern.....	2,937,206	3,095,393
	1850.	1851.
Boston and Worcester...	4,882,648	4,908,332
Boston and Providence...	3,416,232	3,370,269
Boston and Lowell.....	1,915,646	1,945,666
Western.....	8,032,813	7,996,056
Eastern.....	3,120,391	3,119,265

Dubuque and Red River Railroad.

A meeting was held at Delhi, Iowa, on the 9th ult. to take steps for the construction of a railroad from Dubuque by the way of Cedar river, and the great bend of the St. Peters to the valley of the Red river of the north, which empties into Lake Winnepeg. The northern portion of that valley contains the colony planted there by the Earl of Selkirk, in 1812, and which has now a population of about 10,000 souls. The 49th parallel cuts the valley in half, leaving the sources of Red river within its boundaries.

To the Editor of the American Railroad Journal.

Sir—In your Railroad Journal of the 13th December, I notice a statement, copied as you remark from a Cincinnati paper, importing that the Supreme Court of Illinois had given a decision which defeated the construction of the *Mississippi and Atlantic railroad*, from St. Louis to Terre Haute.

This is an entire misapprehension. That decision embraced only the question of power to enter upon and condemn land for the use of the road, under the provisions of the General Railroad Law. The general corporate powers of the company under the act remain full and undisputed; and this case was submitted on account of the real or supposed ambiguity of that law upon this point. The right of way is already secured over nine-tenths of the route by agreement of parties, and the right given by pre-existing statute, confers all needed power to perfect it.

The Ohio and Mississippi road, from St. Louis through Vincennes to Cincinnati, is not an antagonistic enterprise, as might be inferred from the statement alluded to. That road accommodates a different region of the State, as well as Indiana and Ohio, and both roads are required for public convenience, and both are sure to be made. Like all other judicious enterprises, they aid each other. The accomplishment of one would assure the speedy construction of the other, were any such assurance needed on either side.

The route of one road is the same as that selected more than thirty years since by scientific and impartial men, under the direction of Congress, as the best line of communication with the west, and located for the great national road as such. Its eastern point is at Terre Haute, on the Wabash—its western terminus at Illinoistown and St. Louis, on the Mississippi, there connecting with the Pacific railroad, now in progress. The great lines of railroad from the principal commercial marts of the Atlantic, Boston, New York, Philadelphia and Baltimore, will all have a perfect connection with Terre Haute in the course of a few years. The necessity, therefore, of this continuation to St. Louis would seem quite apparent, if not indispensable; and may surely be urged with no prejudice whatever to other railroads which traverse the State in parallel directions, and which may be no less demanded by public convenience.

Respectfully yours,

WILLIAM S. WAIT.

Greenville, Illinois, Dec. 30, 1851.

Georgia.

Augusta and Waynesboro' Railroad.—The Savannah Republican says: "It gives us pleasure to announce that this road is now open to a distance of fifteen miles, and that the travel and business on it are constantly increasing. The daily coaches running between the fifteen mile point and Augusta are filled with passengers on every trip. The contract for the building of the whole road through to Augusta has been let, and it is expected that it will be finished in the course of the ensuing year. The completion of the work will be an event for legitimate congratulation with the people of this city and Augusta, as well as with those living along the line and in north-eastern Georgia.

Columbus Railroad.—We see from the Columbus papers, that the city council of that place, in addition to its former subscription, has loaned its credit to the amount of $75,000 in aid of the road.—Twenty miles of the road are finished, and the cars are running upon it.

Erie Railroad.

The following is a statement of the present financial condition of the Erie railroad:

Capital stock	$6,000,000
1st mortgage bonds	3,000 000
2d " "	4,000,000
Income "	3,500,000
1st convertible "	3,500,000
2d " "	3,000,000
Certificates of old indebtedness	500,000
	$23,500 000
Loss on bonds sold January 10th	420 000
Floating debt not yet provided for	500,000
	$24,420,000

The four last loans, as follows—

Loan of 1849	$4,000 000
" 1850	3,500,000
" 1851	3,800,000
" 1852	3,000,000
	$14,000,000,

with the exception of $1,600,000, have been in excess of the estimates of the company.

The loss on the last sale was exactly equal to a 7 per cent dividend upon its stock, $420,000. The amount of loss outright on the four last sales of bonds have been just about equal to a dividend on the stock, while the debt has increased annually more than $3,000,000.

The present cost of the Erie road is $52,516 per mile.

The recent sale, instead of providing means for a double track as advertised, still leaves a floating debt of $920,000 to be provided for.

The number of miles run by the passenger trains the past year have been	725,978
Do. freight trains	733,222
Total	1,459,200
Cost per mile of running passenger trains by company's report	32·6 cts.
Do. freight trains	55·3 cts.
Total receipts from freight and passenger traffic for the year ending September 1	$2,124,788 27
Amount received per mile run per passenger train as per company's report	$1 60
Do. freight train	1 51
Amount actual received per mile run	1 46
Amount of receipts per mile in 1850	1 54

The cost per mile run is not given in the report of 1850.

Cost of equipment as per report of 1850:

Locomotives, etc.	$567,312 64
Passenger and baggage cars	108,458 21
Freight cars	489,200 03
Total equipment account September 1, 1850	$1,164,970 88
Total equipment account January 1, 1851	2,151,430 24
Amount stated as charged to equipment account as per late report of the company	3,000,000 00
Deficiency not accounted for	$848,569 76

Finances of Portland, Me.

The cash valuation of the real and personal estate of the city of Portland in 1851, was $15,694,247, equal to $750 to each individual, the population being 21,000. The city debt for 1851 was $265,632. The whole amount of assessments on polls and estates amounts to $100,738. The per centage on property this year is 61 cents on $100; last year 65 cents or same sum. Nine of the corporations of Portland are taxed $2,922. In the last Mayor's Report, it is estimated that $4,500 assessed annually, would pay the whole city debt before 1876, when the last payment becomes due.

In addition to the above, the city is conditionally liable, in bonds guaranteed for the Atlantic and St. Lawrence Railroad to the amount of $1,500,000. It is expected that the Railroad will meet the interest and principal on these bonds, and save the city from all liability. The city bonds issued for the Railroad are 6 per cent., and were in no instance sold for less than their par value; a fact which speaks well for the credit of the city.

Norwich and Worcester Railroad.

The receipts of this road for the year ending Dec. 1, 1851, are as follows:

	Dec. 1, 1849 to Nov. 30, 1850.	Dec. 1, 1850 to Nov. 30, 1851.
Through travel	$12,833 01	$19,793 28
Local	97,276 71	97,810 98
Through freight	20,317 45	22,549 96
Local	116,103 83	115,351 09
Mails & Expresses	12 519 86	12,267 97
Rental	2,148 23	2,284 97
	261,259 12	270,049 25
		261,259 12
Increase over the preceding year		$8,790 13

Receipts for six mos. ending Nov. 30, '51.	$146,265 18
For the same period for expenses of road bed, engines, cars, bridges, and running expenses, [including $5000 damages paid on account of the falling of Wilson's Bridge, etc., which occurred about two years since, and reduces the net earnings for the last six mos. that amount]	70,535 00
Net earnings	75,730 18
Interest	22,440 87
Balance to profit and loss	$53,289 31

The Directors in their report state that they have full confidence in the ultimate success of the road. There is but little ground for such confidence. The trouble with the Norwich and Worcester is, that from bad management the road has cost just about twice too much. At a cost of $1,500,000, which is about the real cost of the road, it would be good property. At some $3,200,000 it is very poor property, and must always remain so. This is the whole truth in a nutshell; however much the Directors may attempt to give a different coloring to its affairs. The road has lost all character and cast, and is just fit for the use to which it is applied; to be the football of the New York Stock Speculators.

New York.

Buffalo and Conhocton Railway Company.—The Le Roy Gazette states on authority of one of the the directors of this company, that, at their meeting at Bath, on the 23d ultimo, they decided immediately to commence work upon the road west of the Genesee river. The work will be commenced first upon the embankment between the river and canal, which can be done as economically in the winter as at any other season of the year. The commissioner is instructed immediately to repair to this section of the road, to complete and finish up the conveyances of the right of way from the river to Batavia; to contract for the ties of the road and the fencing, which were not included in the general contract made last August with Phelps & Co.

The president and commissioners were also directed to open for business that portion of the road from Corning to Blood's Corners, upon which the iron is now laid, as soon as the locomotives can be got from the manufacturers. Passenger and freight cars sufficient to run this portion of the road are already completed and in their depot at Corning.—Cars will, undoubtedly, commence running over that portion of the road by the first of March next; and the directors confidently expect to open the road for public business to Conesus Centre, a distance of 15 or 16 miles from Avon, by the middle of June next.

Maine.

York and Cumberland Railroad Co.—We learn that on Saturday last the suit of John G. Myers vs. the York and Cumberland railroad company was withdrawn, and the Plaintiff submitted to a *non-suit*.

The suit has excited some attention from the circumstances connected with the removal of F. O. J. Smith from the office of president of the company, which has been referred to by us, and out of which grew the suit of Smith praying for a *quo warranto*, referred to by us last week. Myers, in his suit, claimed $500,000 of the company. The company notified him to be in readiness to try the suit at the present term of the court, and made preparation accordingly. The action is now dismissed from the docket.

It is understood that the company are to commence work upon the road as soon as the outstanding debts are settled, and that a satisfactory arrangement has been made therefor, with a certainty of carrying the road through, provided the floating debt is immediately taken up with the mortgage bonds of the company recently issued to Hon. Toppan Robie, Hon. John Anderson, and Hon. Nathan Clifford, trustees. It is a source of sincere pleasure to hear that all the obstacles to the prosecution of this road, so important to Portland, are now removed, and that the directors feel entire confidence in its rapid prosecution as soon as the debts are adjusted. Now that the suit and attachment of Myers are withdrawn, and the right of the directors judicially settled, we presume the bonds will be eagerly sought for by all who have claims upon the company.—*Portland Advertiser.*

Rochester Flour Trade.

The Democrat, in its annual statement of the flour trade of Rochester, gives some interesting statistics, from which we gather the following:

The amount of flour shipped from this place by canal for a series of years is as follows:

	bbls.
1844	400,388
1845	518,318
1846	540,232
1847	631,574
1848	584,426
1849	570,757
1850	552,729
1851	500,330

The Rochester and Syracuse railroad carried 20,513 barrels in 1851. This is a small comparative amount. In 1848 that road took 58,137 barrels, and in 1850 about 30,000 barrels. The amount of flour left here by canal during the year is 26,888 barrels. Last year there were 44,443 barrels left by canal. The Western railroad during 1851 brought down 49,000 barrels—in 1850, a little more than that. Adding to the amount shipped by canal the difference in the amount left here during the year, and the shipments are still less than any previous year named, excepting 1844-'5.

To the amount shipped must be added the am't consumed by 40,000 inhabitants, and by a large number of people living in the suburbs and vicinity.

The amount of wheat left here by the Erie and Genesee Valley canals, for a series of years, is as follows:

1844	884,141
1845	1,169,231
1846	1,503,546
1847	1,778,116
1848	1,443,133
1849	1,426,436
1850	1,215,759
1851	1,465,454

The Western railroad has left 175,000 bushels, which is more by 50,000 than it brought here the year previous.

There is a considerable amount of flour now stored in the mills, and more or less wheat.

A rough estimate of the amount of flour manufactured here in the course of a year is 600,000 barrels, to manufacture which, computing five bushels of wheat to each barrel, would require three million bushels. The whole amount left here by canal and railroad is 1,640,454 bushels, leaving 1,359,546 to be made up from receipts by wagons from the country towns. The product of this county is computed at about that amount. A considerable portion of what is grown in this county is brought in by canal, while no small amount is brought from adjoining counties, by land carriage. Some wheat is received by lake vessels, both from Canadian and American ports. The amount arriving last year is much smaller than usual, but we have not been able to obtain the precise figures. Canadian produce dealers have found this an unprofitable market, as their wheat can scarcely compete with Genesee upon paying terms, and they do not often venture to send a cargo to our port.

This city has always ranked as the first flour manfacturing town in the world. Richmond, in Virginia, has recently outranked us in quantity, but the reputation of the Genesee flour is unapproached by that of any other description extant.—The capacity of our mills is never fully exercised, and will not be while the demand continues as at present. During the next year a new mill of four run of stone will be added to the present force. New facilities and improvements are constantly making, and Rochester will not long stand less than first in this branch of manufactures, if such be the case now.

British Metals Exported to British North America.

	1840.	1841.	1842.	1843.
	Tons.	Tons.	Tons.	Tons.
Bar iron.....	9,109½	9,762½	4,971½	6 838
British pig do.	3,998½	4.844	3,199½	4,413
Hardw're and cutlery.....	£ st'g. 131,326	£ st'g. 155,750	£ st'g. 128,121	£ st'g. 102,260
		1844.	1845.	1846.
		Tons.	Tons.	Tons.
Bar iron.....		11,209½	11,297	9,041
British pig iron.....		2,991½	6,388	6,711
		£ st'g.	£ st'g.	£ st'g.
Hardware and cutlery.		167,876	200,476	193,880
		1847.	1848.	1849.
		Tons.	Tons.	Tons.
Bar iron.....		14,196½	9,277½	19,899
British pig iron.....		6,231½	4,218	7,823½
		£ st'g.	£ st'g.	£ st'g.
Hardware and cutlery.		166,094	95,967	98,460

Commerce of the New York Canals.

The canal closed several days earlier than was anticipated, and so suddenly that a large amount of property, consisting principally of flour, wheat, barley and beef, destined for tide water, was locked up in the canal between Schenectady and Little Falls, which, had it arrived here, would have materially altered our figures for this year.

The commercial year, however, compares favorably with any of its predecessors. We have not complete returns of the amount of property going from tide water; but from the fact that while there has been a single falling off in the tonnage coming to the Hudson river, the aggregate tolls received on all the canals exceed those of last year about $70,000, thus showing that a larger amount of property has been conveyed on the canals than there was last season.

During the summer and early fall, the railroads monopolize the carrying trade in perishable articles, and dealers in butter, cheese and lard avail themselves of those facilities to secure an early market. While this is true in regard to the articles named, the canal must necessarily retain such articles as sugar, molasses, iron, etc., which, paying but small profits to the trader, will not bear so high a rate of transportation as charged by railroads.

In February last, the canal board made considerable reductions in tolls on several of the leading articles to be transported to and from tide-water, and while many doubted the wisdom of their act, the result has shown their sagacity. We are inclined to the belief that the present board will be called upon during the winter to make further concessions, which they will undoubtedly concede to, if satisfied that it will be for the interest of the State.

At an early day we shall endeavor to give the "general movement" showing the aggregate tonnage of property ascending and descending the canals, and its estimated valuation.

We now submit our tables showing the amount of property arriving at tide water, which embraces the returns from New York, Albany, West Troy and Waterford offices, and the estimated valuation of the same:

Statement showing the aggregate, in tons, under the divisions as specified as follows:—

	1849.	1850.	1851.
The Forest....	665,547	947,768	921,337
Agriculture....	796,000	926,048	895,096
Manufactures .	44,288	39,669	53,553
Merchandise ..	5 873	7,105	5,349
Other articles..	94,638	113,273	135,365
Total tons...	1,606,346	2,033,863	2,010,700

Statement showing the aggregate value of the property which came to the Hudson River, on all the Canals, during the years '49, '50, and '51, under the divisions as specified in the above table:

	1849.	1850.	1851
The Forest...	$7,192,796	$10,315,117	$10,380,355
Agriculture...	38,455,456	38,311,546	36,520,296
Manufactures.	3,899,238	3,960,854	4,355,907
Merchandise..	508,048	563,615	406,711
Other articles.	2,319,983	2,323,495	2,789,257
Total.....	52,375,521	55,474,627	51,452,526

—[*Albany Evening Journal.*

Canada.

Great Western Railroad.—We learn that a meeting of the Joint Committee of the Central line of Railroads and the Canada road, from the Falls westward, was held at Albany, on the 8th inst., and settled the whole matter of the connection, and the making of the subscriptions. They also decided to use the compound or continuous rail of Mr. J. F. Winslow, of Troy, on the whole length of the new road.

St. Lawrence and Champlain Railway.—We learn with much pleasure that the Railway Company have completed their line to the river side at St. Lambert. In a very short time the locomotive engine will run to this terminus, and our citizens will be transported from their river to Boston or New York, without once leaving the rail. This improvement will, no doubt, be greatly felt by our business men during the ensuing season; as the Company are making arrangements to transport goods with great expedition from the wharves to their terminus.—*Montreal Herald, Jan. 8.*

Louisville and Nashville Railroad.

We learn by advices from Frankfort that a series of amendments to the charter of the Louisville and Nashville railroad have passed both houses, These amendments give to the company the power to construct their road to the Ohio river, below the mouth of the Tennessee, or to the Mississippi river, or to connect with the Mobile and Ohio road, in Kentucky, or to connect with a railroad from Memphis, Tennessee, in the direction of Louisville, unless the Legislature of Tennessee shall grant to the company an acceptable charter to their State.

The amendments also provide that the company may change their name to that of the "Louisville and Southwestern railroad company;" and also further provides that the General Council of Louisville may have power to transfer the subscription of the city to the latter road, after submitting the same to a vote of the people.

Thus much for the amendments. By them we trust our friends in Nashville, and the friends of the great enterprise throughout Tennessee, will see that we are in earnest in our desire to have a railroad connection with the Southwest, if we cannot go it at Nashville. We understand that the president and engineer of the road will leave in a few

days to visit Nashville once more, for the purpose of endeavoring so to conciliate matters as to permit the company to construct their road to Nashville, and we submit to the citizens of Nashville and the press of that city, that, although we were [as they stated] in a bad humor when we penned a former article upon this question, we at least were sincere.

It is time that the citizens of Nashville were aroused to the probability of their loosing the road, unless they build it themselves, and we sincerely trust that the Legislature will at once, openly and candidly, remove the paltry restrictions they have imposed upon the charter, ere it is too late.

NEW YORK, Jan. 14, 1852.

H. V. POOR, ESQ.

In your paper giving an account of Bituminous Coal, for the past year, taken to tide water, you make some errors.

The last Report of the Baltimore and Ohio Railroad gives the quantity brought down over their road at 163,300 tons, exclusive of Coal consumed on their road, which is from 30,000 to 40,000 tons *additional* per annum.

The Chesapeake and Ohio Canal from its opening, 10th of October, 1850, to 10th October, 1851, is one hundred thousand tons, and the amount mined in the Cumberland region is very nearly 400,000 tons per annum. Please correct the error, and oblige,

CUMBERLAND.

Export of British Metals to America.

We take the following tables from the circular of Messrs. Aylwin & Co., metal agents, of London. The correctness of the figures may be depended on:

Copper sh'ts, n'ls, etc. includ. m'xd or yellow metal.	1840. Tons.	1841. Tons.	1842. Tons.	1843. Tons.
	917½	906	772¼	1,416¼
Bar iron	26,858	54,199¾	39,965	21,336¾
Iron wire	32½	104	91	9
Pig iron	5,151	16,463	13,075¼	7,148¼
Unwrought steel	1,202¼	2,535¾	1,507¼	1,336¼
Spelter	5¼	10	23½	116¼
Hard ware and cutlery	£ st'g. 334,065	£ st'g. 584,400	£ st'g. 29,881	£ st'g. 448,341

Copper sheets, nails, etc. including mixed or yellow metals	1844. Tons.	1845. Tons.	1846. Tons.
	1,671	1,605½	1,901
Bar iron	64.713	25,006½	31,517
Iron wire	42¾	22	77
Pig iron	28,447	23,375	16,345
Unwrought steel	2,376¾	3,633¼	4,132
Spelter	333½	45	386¼
Hardware and cutlery	£ st'g. 827,084	£ st'g. 719,324	£ st'g. 739,793

Copper sheets, nails, etc, including mixed or yellow metals	1847. Tons.	1848. Tons.	1849. Tons.
	2,637	2,546	3,003¾
Bar iron	64,494¼	162,057½	228,624
Iron wire	351	350½	880¼
Pig iron	47,217	91,704	96,238½
Unwrought steel	5,428¼	4,607	5,216¼
Spelter	223¼	110	250½
Hardware and cutlery	£ st'g. 931,203	£ st'g. 777,964	£ st'g. 849,758

Vermont Central Railroad.

The following, the latest gossip in relation to the above road, is from the Boston Journal:

The effect of the troubles between the Vermont Central Railroad Company and Mr. Quincy has been to throw discredit on nearly all stock and bond collaterals.

A curious circumstance is reported to-day in regard to some of the Vermont Central Collateral Bonds pledged by Mr. Quincy for his individual note. It appears that a broker, acting for the owner of the note, notified the Vermont Central Directors that he should sell the bonds, which, by the way, are of the 1856 issue. This morning one of the Finance Committee, acting as the Attorney of the Corporation, sent a written and formal demand to the broker for the delivery of the bonds, alleging that said bonds were the property of the Company. The broker, of course, refused to comply, whereupon legal proceedings were at once instituted against him, and his property attached to the amount of $4,000.

Quebec and Richmond Railroad.

The ceremony of breaking ground on the Quebec and Richmond railroad took place on the 7th inst. with much *eclat* on the opposite side of the St. Lawrence this afternoon. In addition to the presence of several members of the Administration, the town council, the directors, and many of the shareholders of the company, a very numerous party from the city and surrounding parishes were assembled.

Shortly after noon, the whole company, including several ladies arrived at the ground selected.

After an english and french address from the Hon. Mr. Caron, the Hon. Inspector General Hincks, in the absence of the Governor General, performed the ceremony of turning the first spadeful of earth. The Hon. gentleman then spoke from the platform for some time, alluding to the aid given by the Government to the construction of railroads, as certain to produce great and important results to the benefit of the public revenue, and to the advance of agricultural as well as commercial interests.

The Hon. Receiver General Tache then spoke in French, and was followed by the Hon. J. Rolph, commissioner of Crown Lands.

The whole of the invited guests and stockholders then adjourned to a substantial collation.

Illinois.

Aurora Extension and Beloit Branch Railroad.—During the greater part of the past week the directory of the Galena and Chicago Union railroad have been in session in this city, to consider and adopt measures with reference to a permanent arrangement between their road and the Aurora extension, and to deliberate and determine, if possible, on the action necessary to be taken in prosecuting the Beloit branch road. With the Aurora branch an arrangement was concluded, to be perpetual, as regards the use of the first thirty miles of the road, between Chicago and the Junction, for the running of the cars of the Aurora company.—The terms of the contract, we understand, preclude the latter from doing any ot the way business between Chicago and the Junction, while the business of the Galena and Chicago Union railroad will remain separate as heretofore. It is understood that the terms of the arrangement give complete satisfaction to the directory of the Aurora road, and are of such a nature as will stimulate its extension to its western terminus.

In regard to the Beloit branch, the directors did not arrive at any definite action, further than that it would carry out, in good faith, the terms of agreement. A committee was appointed to confer with the citizens along the line of the proposed track, and those interested in it, in order that a mutual understanding may be had as to the course to be pursued, that will most effectually subserve the interests of all parties. When this committee shall have accomplished its purposes, which we doubt not will be during the winter, we understand it to be the purpose of the company to prosecute the work as rapidly as circumstances will permit. —*Chicago Tribune.*

Illinois.

Chicago and Galena Railroad.—The Chicago and Galena railroad has been extended seventy-five miles west of Chicago, penetrating a region solely agricultural, and which scarcely had an inhabitant before 1835. When the building of this railroad was commenced, it was suppored that it would yield little or nothing to the stockholders, till after its completion to Galena. But the experiment of a dozen miles of finished road demonstrated that the calculations of the proprietors were erroneous, and every successive mile constructed, has made that demonstration more complete. When it was extended thirty-five miles west of Chicago it paid fourteen per cent. upon the cost, and the same income has been realized constantly as the road progressed to its present western termination, which it reached this month. Calculations for a certain amount of business between this time and the opening of navigation were made, and locomotives and cars were provided in accordance with these calculations, but it is ascertained that there is a great deal more business than the road can do, and that several more locomotives could find constant employment now, and through the winter season.—[*Springfield (Ill.) Register.*

Accidents on the Lakes.—Capt. G. W. Rounds, agent of the Northwestern Insurance company of Buffalo, has furnished the Advertiser of that city with a detailed statement of all the accidents which have occurred on the lakes during the past year.—From it we collate the following results:—

Total amount of property lost in 1851	$730,573
Total amount of lives lost	79
The amount of loss by steam vessels has been	347,325
Do do sail do	383,212
The proportion of loss on lake Ontario is	110,557
Do do do Erie	477,805
Do do do Huron	23,000
Do do do Michigan	79,875
Do do do Superior	39,300

Two hundred and sixty-three accidents are here recorded, thirty-four of which occurred in April, sixty-four in May, (forty-six on the first day,) twelve in June, nine in July, fifteen in August, thirty-four in September, thirty-three in October, fifty-one in November, and eleven in December.—Five steamers, (not including the Mayflower,) three propellers, and thirty-seven sail vessels have been totally lost.

	Loss of property.	Life.
1848	$420,512	55
1849	368,171	34
1850	558,826	395
1851	730,537	79
Total (4 years)	$2,088,046	563

Ohio.

The Steubenville Herald states that the survey from Cochocton to Mt. Vernon has just been completed and a route of easy grades and moderate curves found at a distance of 36 miles, connecting at Cochocton with the Steubenville road to Pittsburgh, on a line 25 miles shorter than by Wooster and Beaver.

The Toledo, Norwalk and Cleveland company now have more than one thousand hands employed on the line, the grading to be completed before April next.

A friend at North Fairfield writes us that the project of connecting the Mad river road with the Columbus and Cleveland, by a cross line from Republic to New London, is not abandoned. The exact distance is thirty-one and a half miles, and the grade lower and better than the Norwalk and Toledo road. The people at Republic are deeply interested in this connection, and think the construction of the line the only way of securing the travel to the Mad river road from and to Cincinnati. The line shortens the distance to Cleveland and passes through a fine agricultural country, and the flourishing villages of Greenfield, Fairfield, Fitchville and New London. The people along the line will make liberal subscriptions, and they desire to know what can be done to aid them.—*Cin. Enq.*

Georgia.

Central Railroad.—The following is a list of the directors of this road for the current year:—R. R. Cuyler, Jno. W. Anderson, A. Low, Thos. Purse, W. Crabtree, Jr., Jno. R. Wilder, Jno. B. Gallie, L. O. Reynolds, Jos. S. Fay.

Waynesboro' Railroad.—The following is a list of the directors of the Waynesboro' railroad:—A. R. Lawton, J. P. Scriven, John Stoddard, Wm. Duncan, R. A. Allen, of Savannah; J. C. Poythress, of Burke county, and J. Phinizy, of Augusta.

Alabama.

We understand that active operations have been commenced upon the line of the Girard and Mobile railroad.

Sandusky City and Indiana Railroad.

A meeting of the directors of this company took place on Friday last in this city. We have learned incidentally that the line of the road between this place and Tiffin was permanently located. From the surveys which have been made, it is found perfectly practicable to construct it in almost an "air line," the deviation being about half a mile, only. The line west of Tiffin is not yet located, but there is good reason to believe that it may be run directly west to the State line without any natural obstacle. The route, as we have understood, is parallel with 'Blanchard's Fork' of the Anglaize river and runs between the former stream and the heads of the Portage and the minor tributaries of the Maumee which run north, until the Anglaize is reached. To this point, it is said, there is not a single stream to be crossed, the route consisting principally of a sandy ridge with but a slight elevation, being one of the best in this State for the construction of a road.

The board directed the President, F. T. Barney, Esq., to prosecute the survey as soon as practicable, of the shortest and best route from Tiffin to the west line of State in the direction of Fort Wayne, and that he procure estimates of the cost of construction. The Executive committee, consisting of Messrs. Barney and Wetherell, were also directed to use all necessary means to secure an active prosecution and speedy completion of the road from this city to Fort Wayne.

We regard the construction of this road as of the greatest importance to the people along the line as well as vital to the interests of its terminus on the lake. It penetrates a section of country west of Tiffin, now wholly without railroad facilities, but capable of producing vast quantities of wheat, corn etc., whenever it can be admitted to a market.

The Register states, that the portion of this line between Sandusky and Tiffin has been placed under contract.

Chili.

The Copiapo Railroad is nearly finished, only two or three miles remaining incomplete. The distance between the two termini, Copiapo and Caldera, is 50 miles. Very large and substantial buildings have been erected as station and engine houses. A mole has also been built, 500 feet long, out into the harbor at Caldera, where the water is 30 feet deep. Philadelphia locomotives are used upon the road. The entire cost will be about $1.200,000.

Railroad Iron.

2000 Tons of Guest & Co. make (GL) weighing about 58 lbs per yard, to arrive at New York during April and May, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich St., New York.

Also for sale—

430	Tons Rails,	weighing	61 lbs.
475	"	"	53½ "
50	"	flat	2½x½.

To Contractors.

IN gross, will be received until the 25th day of January, 1852, proposals for the grading and entire construction of the Ohio and Indiana Railroad, extending from Crestline, the point on the Cleveland and Columbus Railroad where the Ohio and Pennsylvania railroad terminates, to Fort Wayne, Ind., 131 miles long.

The location, stock subscription, and releases, are in condition to warrant an early commencement and vigorous prosecution.

This road is the third link in the great chain of roads from Philadelphia to Chicago.

W. MERRIMAN, Pres't.

Bucyrus, Ohio, Dec. 25, 1851.

To Civil Engineers and Contractors.

THE advertiser, an Engineer recently from England, is desirous of an engagement, having been employed on some of the principal lines in that country and France. Satisfactory testimonials from parties in England and America. Address A. B., at the Railroad Journal office.

January 1, 1852. 1m*

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.

Winter Arrangement.

The Passenger Trains will run as follows until further notice:

TRAINS GOING EAST.

Leave LaPorte, 7·30 a.m., White Pigeon, 10·40 a.m., Adrian, 3·10 p.m.

Arrive at Toledo and Monroe, 5·45 p.m.

TRAINS GOING WEST.

Leave Monroe and Toledo, 8·15 a.m., Adrian, 11 a.m., White Pigeon, 4 p.m.

Arrive at LaPorte, 6·30 p.m.

E. P. WILLIAMS, Sup't.

Adrian, December 22, 1851.

Straughan, J. R.,
Ohio and Indiana Railroad, Bucyrus, Ohio.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING
OIL,
Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

American Lap Weld Iron Boiler Flues.

MANUFACTURED by the Reading Iron Tube and Boiler Flue Works, from 1¼ to 7 in. diameter, and in lengths to eighteen feet, made from the best Pennsylvania refined cold blast charcoal iron, and equal in finish to any imported. Also made to order a but welded flue with patent lap welded ends, and when preferred they will be finished with a screw and ferrule on the ends. All the above will be made of any thickness of iron ordered. Also, welded wrought iron Tubes for water, steam and gas. Extra heavy tubes made to order, for sale by our agent, A. B. Wood, 23 Platt street, New York, and Samuel Griffiths No. 15 North 7th street, Philadelphia, or at our works.

SEYFERT, McMANUS & CO.,
January 3d, 1852. Reading, Pa.

THE FIFTH EDITION OF
NEW YORK:
Past, Present and Future,
BY E. PORTER BELDEN, M. A.,

HAS been issued, by PRALL, LEWIS & Co.—We have made arrangements by which we have bound, and will continue to bind with each Edition of the above, the

AMERICAN ADVERTISER,
A Reference-Work for Purchasers,
Containing the Cards of Merchants and Manufacturers in every line of business. Price, including both of the works, 25 cents and upwards.

STURGES ON THE GAME OF DRAUGHTS,
Second American Edition. Price, in muslin; 75 cents—in paper 50 cents.

The Cheapest Almanac of the Season!
AMERICAN COMMERCIAL ALMANAC, 1852,
Containing, besides the Astronomical matter, numerous statistical details relative to the government, judiciary, population, resources and commerce of the Union, all the details of inland and foreign postage, and the *Constitution of the United States* in full, the latter of which alone usually sells for twice the price of the Almanac. Price 6¼ cents single, $1 per hundred, $35 per thousand.

PRALL, LEWIS & CO., Publishers,
76 Nassau street, N. Y.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

New England Car Spring Co.,

No. 104 Broadway, New York,

MANUFACTURERS OF

INDIA RUBBER CAR SPRINGS & HOSE,

Of F. M. Ray's improved form, and dealers in every description of Rubber Goods for Railway purposes.

All Goods manufactured by this company are warranted of the best materials, and the same composition which has estnblished the reputation of F. M. Ray's India-rubber Car Springs.

F. M. RAY, Agent.

Railroad Iron.

THE undersigned offer for sale 1000 tons Railroad Iron, (about 56 lbs. to the yard,) now at Brooklyn.

CHOUTEAU, MERLE & SANFORD,
Oct. 1, 1851. 51 New st.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

PREMIUM RAILROAD CAR SPRINGS,

AND OTHER

India-rubber Goods.

TWO Prizes were awarded me last month by the American Institute—one for *best Car Springs*, the other for *best Overshoes*. This proves the superiority of the Goods made by me.

HOSE and STEAM PACKING, and all other India rubber goods for Railroad purposes, on hand and for sale cheaper than any other house.

Car Springs, 50 cents per lb. for cash—of the best quality and of all sizes, (Fuller's patent.)

I now give notice that Fuller is the original and true inventor of the India-rubber Spring, and companies who use Springs made by other parties will eventually have to pay me damages. H. H. DAY,
23 Courtlandt st., New York.

Inventor and owner of 17 I. R. Patents, and the oldest Manufacturer of India-rubber in the U. S.

December 6, 1851.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Civil and Mining Engineers and Surveyors.

A YOUNG MAN having lately completed an engagement of six years with an eminent Civil and Mining Engineer in Scotland, is desirous of a situation in that capacity. Has had considerable experience in the mines of Scotland, and is in possession of all instruments necessary for land and mining surveying. Address A. S, care Mr. D. H. Arnot, 50 Wall St., N. Y.

Dec. 13th. 1m*

Railroad Iron.

2000 TONS of an approved pattern 59 to 60 lbs. per lineal yard, now manufactured in England, and ready for immediate shipment, from thence.

Also, 2,500 tons of different patters in port and expected to arrive within sixty days. For sale by

DAVIS, BROOKS & Co.
28 Beaver Street, New York.

CONTRACTS made for Railroad Iron at a specific price delivered in England, or at port in the United States.

TO FOUNDRYMEN, AND Contractors for Iron Castings.

THE Proprietor of the Rossie Furnace, St. Lawrence County, N. York, having lately erected at their works a Casting House 125x75, with suitable Cupolas, Cranes, etc., and a Machine Shop, furnished with a considerable stock of tools, and a water wheel of 30 horse power—the whole carried out in the most substantial manner—offers the use of these premises, in connection with the sale of Rossie Iron, to manufacturers and contractors for castings and machinery.

There are 2000 tons of hot and cold blast iron now at the works, any part of, or more than which, might be contracted for in connection with the above; and as liberal terms of credit would be extended to parties offering satisfactory security, it is supposed that the conditions contemplated may present no ordinary advantages to persons desirous of a large business on a limited capital.

It may be useful to add that the Cold Blast Iron made at these works is of a very superior quality for Car Wheels.

Rossie is 6 miles from the River St. Lawrence, and connected by a good Plank road all but 1 mile. For further particulars, apply to D. W. Baldwin, Agent, at the works, or at the office of the subscriber, Ogdensburg, St. Lawrence Co., N. Y.

G. PAIRSH.

December 20, 1851. 6t*

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

LOWMOOR IRON.

THE *LOWMOOR* IRON COMPANY having appointed WM. BAILEY LANG their sole agent in America and Canada, he is now prepared to receive and execute all orders for Railway Tire Bars, bent, welded, and blocked Railway Tires, Axles, Piston Rods, and Boiler Plates. Also, plain, angle, rivet and every other description of Lowmoor Iron.

All communications respecting the above are requested to be sent to Wm. Bailey Lang, at his Steel Warehouse, No. 9 Liberty Square, Boston, or to the Lowmoor Iron Works, Bradford, Yorkshire, England. 30th Sept., 1851.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Stone Masons.

THE NEW ALBANY AND SALEM RAILroad Company have about 10,000 c. yards of Abutment Masonry to let at private contract, to be completed by the 1st of July, 1852.

To contractors who can produce testimonials of character for ability as STONE MASONS, fair, remunerating prices will be given.

Early applicants, by securing the work now offered, will gain advantages over competitors for the erection of an additional 15,000 yards, to be let out early next spring, in bridging the streams between Bedford and Michigan City, via Bloomington, Gosport, Crawfordsville and Lafayette, (the most productive and healthy region in Indiana,) by the knowledge they will have acquired of the resources of the country.

Application may be made in person, or by letter addressd to the undersigned, at New Albany, Indiana. S. B. WILSON, Engineer.

Engineer's Office, New Albany, Sept. 29th, 1851.

To Chief Engineers, Directors of Railroads, Canals, etc.

A Civil Engineer and Surveyor, who has been professionally engaged under the British Government, East India Company, etc., is desirous of obtaining employment as an Assistant. No objection to the South or West. Address for one month to C. E. & S., American Railroad Journal office.

August 16, 1851.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Iron.

THE undersigned, Agents for British Manufacturers, continue to sell Railroad Iron of the best quality, and of any weight or pattern required; deliverable at any part of the United States or Canada.

They have now on hand, ready for delivery New York:

2,000 tons of an approved pattern, weighing about 60 lbs. to the yard.

WM. F. WELD & CO.,
42 Central Wharf, Boston.

To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address

J. B. GRAY, Philadelphia.

July 10, 1851. 4m

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

THE NEWCASTLE MANUFACTURING Co continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack Screws, Wrought Iron Work and Brass and Iron Castings, of all kinds connected with Steamboats. Railroads, etc.; Mill Gearing of every description; Cast Wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

Practical and Scientific Books

PUBLISHED BY

HENRY CAREY BAIRD,

SUCCESSOR TO E. L. CAREY, PHILADELPHIA.

For sale by Dewitt & Davenport, Tribune Buildings, New York, and Booksellers generally throughout the United States and Canada.

Now being published in Twelve Parts, price 25 cents each, the PRACTICAL MODEL CALCULATOR, for the Engineer, Machinist, Manufacturer of Engine work, Naval Architect, Miner and Millwright.—By Oliver Byrne, Compiler and Editor of the Dictionary of Machines, Mechanics, Engine Work and Engineering, and Author of various Mathematical and Mechanical works—illustrated by numerous Engravings; forming, when completed, one large volume, octavo, of nearly 600 pages.

It will contain such calculations as are met with and required in the Mechanical Arts, and establish models or standards to guide practical men. The tables that are introduced, many of which are new, will greatly economise labor, and render the every-day calculations of the *practical man* comprehensive and easy. From every single calculation given in this work other calculations are readily modeled, so that each may be considered the head of a numerous family of practical results.

The examples selected will be found appropriate, and in all cases taken from the actual practice of the present time. Every rule has been tested by the unerring results of mathematical research, and confirmed by experiment, when such was necessary.

The Practical Model Calculator, will be found to fill a vacancy in the library of the practical working man long considered a requirement. It will be found to excel all other works of a similar nature, from the great extent of its range, the exemplary nature of its well selected examples, and from the easy, simple and systematic manner in which the model calculations are established.

Parts 1, 2 and 3 now ready.

American Miller and Millwright's Assistant, By W. C. Hughes. 12mo., illustrated...$1 00
Byrne's Practical Model Calculator. In 12 parts, each..... 25
Byrne's Treatise on the American Steam Engine. 8vo, [in press].....
Booth's Encyclopedia of Chemistry. In one vol. royal 8vo, 974 pages, sheep..... 5 00
Builders' Companion. By A. C. Smeaton.—Seventy illustrations, 12mo., cloth..... 1 00
Cotton Spinner and Manufacturers' Companion. By Scott and Byrne. In one vol. 8vo., cloth, with large working drawings..... 3 50
Cabinet Maker and Upholsterer's Companion. 12mo., cloth..... 75
Dyer and Color Maker's Companion. 12mo., cloth..... 75
Elwood's Grain Tables. A new edition, in one vol. 12mo., cloth..... 1 00
Encyclopedia of Useful Knowledge. 8vo., illustrated..... 5 00
Fisher's Photogenic Manipulation. 16mo., cloth..... 62
Gregory's Mathematics for Practical Men. Illustrated, 8vo., cloth..... 1 50
Household Surgery, or Hints on Emergencies. By J. F. South, M.D. 12mo., cloth..... 1 25
Leslie's Complete Cookery. 41st edition, 12 mo., sheep..... 1 00
Morfit's Perfumery: its Use and Manufacture. 12mo., cloth..... 1 00
Morfit's Treatise on Tanning, Currying, and Leather Dressing in General. In one vol. large 8vo., [in press].....
Norris' Hand-book for Locomotive Engineers. By Septimus Norris. 12mo., cloth..... 1 50
Neill's Fruit, Flower and Kitchen Garden. Illustrated by numerous plates, 12mo. cloth. 1 25
Overman on the Manufacture of Iron and Steel. Illustrated, 8vo., cloth, new edition. 5 00
Practical Metal Workers' Assistant. By C. Holtzappfel, with numerous illustrations, 8vo., cloth..... 4 00
Painter, Gilder, and Varnishers' Companion. New edition, 12mo., cloth..... 75
Randall's Sheep Husbandry in the South. Illustrated, 8vo., cloth..... 1 25
Steam for the Million. 8vo., paper..... 37

Best Cast Steel Axles & Tires,

(A NEW ARTICLE,)

For Railroad Carriages and Locomotives.

THE quality of this Steel is sufficiently attested in the announcement that it has carried off the first prizes awarded at the World's competition of 1851, in London. The axles are in general use on the Continent, and are now offered in competition with any other that can be produced; and to be tested in any way that may be desired by the Engineers of the United States, either by impact or by torsion. This Steel is manufactured by Frieo Krupp, Esq., of Essen, in Renish Prussia, represented in the United States by

THOS. PROSSER & SON,
28 Platt st., New York.

November 1.

To Railroad and Canal Companies, Contractors, etc.

THE Undersigned wishes to direct the attention of Chief Engineers and Contractors to the facilities he possesses for supplying them with workmen laborers, etc. of any description, and also to remind them that he forwards such men to whatever destination they may be required.

Companies or Contractors desirous of receiving peaceable and industrous men, will be promptly supplied at the shortest possible notice.

C. B. RICHARDS,
No. 85 Greenwich Street, New York.

REFERENCES:—Chas. H. Webb, Esq., Supt. of the St. George's and British Protective Society, New York; Messrs. Harris and Leech, Philadelphia, Wm. P. Malburn, Esq., Albany.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Trautwine on R. R. Curves.

By JOHN C. TRAUTWINE, Civil Engineer,
Philadelphia, Pa.

JUST published, accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by Wm. Hamilton, Actuary of the Franklin Institute, Philadelphia. Price $1.

Also, "*Trautwine's Method of Calculating Excavation and Embankment.*"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidity, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, $1. For sale by Wm. Hamilton.

June 28, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

Bridges & Brother,

DEALERS IN

RAILROAD AND CAR FINDINGS,

64 Courtlandt street, New York.

Having established a general Depot for the sale of articles used in the construction of Railroads, Locomotive Engines and Railroad Cars, we would invite your attention to our establishment. We have already in store a good assortment of CAR FINDINGS and other articles used in the trade, and feel justified in saying, that should you desire anything in our line, we can supply on terms perfectly satisfactory, and in the event of your desiring to order, you may feel assured that your terms will be as good as though you were here to make your own purchases.

Among our goods may be found Railroad Car Wheels, Axles, Jaws and Boxes, Nuts and Washers, Bolts, Brass Seat Hooks and Rivets, Window and Blind Springs, Lifters and Catchers, Door Locks, Knobs and Butts, Ventilators and Rings, Car Lamps, Coach and Wood Screws, Jack and Bed Screws and Babbitt's Metal; also Plushes, Danask, Enameled Head Linings, Cotton Duck for Top Covering in width sufficient without seams, Curled Hair and all other articles appertaining to cars.

Also a new and valuable CAR DOOR LOCK, well adapted to the Sliding Door. This is decidedly the best yet introduced.

LOCOMOTIVE ENGINE LANTERNS, the best article made in the country. Whistles, Gauge and Oil Cocks, Hemp Packing, American, Russian and Italian. We are also agents for Lightner's Patent Journal Box for Car Axles, that invaluable invention, for the economical use and preservation of Car Journals.

Coach VARNISH and Japan of the best quality.

We would also offer our services for the purchase as well as for the sale of goods on commission.—Both members of our firm have had the experience of many years in the manufacture of Railroad Cars, and our Senior was a member of the well known house of DAVENPORT & BRIDGES, Car Manufacturers, Cambridgeport, Mass. With our knowledge of matters pertaining to Railroads, we feel quite confident in giving satisfaction to both buyer and seller, and hope that through assiduity and attention to any business entrusted to our care we shall merit a continuance of confidence and patronage.

BRIDGES & BROTHER.

July 22, 1851.

To Railroad Car Builders and Manufacturers Generally.

THE Cincinnati, Hamilton and Dayton Railroad Company, at Cincinnati, have ten acres of land adjoining the City and near the Ohio River—their Road running through its center—which they will lease for a term of years, or perpetually, for the establishment of a Car Manufactory, or for any purpose connected with the furnishing of Machinery for Railroads.

The Company have at their Depot grounds, at Cumminsville, about five miles north of the city, six acres of land, eligibly situated for a variety of Manufacturing purposes, which they offer for lease on advantageous terms.

They have, also, on the line of their Road, in the town of Hamilton, 25 miles north of the city, about forty acres of land, situated on the Hamilton Hydraulic Works, where a Water Power can be displayed advantageously, and the same had on favorable terms. This property is also eligibly situated for Manufacturing purposes, and will be *sold or leased* on accommodating terms.

The above described property is admirably situated for the successful prosecution of the objects referred to, connected as the Road passing through it is with other Railroads built and building into Western and Northern Indiana, and Northern and Eastern Ohio; and the first described land lying near the line of the Cincinnati and St. Louis Railroad.

To skilful and enterprizing Car Builders, possessing sufficient capital for the prosecution of that business, the inducements are peculiarly flattering.

For further particulars address, at Cincinnati,

S. S. L'HOMMEDIEU,
Dec. 20d. Pres't C., H. and D. R. R.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 4] SATURDAY, JANUARY 24, 1852. [WHOLE No. 823. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Milwaukee and Mississippi Railroad.....49
Pacific Railroad.....50
Ohio and Pennsylvania Railroad.....50
Cincinnati and St. Louis Railroad.....51
Statistics of Massachusetts Railroads.....52
Public Domain of Texas.....53
Commerce of Chicago.....53
Finances of Maryland.....54
Albany and Binghamton Railroad.....54
Railroads in Virginia.....54
Nashville and Memphis Railroad.....54
Influence of Railroads.....55
Finances of Massachusetts.....55
Cincinnati and Hillsboro' Railroad.....55
Sunbury and Erie Railroad.....55
Northwestern Railroad.....55
Indianapolis and Bellefontaine Railroad.....55
Stock and Money Market.....56
Springfield and Mansfield Railroad.....58
Grants of Public Lands for Railroads.....58
Routes to Lake Erie.....59
Cleveland and Pittsburg Railroad.....59
Statistics of English Railroads.....60

American Railroad Journal.

Saturday, January 24, 1852.

Milwaukee and Mississippi Railroad.

This enterprise is beginning to attract, as it deservedly ought, considerable public attention. It might very properly have been called the "*Wisconsin Central Railroad*," since it starts from Milwaukee, the commercial metropolis of the State, now numbering over twenty thousand inhabitants, and taking a western direction, passes through the fertile and populous valleys of the Fox and Rock rivers, to Madison, the capital of the State. From this point it will pass directly to the Wisconsin river, a distance of some twenty-five miles, where steamboat navigation is met, and consequent commerce of the upper Mississippi country. Whoever will take the trouble to look at the map of the great northwest, will observe a peculiar feature in the course of the Wisconsin river, which highly favors the interests of the company. Its course is from the north until it gets nearly abreast of Madison, when it forms an almost acute angle, and makes its course westward, with a slight southern inclination. The company, from its point of junction with the Wisconsin river, can consult its own interests, as to whether it will continue its route along the valley of the river, or bear a more southerly direction towards the Illinois State-line, thereby penetrating and passing through the very heart of the Wisconsin lead mines. The whole line of the road when completed will be about two hundred miles in length, reaching from the great highway of the lakes to the Father of Waters. Thus, it will be seen, that the enterprise is one of no small magnitude, either as regards its length, or the extent of influence it is destined to have upon the commerce of the country.

But as this is a new enterprise, we are called upon, in justice both to the company and to the public, to go a little more into detail than we otherwise should. And since the company are now offering their securities upon the market, (first mortgage ten year bonds, ten per cent interest, payable semi-annually,) and many of our readers are in the habit of paying some deference to our views, we propose to propound and answer certain specific inquiries, to wit:

1st. Has the company a good charter?

We answer, after a careful perusal, it has.—Among its leading points are—perpetuity as to time—ample means for acquiring right of way and depot grounds—the regulation of tolls and charges left entirely with the company—ample protection to their property—the penalty of placing obstructions upon the road, and the penalty of murder, if loss of life occurs by reason of such obstructions, and full legal authority for borrowing money for the construction of the work, at such "rate of interest as may be agreed upon by and between said company and any person or party of whom such money may be obtained."

2d. Has the company been properly organised, and is it in good hands?

The company was organised with the view of *building* the road, and took the doctrine at the start that the people of Wisconsin, if they would have a railroad, *must first put their shoulder to the wheel.*—As a consequence, a stock subscription of about one million of dollars was taken up, between Milwaukee and Madison, distributed among about one thousand citizens along the route, embracing the most enterprising merchants, mechanics and farmers in the community. No subscription at first was allowed to exceed $5,000, so that by this process, the stock became extensively distributed among the people, and this fact, in itself, gives assurance that the company was properly and well organized. As to the latter part of the inquiry, it cannot perhaps better be answered than by an insertion of an extract from the report of Stephen Spencer, Esq., of Hartford, Ct., who was employed by the President of the Co'y to visit Wisconsin, in June last, and investigate, personally, into the affairs of the company. Mr. Spencer says in a public communication to the President after his return —"I have had an introduction to all the directors of your company, with but one exception. I believe them to be men of strict integrity and moral worth, and fully competent to manage the important trust committed to them. I arrived at this conclusion not only from personal intercourse, but from inquiries of friends at Milwaukee, not stockholders, and some of whom have been long known to me." It may be proper here to add that the capabilities of Mr. Spencer to make the investigation were publicly certified to by W. H. Imlay, George Beach, John L. Bunce, S. Belknap, C. H. Brainard, H. A. Perkins, James Goodwin, W. S. Hooker, D. F. Robinson, P. W. Ellsworth, and Seth Terry, old and well-known citizens of Hartford, Connecticut.

3d. How much of the road is built; and at what cost per mile; and of what quality?

The company have just now opened seventeen miles, the fruit of the year's labor just closed.—Which, added to that made the year previous, twenty and a half miles, makes in all about thirty-eight miles. The cost of the road with equipments falls short of thirteen thousand dollars per mile, as per engineer's report. As to the quality of the road now built, we again quote from Mr. Spencer's report:—"I consider the work well done, and the road in as good condition as any eastern railroad I have seen which has not been longer in operation than this, being laid with heavy T rail, and, as far as I can judge, it has been built with strict economy."

4th. What is the description of the country thro' which the road runs; also, the character and extent of population, whose traffic is likely to fall upon the road?

As to the first point in the last inquiry, to wit: the description of the country traversed by this road, it is perhaps needless to say anything, since so much has been already said in public and private as to that portion of Wisconsin, occupied by the route of this road, all tending to show that it is a country abounding in elements of great natural

wealth—good climate—rich soil—mineral productions—happy diversification of prairie and timber—abounding in streams of water and beautiful lakes.

Its population has been chiefly drawn from New England and New York, some from Ohio, Michigan and Illinois, and a large population from the north of Europe. The last census shows a population of near two hundred thousand inhabitants along the route of the road. What then may not be expected of the commerce of such a country occupied by such a population?

5th. What have been the earnings of the road on that part built last year?

We answer this inquiry by quoting from the money article of the New York Tribune of the 8th inst. The road was opened as far as Waukesha, twenty and a half miles, on the 25th of February last. To this point it cost about $240,000. Its net earnings over and above expenses upon this twenty miles are as follows:—

March	$719 26
April	840 93
May	1,333 24
June	1,663 96
July	2,226 76
August	2,210 00
September	2,440 00
October	2,529 02
November	2,451 00
	$16,414 17

These figures show that upward of $2,000 per month of net earnings were realized from the opening of the road, and should the remaining months of the year show as good earnings, it will appear that a dividend equal to ten per cent has been realized upon the cost of the road to Waukesha."

We have thus briefly gone over those points which naturally arise in the investigation of a question like the one under consideration.

Upon the whole, we cordially commend this enterprise to the consideration and confidence of the community. Before closing, we would simply add that the company have lately entered into contract with Messrs. J. & S. Chamberlain, late contractors upon the Cleveland and Pittsburg road, for the extension of the road to Madison, the capital of the State, to be done in two years.

Pacific Railroad in Missouri.

The Pacific railroad company, at St. Louis, have recently adopted a new and improved charter, and on the 27th December elected a new board of directors, as follows:

James H. Lucas,	Thomas Allen,
Hudson E. Bridge,	Luther M. Kennett,
James E. Yeatman,	John C. Rust,
Edward Walsh,	Daniel D. Page.
Louis A. Labeaume,	Joseph Charless,
James Harrison,	Joshua B. Brant,

George Collier.

At a meeting of the new board, on the 29th ult., Thomas Allen was re-elected President.

The wealth of the board of directors is a pretty good guaranty of the completion of the work, as well as an indication of the importance attached to it by those who have a deep interest in St Louis. We are informed that six of the above names appear on the city tax list to be assessed with city property as follows:—

James H. Lucas	$452,000
George Collier	441,000
Dan'l. D. Page	427,500
Thomas Allen,	374,000
J. B. Brant	312,000
Edward Walsh	195,000

The other members are set down at from $60,000 to $100,000 each. It is quite probable that the above named individuals are worth twice the amounts stated.

The first 40 miles of this road are under contract and will probably be opened towards the close of this year. The means of the company consist of about $1,560,000 subscribed capital, and $2,000,000 of State credit. It is calculated that their subscriptions will increase as the work progresses westward. The State of Missouri is not in debt, and her bonds ought to command a good price.—Probably the next division, to be put under contract next year, may reach to the Osage river, or nearly half way across the State. The effect of the work upon the sales of the public lands is remarkable. From statements published by the public receivers, it is estimated that 100,0000 acres have been entered on the line of this road since the company have been engaged in surveying, ect., although no locations of line beyond the first 40 miles have been actually made.

We observe that bills have been introduced in Congress proposing to grant the right of way and a portion of the public lands to the State of Missouri to aid the construction of this road, and also the line projected from Hannibal to St. Joseph, in the same State. The Pacific road, from St. Louis to Kansas, will be about 300 miles long. The other line about 200 miles. Both of these lines are important, and will be useful to the whole country. It seems to us there are many sufficient reasons why Congress should make these grants, which we do not propose to enter into now. We will only add the expression of our hope that the lands may be granted during the present session.

Ohio and Pennsylvania Railroad.

Report to the Stockholders of the Ohio and Pennsylvania Railroad Company.

Pittsburg, Jan. 8, 1852.

When the last annual report of the board of directors was submitted to the stockholders, on the 9th day of January, 1851, the laying of the superstructure of the railroad was not begun.

The report stated the inadequacy of the means at the command of the board to the completion of the work, and urged the importance of additional stock subscriptions to enable the directors to prosecute it with energy. This appeal did not meet with the success for which the directors had hoped, and which the importance of the enterprise deserved; and the labors and anxieties of the board have been greatly increased by this cause. So far as the work has been completed, its cost has agreed very nearly with the original estimate of the Chief Engineer, but the means of the company have never permitted the simultaneous and vigorous prosecution of the whole line. Still less have they allowed of those large advances to contractors, and heavy additions to the cost for the sake of hurrying the work, which are so common in the history of railroads. To make a railroad as far as possible, at the lowest cost in the shortest time, and with inadequate means, is a problem which may well tax the best energies of whoever may undertake its solution.

In surrendering their trust to the stockholders at the close of the year for which they were elected, the board do so with the belief that they have done the best they could with the means in their hands, and that they have shunned no labor, and shrunk from no responsibility, which their duty to the whole body of the stock and bond holders of the company called them to meet.

On the 30th of July last, twenty-eight miles of the railroad, extending through Rochester to New Brighton were opened for use, and this was accomplished in fifteen months from the letting of the first contracts between Pittsburg and Beaver. The work was delayed somewhat by the large amount of masonry required to cross many small streams with stone arches; by numerous questions of the most vexatious character involved in the right of way; and by the failure of the contractors who had bound themselves to furnish the cross-ties.—Notwithstanding these difficulties the road was opened in the midst of the hot season, and while the Ohio river was low; and the best proof of its utility is the fact that in two months it carried 34,700 passengers; and the net receipts of this broken link were at the rate of about eight per cent per annum on the cost of the road in use. This part of the line is graded and bridged for a double track, with a single track and turnouts laid in a most substantial manner; and now that the track is gravelled, the twenty-five miles of the railroad parallel with the Ohio river are readily run over by the express train in an hour, and have been run in thirty-six minutes.

The plan of superstructure adopted by the Chief Engineer has fully met the expectations of the board. The track is smooth, even and firm; pleasant to ride upon, and easy on the machinery. The rails weigh sixty pounds per yard. They were manufactured by the Brady's Bend Iron Company, and by Bailey, Brothers & Co. Their quality sustains the reputation of those well known manufacturers. The wrought iron chairs and spikes, made by Corning & Winslow, are excellent.

On the 23d of October the first train passed thro' the great cut at Clark's summit 36 miles from Pittsburg. By this cut the passage of the river hills is accomplished. It is nearly half a mile long, seventy-four feet deep at the summit, and contains more than one hundred thousand cubic yards of excavation principally rock. It has been made wide enough for a double track.

The only large stream passed by the Ohio and Pennsylvania railroad, throughout its whole length, is the Big Beaver river; which is crossed at New Brighton by a very substantial Burr bridge, 700 feet long and 50 feet high, built upon a rock foundation, and having the track upon the roof or deck of the bridge. The rise overcome by the railroad from the bridge to the summit is 300 feet in eight miles. The passage of the Big Beaver and that of the river hills are accomplished more advantageously on the route adopted, than they could have been on any other of the numerous lines examined.

On the 19th of November, the first train ran to Enon Valley, 44 miles from Pittsburg. In the short time that has since elapsed, this station has been found to be one of the most important on the whole road. It is at the northern bend of the line, in the valley of the Little Beaver, and it is rapidly becoming a point of attraction for the trade and travel of a wide scope of country, both populous and productive. It appears to be profitable that both the Pittsburg and Erie, and the Cleveland and Mahoning railroads will come in as feeder lines at or near this point. Of the *sixteen* projected railroads intended to connect with our main trunk or "backbone" line, the two just spoken of are among the chief.

On the 8th day of December, one month ago, the first train crossed the State-line, and ran to Palestine, Columbiana county, Ohio, 49 miles from Pittsburg. From the summit to Palestine, passing near Darlington, the line traverses a region abounding in bituminous and cannel coal of excellent quality, and individuals are making efforts to construct short branch roads to the main trunk.

On the 27th of November, thirteen miles of the road between Salem and Alliance were opened for use; and on the 3d of the present month the cars ran to Columbiana from Pittsburg, reducing the staging between Pittsburg and the intersection with the Cleveland railroad, at Alliance, to ten miles.

It has required great efforts to accomplish these successive openings at the periods indicated. It has been done in the winter season, and during weather of unusual severity. The persons employed upon the work have exposed themselves both day and night to accomplish the object, and they have pushed it forward with cheerful earnestness, in spite of snow and rain, and of severe frost, even when the temperature was below zero. To the engineers of the company, and to Messrs. Bailey, Hayden & Co., the contractors for laying the track, and their excellent body of skilled workmen,

the board feel much indebted for what has been accomplished.

At noon, on Tuesday, the 6th day of January, 1852, the parties laying the track in the two directions met at a point sixty-one miles from Pittsburg, and closed the gap. A continuous railroad communication from Pittsburg to Alliance, 82 miles, was thus consummated; Pittsburg became connected by an unbroken chain of first class railroads with Cleveland, and also with Columbus and Cincinnati. The passengers and express freight from Cleveland were brought through to Pittsburg on the line the same evening. There has thus been accomplished, in two years and a half from the commencement of the work, a first rate railroad connection between the public works of Ohio and those of Pennsylvania. It is the first railroad completed between the great western State of Ohio, and the older States, which have so long been striving to reach her from the east. Although not the first connection to be begun, it is the first to be accomplished, and the board of directors congratulate the stockholders on this auspicious event; the honor of which belongs to the Ohio and Pennsylvania railroad company, and which can never be wrested from it. The board consider the location of the road to be a most fortunate one, and they believe that before long none will question this fact.

The board desire to express their strong sense of the importance of the services of Solomon W. Roberts, Esq., the chief engineer, who has devoted himself to the enterprise, from the commencement of the surveys until the present time. His professional knowledge, acquired by long experience as a civil engineer, in the construction and management of public works, has been at all times at the service of the company, whenever desired by the board. Final settlements have been made with the contractors on the finished work generally, and in every case without litigation.

The road being now open to Alliance, the work west of Alliance can be pushed more rapidly than heretofore, and will be as fast as the means of the company will permit. Between Alliance and Massillon, twenty-six miles, a considerable portion of the track is already laid. The board are pressing forward the work, and hope that the line to Canton and Massillon will be opened for use in about a month. Between Massillon and Wooster, twenty-five miles, the grading and bridging are nearly completed, a large part of the timber is delivered, the railroad iron is procured, and it is intended to lay the track early in the spring.

From Wooster, by Londonville and Mansfield to the point of intersection with the Cleveland, Columbus and Cincinnati railroad, a distance of fifty-three miles, the grading and bridging are under contract and in progress. Arrangements have been made for timber, and the board hope that they soon will be for the requisite railroad iron. If an ample supply of funds can be provided, the whole road can be brought into use in twelve months from the present time.

The time of the members of the board, and of the officers of the company has been so much taken up by the arduous duty of accomplishing the connection with Alliance, which was opened day before yesterday, that they cannot at this time do justice, in this report, to the great and complicated subject of the numerous railroads which are intended to connect with the Ohio and Pennsylvania railroad. They are about sixteen in number, and most of them of great importance. Feeling an interest in all these works, the board have endeavored to cultivate friendly relations with them all. The Ohio and Indiana the Bellefontaine and Indiana, and the Springfield and Mansfield (now called the Cincinnati and Pittsburg) railroads are among the most important of these great works, which will hereafter add greatly to the profitableness of our road.

The subject of the ultimate eastern terminus of the road, and the point and mode of its connection with the Pennsylvania railroad, is one in which much interest is felt by the stockholders residing in Ohio, as well as those in Pennsylvania. The company is working under an Ohio charter, recognized by a law of Pennsylvania, and about one-half of the stock is held in each State. As soon as ten miles of the road were completed and brought into use, the charter became perpetual, and no limit of time is fixed by the law for the completion of the remainder of the road. The board are, however, anxious to see the whole road finished as rapidly as the means can be provided. In accordance with the terms and intention of the law, they wish to see the best connection made "with the Pennsylvania railroad, with the consent of the Pennsylvania railroad company," at Pittsburg. Although the board have had no funds in their hands, which were not imperatively needed for purposes more immediately pressing, they have ever lost sight of this subject; and from some negotiations which they have had with the Pennsylvania railroad company, they hope that that company will aid in making such a connection in the most judicious manner.

The board have directed the treasurer to compute and pay interest in stock to those stockholders who are entitled to receive the same under the provisions of the charter.

Negotiations are pending for the erection of a telegraph line along the railroad, the necessity for which is already beginning to be felt.

Seven locomotive engines are at work upon the road, and seven more have been contracted for to be delivered in the spring. Several of the engines are necessarily employed in the transportation of materials and gravel for the track.

The company have twelve passenger cars, four baggage cars, and sixty freight and platform cars, each of which has eight wheels. The number of freight cars will soon be largely increased. A train of gravel cars is at work upon the road, and another must soon be provided for the use of the western division.

The number of passengers carried, from the opening of the first portion of the road to the close of the calender year, was 56,206. Until very recently, only 28 miles of the road were in use, and the freight business is in its infancy. The receipts from passengers have been $30,074 59, and from freight, $2,268 53, making $32,343 12. The expenses have been $14,258 82, and the net receipts $18,084 30. The daily receipts are now rapidly increasing.

It is recommended to the Stockholders to adopt a by-law changing the day of their annual meeting and election from the second to the fourth Thursday in January, in order to give to the officers of the company sufficient time, after the close of the calender year, to post the books and include all the accounts connected with the transportation department.

The estimated cost of the road from Pittsburg to Massillon, 108 miles, with equipments for one year, is $2,085,000, as per the last annual report. From Pittsburg to Crestline, 186 miles, the estimated cost is $3,370,000. The board believe that, at cash rates, the actual cost will vary very little from these estimates.

So far as the work has been completed, its substantial character has elicited general commendation. Mr. Edward Warner, the resident engineer of the eastern division from Pittsburg to Alliance, and Mr. J. R. Straughan, the resident engineer of the western division from Alliance to Crestline, deserve great praise for the manner in which they have performed their highly important duties, under the supervision of the chief-engineer. The members of the engineer corps, in general, have done their duty well.

At the request of the board, the chief engineer has undertaken the general superintendence of the transportation department. It is believed that the regularity with which the road has thus far been worked, will compare favorably with the working of any new road in the country.

It is the desire of the board that none but sober, industrious, competent, and courteous men should be employed in any department of the company's service, and that strict discipline and good order should at all times be enforced. They believe that the road, if well managed, will become very profitable, and they wish to seee it made a model road in all respects.

In conclusion, the board desire to express their concurrence in a suggestion made in the recent annual report of the Little Miami railroad company, of "frequent and frank correspondence between those who manage and direct the leading lines of conveyance for passengers, and of a conciliating spirit, by which minor and local considerations shall be compromised for the good of the general system, and the advantages of the public." All of which is submitted by order of the directors.

WM. ROBINSON, Jr., Pres't.

The Cincinnati and St. Louis Railway, Contract for its Construction.

At a recent meeting of the Board of directors of the above company, the loan of $600,000 from the city of Cincinnati was formally accepted by a unanimous vote of the directors.

We have, we are happy to say, the most reliable authority for stating that:—Thus far, since the change in the policy and plans of the company, it has been thought inexpedient to make any announcement to the public of expectations which might not be realized. The action of the city council, on the 29th ult., and the subsequent acceptance of the loan by the board, removes the last obstacle in the way of the final perfection of the contract, with H. C. Seymour & Co., for the building, furnishing and equipping the entire line to St. Louis.

As early as the early part of August last, Prof. Mitchel, the present consulting engineer and commissioner, was authorised to open negotiations with eastern capitalists, having in view the construction of the road by one or more powerful companies. After many interviews with parties interested in railroad contracts, and with capitalists of New York, on the 22d of October last, Mr. Mitchel, received a proposition from H. C. Seymour and associates, [among whom are named several wealthy gentlemen of New York city,] offering to build the entire road from Cincinnati to St. Louis, and equip the same, for the sum of nine millions of dollars.

For this sum, the contractors proposed to build a first class road, with heavy T rail, and with masonry equal in all respects to that for like work on the Hudson River railroad. The bridges are to be built on an improved plan, specified in the proposition. They proposed to build all the depots, water-stations, station-houses, turn-tables, etc., and furnish an equipment of forty locomotives, forty passenger cars, five hundred freight cars, etc., etc.

They further proposed to finish the entire line in five years to St. Louis, while they express the intention of finishing the section to the Jeffersonville and Columbus railroad in three years, or less.—Also the section from St. Louis to Vincennes in the same period.

This proposition was laid before the board of directors of the eastern division, early in November, and after a full discussion, was accepted by a unanimous vote of the directors. The general outlines of the proposition were in like manner submitted by telegraph to the executive committee of the St. Louis board. The proposition was approved, and the two boards united in delegating to Prof. Mitchel, their financial commissioner, and Mr. Jas. C. Hall, a member of the executive committee of the eastern division, full and perfect powers to proceed to New York and close a contract on the general basis of the proposition which has been accepted.

On the 22d November last the contract was signed in the city of New York by the commissioners on the part of the two companies, and by H. C. Seymour & Co., as contractors. After as little delay as possible, this contract, drawn out in due form, was submitted to the board of directors of the eastern division, and after full and critical examination, was ratified and approved by a unanimous vote of the board.

The contract forbids the company to mortgage to the city any part of the road, to secure the loan of two hundred thousand dollars. It therefore became necessary to memorialize the council, and ask that body so to change their required security, as to render it possible for the company to receive the benefit of this important loan.

After the presentation of the memorial, and before the final action of the council, the contract was submitted to the St. Louis board, and, after many hours of patient examination, article by article, it was referred to a committee to report its important outlines, and any modifications, or explanations, should such be deemed necessary. The report of the committee recommended the ratification of the contract, with some unimportant modifications and

explanations, acceptable to the contractors. And the board confirmed the contract by a vote entirely affirmative, with one exception. This dissenting director then resigned, and another being elected, the board are now unanimous in their ratification of the contract. The city council were the last to act on the contract, which they have affirmed, indirectly, by their action on the evening of Monday, the 28th December. The contract requires the companies to pay the contractors the sum of nine millions of dollars, in the manner following, viz: Three and a half millions in cash, two and three fourths millions in their capital stock, and two and three fourths millions in the mortgage bond of the companies. Of the entire amount required to be paid under the contract, all is now provided, with the exception of one and a half millions. While it is confidently believed by the companies that this amount can be really obtained in stock in this city, in Indiana, Illinois, and St. Louis, should any set of circumstances occur, such as should render it impossible to raise the entire sum of one and a half millions from stock, the companies have reserved in the contract (in such an emergency) the right to issue one million of second mortgage bonds, from which, no doubt, they will be enabled to comply with the contract, and ensure the speedy completion of the road.

The charter at Illinois, which requires the company to commence the construction of the road on or before the 12th of February, 1852, will render it necessary to bestow exclusive attention on that end of the line for the next thirty days.

So soon as the contractors are at work in Illinois, parties will at once be organized to prepare for constructing the line from this city westward, and the work will be pushed forward with the utmost rapidity consistent with the best interests of the parties.

There seems now no reason why we may not anticipate an early and successful completion of this great work. A road whose equal in importance it will be difficult to match in any part of the United States. A road uniting the great local cities of the West. A road which must at one terminus, receive the contribuitons of trade and travel of all the great thoroughfares from the eastern seaboard, while at the other it becomes the recipient of the contributions of the railways leading south, and of all the mighty rivers of the West and South.—*Cin. Gaz.*

Ohio and Pennsylvania Railroad open to Alliance.

The connection with Alliance was made yesterday, and the passengers were brought through to Pittsburgh in a continuous line of railroad. The express car, which left Cleveland at 8 A. M., was here at 8 P. M., without the freight which it carried having been disturbed.

Thus has this great work, so important to this city, been accomplished. Pittsburg is now in railroad communication with Cleveland, Cincinnati, and all the net of railroads in Ohio. The first rail was laid last May, and now we have 81 miles finished, and 27 miles more in a state of great forwardness. This great feat has not been accomplished without immense exertion, and untiring perseverance on the part of the directors and officers of the company. The president, Gen. Robinson, and the chief engineer, S. W. Roberts, Esq., have devoted to the work no ordinary skill and energy, and seldom are men in their private affairs as indefatigable as these gentlemen have been in pushing forward this work, and in overcoming the almost insurmountable difficulties they have had to contend with. Among the directors, who have all served the company faithfully, it is but just to mention the names of Mr. Lorenz, of Pittsburg, and Mr. Street, of Salem, who have given nearly their whole time to the service of the company. Mr. Lynch, of Canton, and Mr. Larwill, of Wooster, have also watched over the work in their respective districts, with faithfulness and skill.

We congratulate the citizens of Pittsburg on this auspicious event. We have now the very best means of communication with Ohio, and we have no doubt, that while the stockholders will reap handsome dividends, the business men of our city will secure a great increase of profitable business. —*Pitts. Gaz.*

Massachusetts Railroads.

A Statement of the standing of Railroad Companies in Massachusetts January 1st, 1852, carefully compiled from the original reports, as made to the Legislature.

ROADS.	Capital.	Capital paid in.	Cost.	Length.	Length of double track.	Length of branches.	Speed of passenger trains per hour.	Speed of frg't trains per h'r.	Earnings.	Expense of working.	Net earnings.	Dividends.	Debt.	Surplus.	Casualties. Fatal.	Casualties. Not fatal.
Boston and Lowell	1,630,000 00	1,830,000 00	1,945,646 68	25 77	25 77	1 87	25	12	409,152 88	268,029 67	141,123 21	146,400 00	41,090 00	156,712 99	2	2
Boston and Maine	4,155,700	4,064,299 52	4,090,452 48	74 26	27 79	8 79	24	11	633,095 15	305,068 40	328,026 75	290,899 00	150,000 00	85,032 67	13	...
Boston and Providence	3,160,000	3,160,000 00	2,840,442 55	41	15 75	12	30	14	377,396 57	177,776 17	199,620 40	94,800 00	287,000 00	...	7	1
Boston and Worcester	4,500,000	4,500,000 00	4,862,748 45	44 58	44	24	25	11	743,922 60	414,109 27	329,813 33	315,000 00	560,657 08	84,329 99	15	2
Cape Cod Branch	300,000	421,950 00	633,676 61	27 08	.....	1 45	21 50	14	56,736 71	30,998 27	25,738 44	.....	190,505 00	.....	.....	.....
Charles River Branch*	117,300	52,946 43	68,872 39	11 96	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cheshire	2,250,000	1,541,154 50	2,777,843 89	53	.....	2 35	25	10	222,295 57	159,322 49	62,973 08	.....	1,131,520 15	112,188 51	1	.....
Connecticut River	1,750,000	1,591,110 00	1,601,592 36	50	.....	.....	.....	10	199,891 83	115,147 85	84,746 98	24,600 00	213,157 50	78,701 29	1	1
Dorchest'r and Milton Br.†	130,000	73,340 00	136,372 77	3 65	.....	.....	.....	.....	7,530 00	.....	.....	.....	56,050 00	.....	.....	.....
Eastern	3,150,000	2,850,000 00	3,120,391 67	38	16	19	21	15	502,054 53	294,599 21	207,455 32	267,400 00	707,180 22	74,202 67	.....	5
Essex	700,000	295,177 31	602,135 75	19 86	2	1 36	25	15	39,960 19	32,439 19	7,521 00	.....	345,371 96	.....	.....	.....
Fall River	1,200,000	1,050,000 00	1,050,000 00	42	.....	.....	22	13	232,322 26	132,527 40	99,794 86	78,750 00	2,748 20	20,500 63	3	.....
Fitchburg	3,540,000	3,540,000 00	3,612,486 97	50 93	16 85	.....	24 50	12 50	516,012 76	310,376 96	205,635 80	140,000 00	116,508 00	141,965 38	4	2
Fitchburg and Worcester	500,000	205,674 52	305,409 94	13 87	.....	.....	22	10 50	29,354 64	19,815 41	9,539 23	.....	92,653 93	9,539 23	.....	.....
Hartford and New Haven	300,000	.....	.....	.....	.....	.....	23	11	.....	.....	.....	.....	.....	.....	1	.....
Lexington and W. Camb.‡	200,000	121,000 00	240,367 84	6	.....	40	.....	12 50	.....	.....	.....	.....	.....	.....	.....	.....
Lowell and Lawrence	300,000	200,000 00	343,467 08	12 35	.....	.....	25	12	36,311 50	28,152 19	8,159 31	.....	149,675 48	17,034 86	.....	.....
Nashua and Lowell	600,000	600,000 00	651,214 88	14	14	.....	28	14	117,017 25	53,445 19	61,573 06	54,000 00	.....	11,821 74	.....	.....
New Bedford and Taunton	400,000	400,000 00	510,363 18	20 13	.....	.....	26 45	16	173,449 98	120,144 22	53,305 76	32,000 00	.....	115,713 45	.....	.....
Newburyport	300,000	118,110 00	.....	14	.....	.....	20	.....	7,111 55	.....	.....	.....	77,974 19	.....	.....	.....
N. Lond., Wil. and Palm.	1,700,000	493,233 43	1,450,410 70	65 70	.....	.....	25	12	168,459 81	86,200 22	82,259 59	.....	111,007 57	.....	.....	4
Norfolk County	1,200,000	455,015 00	1,213,451 70	25	.....	.....	25	12	60,085 97	37,859 84	22,226 13	.....	788,242 93	15,718 47	.....	.....
Norwich and Worcester	2,852,000	1,914,050 00	2,585,104 50	59	1 8	7	20	11	270,049 37	158,450 90	131,598 47	.....	875,116 71	57,800 62	4	.....
Old Colony	2,100,000	1,964,010 00	2,293,534 83	37 25	11 50	7 75	20	12	318,075 93	240,924 46	77,151 47	18,250 00	328,800 00	50,536 24	3	9
Peterboro' and Shirley‡	275,000	200,760 00	264,115 30	14	.....	.....	.....	.....	.....	.....	.....	.....	50,637 16	.....	.....	.....
Pittsfield and North Adams	500,000	450,000 00	443,677 68	18 63	.....	.....	.....	.....	.....	16,012 00	.....	.....	.....	.....	.....	.....
Providence and Worcester	1,457,500	1,457,500 00	1,820,064 63	43 41	5 17	.....	30	10	37,514 32	16,012 00	21,502 32	27,000 00	.....	.....	.....	.....
Salem and Lowell	400,000	213,305 00	343,920 65	16 88	.....	.....	25	12	902,889 81	86,958 54	115,931 27	.....	306,000 00	.....	1	.....
South Reading Branch	300,000	209,532 73	203,759 65	8 15	.....	22 30	.....	12	36,640 25	32,106 82	4,533 43	.....	106,693 25	6,903 40	2	3
South Shore†	600,000	259,685 00	427,689 25	11 05	.....	.....	.....	.....	42,235 67	29,822 48	12,413 03	10,000 00	87,695 07	.....	.....	.....
Stony Brook	275,000	266,900 00	265,762 17	13 16	.....	.....	28	12	.....	.....	.....	7,500 00	151,522 20	.....	.....	.....
Stoughton Branch	90,000	85,400 00	93,433 29	4 04	.....	.....	20	20	16,236 61	5,956 01	16,014 00	16,014 00	.....	.....	2	.....
Taunton Branch	250,000	250,000 00	307,136 29	11 10	.....	57 22	.....	14	25,815 79	19,859 78	1,708 00	1,708 00	700 00	7,468 24	.....	.....
Troy and Greenfield*	354,900	56,592 21	.....	43 55	.....	.....	.....	.....	131,292 66	104,291 10	27,001 56	20,000 00	.....	38,976 46	.....	.....
Vermont and Mass	3,350,000	2,250,353 31	3,450,004 53	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Western	6,500,000	5,150,000 00	9,953,758 84	155 40	53 14	8	28	15	1,353,894 63	527,756 20	756,138 43	412,000 00	5,319,520 00	128,121 51	7	.....
Worcester and Nashua	1,800,000	1,039,891 67	1,309,564 01	45 69	.....	.....	23	10	150,791 68	98,511 32	52,280 36	56,330 87	262,945 78	2,903 78	.....	.....
	53,387,400	43,369,990 63	56,106,083 53	1207 47	234 77	94 36	24 16	12 78	7,287,342 74	4,002,847 17	3,284,495 57	2,084,344 67	12,742,787 61	1,341,283 38	66	30

* Not finished. † Run by Old Colony Railroad. ‡ Run by Fitchburg company on contract.

Public Domain of Texas.

A report of the late Commissioner of the General Land Office gives a statement of the present condition of Texas land affairs, showing the am't of land titled by Spain and Mexico, as also the quantity that has been patented by Texas—the amount set apart for Universities, Colleges and Common Schools, and the amount now on hand. By the act of 1836, Texas had 379,054 square miles, or 242,549,560 acres. There were ceded to the United States, by the late compromise law, 67,000,000 acres, leaving Texas 175,594,560 acres. Titled by Spain and Mexico 25,517,391 acres. The whole amount of claims originating under the late republic and State of Texas is 38,265,663, ac., making the total amount of every description of claims against the public domain 63.683,054 acres. There will consequently remain to Texas, after every legal claim for land officially known to exist against her shall have been satisfied, 111,812,079 acres; this land, estimated at only 50 cents per acre, would be $55,906,039.

Lands patented for educational purposes.	Acres.
For two State Universities	199,102
For Denominational Colleges	31,106
For Primary Schools in each county	175,645
Total	405,853

This includes only the lands surveyed and patented; there are some 300,000 acres more already ordered by law to be surveyed for the primary or common school purposes.

Commerce of Chicago.

One of the best illustrations of the growth and progress of the west is found in the rapid increase of the population and commerce of its leading towns. There is no better example of this than the statistics of the trade of the city of Chicago, for which we are indebted to the Chicago Democrat of 30th December, 1851.

The whole number of arrivals of vessels from all ports for 1850 and 1851, the tonnage of the vessels and the number of men employed, was as follows:

	Arrivals of vessels.	Tonnage of vessels.	Number of men.
1850	2,106	606,951	20,103
1851	2,808	801,088	26,352

The first clearance of the season was the steamer Champion, for New Buffalo, on the 19th of February; and the first arrival, the steamer Champion, from New Buffalo, March 14th.

The last clearance of the season was on the 26th of December; the last arrival on the 15th of December.

The following are the entire receipts and shipments of grain and flour to and from the city by all sources, for 1850 and 1851:

1850.	Receipts.	Shipments.
Wheat, bush	1,165,480	873,650
Corn "	258,300	242,300
Oats "	162,510	158,000
Flour, bbls	70,700	100,900
1851.	**Receipts.**	**Shipments.**
Wheat, bush	575,500	287,709
Corn "	2,820,000	2,410,600
Oats "	522,042	567,200
Flour, bbls	40,215	41,519

Shipments of cured provisions:

	1849.	1850.	1851.
Pork, bbls	17,910	12,307	12,763
Beef, bbls and tcs	48,436	39,247	56,298
Hams, bbls	2,140	2,206	3,629
Lard, bbls	2,282	2,445	4,468

The receipts of sugar have been as follows:

By the Illinois canal	lbs. 3,765,838
By way of the lakes	lbs. 2,940,000
Total	lbs. 6,705,838

The salt trade, as compared with 1850, presents the following results:

	1850.	1851.
Imports by lake, bbls	48,425	87,052
Bags, number	35,995	60,000
Minots	8,700	....
Receipts by canal, lbs	181,920	253,300
Shipments by canal, bbls	23,041	35,087
" " lbs	14,580	537,958

The receipts of wool for the past year have been 731 953 lbs., against 629,887 for 1850. About 55,000 bbls of beef were packed at the various establishments in the city during the season; 30,000 cattle were slaughtered; 7,000 bbls. of tallow rendered; 2,000 tons of salt consumed; and it is estimated the hides will weigh 1200 tons.

The number of passengers arrived and cleared at Chicago for two years is as follows:

	1850.	1851.
Arrived	17,369	20,846
Cleared	22,774	26,853
Total	40,143	47,699

The following is a statement of the quantity of lumber sent into the country from Chicago by canal and railroad for the years 1850 and 1851.

	1850. Canal.	1851. Canal.
Lumber, ft	38,388,313	54,186,645
Shingles, number	40,453,250	51,642,100
Lath "	11,208,170	12,805,288
	Railroad.	**Railroad.**
Lumber, ft	8,801,310	13,040,892
Shingles, number	5,054,500	7,265,500
Lath "	1,728,830	2,389,500

The receipts of lumber the past year have been as follows:

Sawed lumber	105,000,000 feet.
Shingles	100,000,000
Laths	30,000,000

Galena and Chicago Railroad.—The following is a statement of the affairs of the above railroad for the past year:

Last season the running stock of the road and branches consisted of 6 locomotives, 9 passenger cars, 32 covered freight cars, 53 platform cars.

The present season the running stock of the road and branches consists of 10 locomotives, 12 passenger cars, 56 eight-wheeled covered freight cars, 50 eight-wheeled platform freight cars.

The number of platform cars used in transporting gravel, etc., is not included in this year's estimate, but probably was in last.

By the last published statement of the business of the road compiled up to the 1st day of May, 1851, it appears that the income for the year closing that day was, from

Passengers	$56,472 69
Freight	68,576 67
Mails	2,636 42
Total	127,685 78
The expenditures in the operating department for the same time had been	48,904 24
Leaving for net earnings	78,781 54

The whole number of passengers conveyed upon the road the year ending May 1st, had been 69,782.

The tonnage of freight westward	28,244 tons.
" " eastward	23,875
Total for the year ending May 1st	52,119

The whole number of miles run by locomotives, including gravel and wood trains was 86,118 miles, and the whole expense of operating the road had been 56·8 cents per mile run.

Upon the earnings the company had been enabled to divide the past fiscal year 15 per cent upon the stock.

The receipts of this road [and branches for the year ending November 30th, 1851, are as follows:

Passengers and mails	$83,901 22
Freight	106,107 83
Total	190,009 05

The amount of receipts of this road for 10 months of 1849, 12 months of 1850, and 11 months of 1851, are as follows:

1849	$28,177 98
1850	116,522 29
1851	177,514 84

The receipts for December are estimated at $20,000; the whole amount for the year ending January 1, 1852, will be $197,514 84.

The receipts of the Aurora Branch railroad for the year ending Nov. 30th, have been | $18,763 92
Do. St. Charles Branch | 4,468 36

The Aurora road commenced earning October, 1850. Its earnings for two months were as follows.

October, 1850	$788,73
November, 1850	1,129 06
	1,917 79

Receipts of main track, deducting branches, for 1851, $174,282 56.

The following table will show the receipts of the Illinois canal for the last four years:

1848	$86 673 80
1849	118,787 32
1850	121,972 21
1851	173,300 34

For 1851, the amount of tolls received at the different offices was as follows:

Chicago	$109,862 29
Lockport	7,849 51
Ottawa	8,298 69
La Salle	47,379 85
	$173,390 34

The first clearance of the season for La Salle was the 15th of March, and the canal was closed on the 13th of December.

The construction and completion of the Illinois and Michigan canal, says the Democrat, has been one great source of the prosperity of the city. Canals and railroads are effectually changing the commerce of the country, and the Illinois and Michigan canal has produced as great a revolution in the west as any improvement has done in any portion of the country. Fully one-half (according to the St. Louis papers) of the merchandise purchased in the eastern cities, and destined for the St. Louis market, passes through this city. The steamboats which formerly carried produce down the Illinois river, now carry merchandise and bring the produce up. In this way the course of trade has been actually reversed, and Chicago is fast becoming the seat of a large portion of the trade heretofore exclusively enjoyed by St. Louis.

But if the canal has done so much in the way of attracting this trade, how much more will not the railroads, now being built, do in that connection? Chicago, situated as she is at the head of the navigation of the great chain of lakes, and the point of connection of the greatest lines of railroads in the United States, must stand unrivalled in the west in the extent of her commerce, and the magnitude of her resources.

It is only about fifteen years since the present site of Chicago was a wilderness. The city now contains over 30,000 inhabitants, with all the conveniences and luxuries belonging to a large town. Notwithstanding its large and rapid growth, the city is only in its infancy. We shall not be surprised if, in 1860, the population should reach 100,000.

Finances of Maryland.

Below we give the substance of the report of the Treasurer of the State of Maryland, dated Dec. 1, 1851.

The whole amount of receipts into the State Treasury for the past year have been 1,231,267 03
Balance in Treasury July 1, 1850. 245,408 84

$1,476,675 87

Of this sum $399,576 64 were received from direct taxation; $84,692 04 from the Baltimore and Susquehanna railroad; $57,223 73 from the Baltimore and Ohio railroad; $67,500 00 from the Tide Water canal, and the balance from permanent sources of income.

The total amount of payments have been $1,225,718 15. Of this sum, $680,077 83 were for the interest on the State debt; $116,211 44 to the sinking fund, and $133,712 82 to the payment of arrears of interest.

The balance of the report we give in full, as follows:—

There remained in the treasury on the 1st Dec., 1851, the balance of $250,957 72, subject to charges to that date, amounting to $79,927 32, of which $1,481 20 is to pay the convention—leaving applicable to future demands $171,030 49.

The probable receipts in the current year, in virtue of subsisting laws, the Treasurer estimates at $1,285,022 73, of which $112,922 72 is expected from the Baltimore and Susquehanna railroad company; $135,000 for licenses in Baltimore city and county; stamps from ditto, $53,000; Susquehanna and Tide Water canal companies, $100,000; direct tax, $450,000. There may be probable further demands for the current year amounting to $913,575 35, according to the estimate, of which $80,000 is put down for the cost of the Legislature, $340,766 51 to pay interest on the public debt at the Loan Office, and $270,845 09 to pay ditto in London.

The foregoing statistics show the financial condition of the State to be sound and healthy. For though the receipts of the year do not quite equal the estimates in the Treasurer's last annual report, the deficiency will be seen to have proceeded from a falling off in these from direct taxes, and will be more than supplied by increased receipts from those taxes in the next and succeeding years. The Treasurer concludes his report as follows:—

From nearly all the other sources of revenue which have been provided to aid in paying the interest on the public debt, (and which in their nature are more liable to fluctuation,) the receipts have exceeded his estimates, and, what is more satisfactory, have annually increased.

The Baltimore and Susquehanna railroad, and the Susquehanna and Tide Water canal companies, have also this year paid the current interest on their debts to the State, and give assurance that they will continue to do so.

In February last, in accordance with the provisions of chapter 196, of 1847, the Treasurer took from the Baltimore and Susquehanna railroad company three bonds, each for $345,326 92, together making the sum of $1,035,980 76, that being the amount due the State for interest to the 1st January, 1851.

These bonds are not subject to interest till fifteen years after date, but if not then paid, will, with the other bonds of the company to the State, become a preferred debt.

The rapid increase in the revenues of this company justifies the inference that no long time after these bonds become due they will be paid; but if this expectation be disappointed, there can be no doubt that the company after that period, will punctually pay the interest on their whole debt, which in that event, will amount to the sum of $168,126 07, relieving the State from the charge of interest on that amount of the public debt.

In January last, he was advised by the President of the Baltimore and Ohio railroad company that they had disposed of the whole amount of the 5 per cent sterling bonds of the State, then remaining in their hands to Messrs. Brown, Brother & Co., at the limit of 91 per cent, in this country; and that it had been stipulated in the contract that £50,000 of them should be reserved for the sinking fund, if the Treasurer should be disposed to take them at that limit.

Regarding this to be a very advantageous offer for the fund, but aware that its ordinary revenue was inadequate to meet so large a demand, it became necessary to ascertain whether a sufficient amount might not probably be derived from the surplusses in the Treasury, which, after certain contingencies, were, by chapter 238 of 1846, devoted to the use of the sinking fund.

A careful examination having satisfied him that after the 1st of July, these surplusses would enure to the fund, and enable him by the 1st of October to meet the required payment, he replied that he would be pleased to accept the offer if the company would consent to receive the payment by instalments, the first on the 1st of July, the other on the 1st of October, to this proposal the company unhesitatingly assented, and the contract was made.

On the 1st of July last, he paid $133,712 82, the outstanding balance of funded arrears of interest on the public debt, and also the interest thereon, thus redeeming the plighted faith of the State, and removing an incubus which had long weighed heavily on the treasury.

A retrospect of the financial struggle of the last ten years seems at such a time to be peculiarly appropriate; and the more acceptable because it will afford gratifying evidence of the great resources the State can in an emergency command.

At one period of this severe ordeal many of our most respectable citizens seeing the enormous debt rapidly increasing, despite the efforts of several successive Legislatures, believed the State to be certainly and rapidly approaching a most disastrous bankruptcy. Others happily more sanguine, relying on the stern integrity of their fellow citizens, while they admitted appearances to be very discouraging, still felt confident, they eventually would, by the discharge of all their liabilities, rescue the fair fame of their mother State, and the result has most triumphantly justified that confidence.

In 1841 she first failed punctually to pay the interest on the public debt, from that time to the 1st of December, 1844, the arrear had accumulated to the fearful amount of $1,435,154 51; in 1845 this accumulation was at length arrested, and on the 1st of October, 1847, the day on which it was directed to be funded, it had been reduced to about $900,000.

On the 1st of January, 1848, notwithstanding apprehension of the failure in the minds of many, the State resumed the payment of the current interest on her main debt, since which time it has been regularly paid. In the same interval there has been paid on account of arrears of interest, and of interest on said arrears, $1,034,817 07, and $594,931 26 of the debt of the State has been purchased for the use of the sinking fund.

In the fiscal year he has disbursed on account of the convention $128,238, account of funded arrears and interest thereon $141,609, and for augmentation of the sinking fund $116,211 44, together amounting to the sum of $386,057 90, and there remained in the treasury a balance exceeding that of last year by about $5,000, showing that there will be annually about $400,000, applicable to the payment of the expenses of the Legislature and the augmentation of the sinking fund.

D. CLAUDE, Treasurer, Md.

Albany and Binghamton Railroad.

We are glad, says the Binghamton Republican, to be informed by Wm. Wentz, Surveyor, that the directors of the Albany and Binghamton railroad are active, and that releases have been satisfactorily obtained, with one or two exceptions, on the Binghamton route, as far as the Van Names, five miles north of the village, on the east side of the Chenango. This evinces a proper spirit, and gives encouraging proof that the inhabitants on this route are intelligent enough to consult their true interests. There is no difficulty in the cars running direct from Albany to Binghamton, if the people so will it.

Virginia.

We make the following extracts from the late message of the Governor of this State, relating to its finances, and to the various railroads to which it is proposed to extend further aid.

The actual debt of the State was, on the 1st of January, 1832, about $11,921,038·30; this debt, under the operations of the provisions of the Constitution in relation to the sinking fund, will be extinguished in about thirty-three years; and any new debts contracted after the first day of January, 1852, under the same provisions of the Constitution, will be paid at the end of thirty-four years from the creation thereof. The State of Virginia owns at this time $7,256,416·13 of productive, and $8,107,502·03 of unproductive stock.

The Northwestern railroad from Parkersburg to the Tygart's valley river, [forming indeed a section of the main stem of the Baltimore and Ohio railroad] as a local improvement, is not less important to Northwestern Virginia than any other road I have mentioned, is to any other section of the State. Circumstances connected with enterprises recently projected, as well as the intrinsic merit of this work, make it peculiarly proper that Virginia should hold over it a controlling influence. Its importance in a national point of view has been sufficiently noticed in comparing the great line to which it belongs with the central improvements recommended. It is confidently believed, if not certainly ascertained, that the capital can and will be secured from abroad for the completion of this road; but it is of the first consideration, not only to the State at large, but to the citizens of the Northwest, that so far as governmental or proprietory control is concerned, it should emanate from Virginia and not from another State. This road, in the hands of Virginia, will constitute a lever, which, in future time, may exert a controlling influence over the whole line, and be the means of protecting the interest of a large portion of Eastern as well as Western Virginia; and I therefore respectfully suggest the adoption of such measures as will secure to this State and her citizens the future control of this division of the line. Already we have assurances, in the operation of the main stem, of the profits which may be derived from such investment which is inevitable between Baltimore and other cities of the North for the business of the country beyond the Ohio. The section of Virginia traversed by the Baltimore and Ohio and Northwestern railroads is one of the most enterprising and prosperous in the State, and will in future contribute very largely to the common treasury. Justice, therefore, no less than duty, imposes the obligation to provide this reasonable protection to our fellow citizens of the Northwest.

The Manassas gap railroad, extending towards Harrisonburg in the valley, will probably require some further aid for its completion to the point contemplated.

The citizens of Hampshire county have recently suggested the propriety of constructing a branch from Strasburg to Paddytown, for the purpose of connecting with the Baltimore and Ohio road, and thereby uniting North-western Virginia by railroad with the Valley and the cities of Alexandria and Richmond. The suggestion is worthy of consideration.

Nashville and Memphis Railroad.

The Memphis Eagle states that meetings of the people have been held in Haywood, Madison, Gibson and Tipton counties, at every one of which resolutions were passed approving without a dissenting voice of the proposed Memphis and Nashville railroad, declaring it entitled to the aid of the State and generally declaring the sentiment of the people to be in favor of aiding in the principal roads in every quarter of the State with the loan of the State credit.

The Eagle says the project is rapidly gaining ground with the whole people of West Tennessee. It may be mentioned, as a striking evidence of the enterprise of our Tennessee friends, that Gibson county, which has subscribed over $100,000 to the Mobile and Ohio railroad is ready, (according to her county journal, the Banner,) to extend her aid to the Memphis and Nashville railroad, and other great public improvements. This is the right spi

rit, and we recommend it as an example to these counties in Virginia which are afraid to expend a dollar for the development of their own resources and the increase of their own wealth.

What Railroads are Doing.

It is but a few years since the idea would have been hooted at by Eastern capitalists, had they been asked to invest in railroads in our Western States. The "Michigan Central," was the pioneer in drawing eastern capitalists attention westward.—It being the natural route or connecting link binding the Atlantic cities with the Mississippi, a few were found hazardous enough to embark in the enterprise. Says the Buffalo Courier—

The road then, extending to Kalamazoo, was purchased from the State, and immediately a new zeal was instilled into it. It was the first western corporation to bring its bonds into market, and now the system has become universal for permanent investments. The bonds of the company now command 108—the highest quoted at the stock board, and the stock 110, with dividend. By the report of the treasurer just made, the net earnings of the road it appears, amount to $461,364 80 to December 1st. After paying a dividend of 14 per cent. amounting to $404,138, the surplus on hand will be $67,226,80. The net receipts for the last six months were $385,051,07 against $288,569,65 in the same period in 1850. This gain has been entirely in passengers and miscellaneous receipts, produce having been held back by farmers owing to the low prices, that must come forward in the spring. There is at the present time more produce in the homes of Western farmers than at any previous season for years. The crops were good last summer, and but a small amount has been disposed of, at least as far as Michigan, Indiana, Illinois, and Wisconsin are concerned, and these States are all more or less tributary to this road.

The whole cost of the road is $6,929,708. In the last year it has paid its expenses and a dividend of 14 per cent., besides retaining $57,226,86 on hand for contingencies. The local business of the road alone will pay 8 to 10 per cent per annum. With the completion of the Great Western Canada road, and the Brantford connection, there can be no reason why the stock will not pay better than any road in the West. On the opening of navigation, the road will be in running order direct from Detroit to Chicago, and a more efficiently managed and better equipped road can not be found in the Union. Indeed it may be called the model road of the West in every respect. Facts and figures like the above speak volumes in regard to the West and its prospects. This is a great country and we are a great people!—*Detroit Free Press.*

Finances of Massachusetts.

We give the following extract from the late message of the Governor of Mass., in reference to the financial condition of that State.

Excluding the balance in the treasury on the first of January, 1851, the ordinary receipts of that year were $566,432 03, and the ordinary expenditures were $642,105 38, showing a deficit of $75,-673 29.

Among the items are three of an unusual character, namely:—the reception of the President, the Valuation committee, and the enlargement of the State Prison; which, together, involved an expenditure of more than twenty-nine thousand dollars.

In addition to this, the session of the Legislature of 1851 was of unusual length and cost.

The estimated receipts for the year 1852, are $617,000, and the estimated expenditures are $568,-291; showing a balance in favor of the treasury of $48,709.

Should you confirm the purchase of land for the State Prison, and authorize the payment from the general treasury, the balance will be reduced to $17,000. This estimate is based upon the supposition that no extraordinary appropriations are made, and that the session will not extend beyond one hundred and twenty days. Should you find it convenient, as it is believed you may, to reduce the length of the session, this balance will be increased. If, however, contrary to this estimate, the appropriations and expenditures should exceed the income of the year, I do not hesitate to recommend a direct tax to supply the deficit. This you can determine previous to your separation. Expenses should not be incurred and appropriations made upon any other principle than that the people are willing to meet them by direct taxation in the absence of other resources.

In view of the extraordinary appropriations which the state must soon make for institutions of charity and humanity, the most rigid economy should be observed.

The property of the commonwealth consists of—

Western railroad stock, (8 per cent)		$1,176,400 00
Five per cent scrip		584,090 00
County, city and town scrip, [6 per cent.]		269,800 00
Notes and mortgages, [6 per cent.]		322,687 15
Notes for land in Maine, [6 per cent.]		335,636 58
Western railroad loan sinking fund rights		258,808 00
Lyman state reform school fund		70,000 00
Natick Indian fund		1,125 15
Cash on hand		76,822 33
Productive property		$3,095,369 21
Lands in Maine unsold.	$631,301 52	
Massachusetts claim	181,000 00	
Real estate, etc	1,426,112 49	
Bonds and mortgages of railroads	5,049,555 56	
		$7,287,969 57
		$10,383,338 78
Debt of the commonwealth on its own account, Jan. 1, 1852	$1,341,475 00	
Scrip loaned to railroads	5,049,555 56	
		6,391,030 56
Balance in favor of the commonwealth		$3,992,308 22

Ohio.

Cincinnati and Hillsboro' Railroad.—The annexed paragraph, from the Hillsboro,' Ohio Gazette, furnishes important information respecting the extension of the Cincinnati and Hillsboro' railroad in a direct line from the latter place to Belpre, opposite Parkersburgh.

Messrs. Morris, Trimble and Fallis, engineer and directors of the Hillsboro' and Cincinnati railroad company have just returned; having explored a line from Big Falls of Paint Creek to Parkersburgh. The line in all respects is exceedingly favorable, both as to grades and cheapness of construction, as well as distance; passing from the Falls of Paint Creek through Pike, Jackson, Vinton and Meigs counties, tapping the centre of the richest mineral region of Ohio, as well as affording an opportunity of connecting with the Ohio river at Pomeroy, and connecting with the Central railroad of Virginia, at Point Pleasant, by short and cheap branches Mr. Morris' report will be published in a few days, and the details of the line given.

A movement is also on foot looking to the extension of the railroad from Xenia to Belpre,

Winter Bridge over the Susquehanna.

The Philadelphia Ledger states that a railroad has been made over the ice on the Susquehanna, at Havre-de-Grace, for the conveyance of the baggage, mails, etc., and the passengers to and from Philadelphia and Baltimore. The road, constructed by the railroad company, is formed of iron rails, and the cars now pass directly across the river, without any detention. This is the first railroad construction upon such a foundation that has probably ever been made, and the enterprise it exhibits on the part of the company, for the accommodation of the public, is an additional reason which may be presented, that should secure for it the favor of a grant from the Legislature of Maryland, which would supercede the necessity of overcoming difficulties of this kind, which the seasons interpose. The surface of ice over the river was very uneven in many places, and required grading, which was accomplished by filling in with snow, which formed soon into a compact, level surface, on which the iron rails were placed. The road will require some watching, to prevent the loss of the rails by any sudden breaking up of the ice on the river by a freshet.

Pennsylvania.

Sunbury and Erie Railroad.—The following are the resolutions passed at the recent meeting held in Philadelphia in aid of this project:

Resolved, That this meeting urgently recommend to the citizens of Philadelphia to make subscriptions to the stock of the Sunbury and Erie railroad company, to such an amount as will enable the corporation to place the work under contract without delay, so as to complete a railway connection from this city to Lake Erie within the shortest possible period.

Resolved, That a committee of three hundred be appointed by the chairman of this meeting, to procure the necessary subscriptions from persons and corporations in the city and county of Philadelphia.

Resolved, That this meeting recommend to the Sunbury and Erie railroad company the procurement of a law which will authorize them to pay interest on subscriptions, and charge the same to the cost of construction, until so much of the road be finished and in use as will justify the declaration of dividends from the profits thereof.

Virginia.

North Western Railroad.—The Parkersburgh Gazette of the 10th instant has the following gratifying information.

We understand that the surveys are still being pushed on with vigor, and that a second route through from Three Forks to Parkersburg will probably be completed by the close of this month. Enough is now known to render it certain that the whole distance will not exceed 115 miles, the original estimate of the chief engineer, and may fall considerably within that limit. The grade will nowhere exceed 53 feet. This shows a more favorable state of things than had been anticipated, and we commend these facts to those who have endeavored to write down our road by inferences. We presume that the route will be determined at the February meeting of the board.

Indiana.

The Indianapolis and Bellefontaine road is a link of 83 miles [between the capital of the State of Indiana and the western line of Ohio,] in the great central line of railways now being rapidly constructed from Boston, New York, Philadelphia, and Baltimore, through the west to St. Louis, on the Mississippi, from which place it is being extended west on the line of the emigrant travel, to Independence, at the mouth of the Kansas river.—At the Ohio line, [Union,] the above link will connect with the through lines from Pittsburg, Cleveland, Sandusky, Columbus, Dayton, and Cincinnati, and at Indianapolis with all the railroads centering there and radiating to every part of the State, including the through line to Terre Haute and St. Louis. It is confidently believed, as we learn, by the companies in charge of that part of this great central route from Bellefontaine, Ohio, to Terre Haute, that it will be opened to the public this year, 114 miles being already in use, giving a continuous line of first class railway from the lake and Pittsburg to the Wabash river at Terre Haute, and to Madison on the Ohio, passing through the seat of government of Indiana. The president of this road, Mr. Smith, has within a few days purchased 2,500 tons of heavy rail to complete the residue of the road, to be delivered in time to lay early in the season. This road, owing to the character of the country through which it passes, is one of the least costly in the United States, being a heavy T rail, ballasted road, costing up to the rolling machinery, less than $10,000 to the mile. The semi-annual interest on the few bonds the company

have issued to purchase their iron, has been punctually paid.

American Railroad Journal.

Saturday, January 24, 1852.

Ohio and Pennsylvania Railroad.

We give this week the report of the directors of this road, submitted on the 8th instant. It gives a full detail of the operations of the company the past year. The extraordinary results accomplished reflect the highest credit upon the directors and the engineering department. From a very feeble beginning, the road has been brought into its advanced state towards completion in a very short period; and the able management of its affairs has secured to itself the confidence of business men and capitalists to such an extent, that what remains to be done will be easily accomplished. The securities of the company are now looked upon with great favor for foreign investment, and the success of the road since it has been opened, has done much to confirm this good opinion. The road has been a decided *hit*, and its success will do much towards strengthening the confidence felt in all our western projects. The stockholders of this, as well as of other western roads, owe a debt of gratitude to Gen. Robinson, the President, and S. W. Roberts, Esq., the Chief Engineer, who have been the chief agents, not only in accomplishing the results that have been effected, but in securing to the Ohio and Pennsylvania railroad the confidence of capitalists, without which it could never have been built.

Erie and Wabash Canal.

The Erie and Wabash canal will, by the terms of its contract, be completed on the 1st of November next, which will open the longest line of artificial navigation in the United States. The work on the unfinished part is in rapid progress of construction. The tolls on this work received during the year ending November 1st, amount to $179,282 76, exceeding the receipts of last year by the sum of $22,124 38. The canal has been navigable during the season just passed, as far south as the crossing of the west fork of White river, in Greene county, 281 miles from the State-line, and 365 miles from Toledo. Early in the ensuing season it is expected that 27 miles will be added to this navigation, extending it to Maysville, in Daviess county. From that point to Evansville, 71 miles, which is the most expensive portion of the work, the labor of constructing the canal is nearly two-thirds performed, and the balance is to be accomplished by the first of November next, according to the terms of the contracts.

Schuylkill Navigation Company.

We learn from a recent report of the directors of this company that the tonnage for the past year has been 842,097 tons, of which 579,150 tons were of anthracite coal. This exceeds that of any previous year by 104,580 tons. The toll on coal amounted to $218,660 17, and on other articles to $66,961 07, making a total of $285,621 34. The amount received for rent of real estate and water power was 26,480 38 dollars. The aggregate income for the year is 331,868 dollars; the total expenses 187,840 dollars—leaving a balance of 144,027 dollars. The capacity of the company for the present year is estimated equal to 776,160 tons of coal. In consequence of the extraordinary expenses in repairing damages, the interest on the loans, and a considerable amount of the principal of the old mortgage loans, have not been met at maturity. A committee, composed of loan and shareholders, was recommended to adjust the liabilities of the company, which suggestion of the managers was adopted by the stockholders. The total indebtedness of the company, December 23, 1851, including capital stock, the various loans and expenses of repairs, etc., was $10,260,813 63.

Rock Island and Chicago Railroad.

The election of officers of the company for the ensuing year, took place at Chicago on the 23d inst., with the following result, as we learn from the Rock Island Republican:—

John B. Jervis, President; James Grant, Vice-President; N. D. Elwood, Secretary; A. C. Flagg, Treasurer; Isaac Cook, Assistant Treasurer; directors—John B. Jervis, James Grant, Elisha C. Littlefield, John Stricker, Isaac Cook, George Bliss, Lemuel Andrews, N. D. Elwood, T. B. Brewster, John Stephens, Charles Atkinson, P. A. Whittaker, Ebenezer Cook.

Indiana.

Terre Haute and Indianapolis Railroad.—The following is a list of the directors of this road for the current year:—

C. Rose, President; S. Crawford, Vice President, J. D. Early, J. Farrington, D. Deming, A. McGregor, C. Warren, W. D. Griswold. For Putnam county—W. H. Thornburgh, Aaron Wood. For Hendricks—Thomas Irons. Marion—E. J. Peck and D. Yandes.

Railroad from Indianapolis to Bellefontaine.—We learn from Bellefontaine, that Messrs. O. J. Smith, President of the Indianapolis and Bellefontaine railway, and Mr. Goodman, President of the Bellefontaine and Indiana railway, with several of the directors and engineers of said companies, have lately had a meeting in that town. The result of the conference was a determination to make the connection through to Indianapolis, *this season—certainly* from Indianapolis to Bellefontaine, and through to Galion if *possible*, as the company believe they can.—*Cin. Gaz.*

New York.

Buffalo and Conhocton Valley Railroad.—The directors of the Buffalo and Conhocton railroad held a meeting on the 23d December, at which it was resolved to commence immediately the work upon the road west of the Genesee river. The commissioners were also directed to open for business that portion of the road from Corning to Blood's Corners, upon which the iron is now laid, as soon as their locomotives can be got from the manufacturers. This section is expected to be open for travel by the 1st of March, and the road to Conesus Centre by the middle of June next.

Virginia.

South Side Railroad.—This road has been completed as far as "Whites and Black," 39 miles from Petersburg, and only 14 miles from the point of junction with the Danville railroad.

Ohio.

Steubenville and Indiana Railroad.—The following gentlemen have been chosen directors of the above road:

James Means, Wm. McDonald,
John Andrews, Wm. K. Johnson,
James Parks, Dan. L. Collier,
James Turnbull.

Railroad from Troy to Rutland.

The line between the above points, made up of the Troy and Boston, Troy and Rutland, and Rutland and Washington, has been completed, and is soon to be opened for travel.

Wisconsin.

Milwaukee and Mississippi Railroad.—We invite attention to a notice of this project, which will be found in another column. We have prepared, and shall publish in our next issue, an article showing the progress and present condition of Wisconsin. A statement of the extraordinary growth of that State would be regarded as too fanciful for credit, could it not be fully sustained by statistics drawn from authentic sources. They will show that no road in the United States has more encouraging business prospects than the Milwaukee and Mississippi railroad.

Stock and Money Market.

We are able to repeat the statement in our last, of the favorable condition of the money market; and the tendency appears to be, to a still further improvement. There is a good amount of business doing in the best securities. Transactions at present are confined mainly to such as are well known. The value of western bonds are graduated very much by the time they have been upon the market, and prices depend upon the amount of general information that exists in reference to them.—The rates of interest paid are sufficiently high to carry them up to par, as they will, when the public shall have had sufficient time to ascertain their perfect safety. For these reasons we would impress upon our friends the importance of taking every step to diffuse information in reference to their projects. We could name some important western roads, towards the construction of which, the *pen* has contributed more essential service than all other things put together.

There is a very firm feeling in reference to undoubted securities. Of the fancies, Reading has shown a large advance, selling at 61, owing to the increased demand for coal. The Hudson river has fallen to 62, with a tendency, we think, to a still greater decline. The great trouble with this road is, that there is *too much* machinery in every place but one, and that place is the *road*. The Harlem has been opened to Albany under good auspices, which has had a corresponding effect upon its stock. It seems to have completely got the start of its rival in popular favor, and will be likely to maintain its advantage.

The Erie road has advanced from 75½, the lowest point of its recent depression, to 78. The stock of this road being in the hands of speculators, its fluctuations have nothing to do with its real value.

The *Express* accuses us of attempting to depreciate the value of Erie railroad stock. We attempted no such thing. We simply published extracts from the various reports of the company, and if the inference from these was unfavorable, we are not to blame. We submit if the directors have made a mistake in their estimates of 300 per cent., that it throws a doubt over all their statements of a similar kind. The Express does not allude to the evidence we offered, but pins its faith entirely upon the *respectability* of the directors. We do not join issue here; but respectability does not give capacity nor experience in railroad matters. We proved the most palpable mistakes, and we can convince any unprejudiced mind that the directors are as much mistaken in their estimate of earnings as of cost. Instead of being hostile to it, we are the best friend it has among the press, which is divided into two parties one of which puffs, and the other abuses; and both without a shadow of reason for their counter statements. We cheerfully praise, when it is deserved, and we shall with equal willingness censure when it is called.

Georgia Railroad and Banking Company.—We give below the comparative statement of the earnings of the company for the nine months ending 31st December, of the years 1850 and 1851 respectively.

	Passengers.	Freight & mails.	Totals.
1851...	$195.575 92	$350,707 10	$546,283 12
1850...	178,262 24	325,519 21	503,781 45
Increase	$17,313 68	$25,187,89	$42,501 67

Michigan Southern.—The earnings of the Michigan Southern railroad company for Dec., 1851, were.....$26,700
For Dec., 1850..... 9 973

Increase, (about 165 per cent).....$16,727

Great Western Railroad Canada.—The proposed loan of £200,000 for the Great Western of Canada company, on the 6 per cent. debentures, repayable in 1857, has been completed in London.

New York and New Haven Railroad.—The earnings of the New York and New Haven road for December show a small decrease as compared with December, 1850. This is in consequence of the opening of the Hudson River road, which has cut off a large portion of the Albany business, the earnings from that source having been only $2,853, against $6,619. The figures are as annexed.

Passengers.....	$43 385 39
Commutation.....	324 38
Estimated freight.....	11,675 62
	$55,385 39
Paid Harlem road.....	3,929 28
	$51,456 11
December, 1850.....	54,316 37
Decrease.....	$2,860 26

Utica and Schenectady.—The Utica and Schenectady railroad have made a half year's dividend of five dollars per share on full stock, and three dollars on scrip stock, payable at the Phœnix Bank on the 1st February.

The earnings of the Macon and Western railroad for December were:

Passengers.....	$9,146 52
Mail.....	1,487 53
Freight.....	14,558 64
Tota!.....	$25,192 69
Dec., 1850.....	23,691 80
Increase 1851.....	$1.500 89

Messrs. Baring, Brothers & Co., in their circular afford the following information on American stocks:

The year which has just expired has been one of regular, but not of very large investments in American stocks; nor could it be expected that the sudden and extraordinary demand produced by the continental events of 1848 should be continued on an equally large scale for many years, unless some fresh stimulus was given to it; while the high prices and limited duration of the federal stocks, and of those of some leading States, have checked both speculation and the temptation of a high rate of interest.

These high prices have been maintained by the more general appreciation of the principal American securities, as well as by the cessation of reduction in the issues. Our fresh supplies have mostly consisted of Maryland sterling bonds, Virginia 6 per cent coupon bonds, Boston city stock, Canada 6 per cent bonds, while the tendency of prices has been to attract, in a more or less degree, Pennsylvania, Alabama, Illinois, Indiana, Mississippi, Michigan and Florida, back to the United States.

If tranquility and confidence be established in Europe, capital will be turned toward investments on this side of the Atlantic, the continental demand will be less, some resales may be made, and the range of prices will be more dependent on the state of the American and English money markets, as well as on the extent of fresh issues, than on the question of political revolutions.

The bonds of American railway companies have not yet obtained much currency in the London market, and where investments are desired the orders have been transmitted to the United States.—Capitalists here, although they often take shares in foreign railways, have never seemed to like the debentures at fixed interest of such companies, and even in this country the debentures only of entirely or partially completed and revenue giving lines are selected.

We subjoin the comparative price of most American stocks now and at the corresponding period of last year, although in many cases they must be considered as nominal:

	January, 1851.	January, 1852.
U. S. 6s. 1867-8, 103*a*104½	104*a*105½	
Do. Coupon bonds, 1868, 108*a* 109	108½*a*109½	
Alabama dollar 5s, '78, with div.	80*a*82—with div.	
Do Sterling, '79, ex. div	81*a* ..—ex. div.	
Illinois Int. Improvement, 52*a*55.	51*a* ..	
Indiana State 5s, 70*a*72	72½*a*74½	
Do. 2½ per cent deferred, 34*a*35..	36*a*37	
Kentucky 6s, 91*a*94, ex. div	91*a*93—ex. div.	
Massachusetts 5s, 105*a*106	107½*a*108½	
Maryland 5s, Sterling, 88*a*89, ex. div	87½*a*88½—ex. div.	
Mississippi 5s, Sterling, 20	20½*a* ..	
Michigan, 36	36½*a* ..	
New York 5s, Sterling, '58, at 94 *a*97	92*a*94	
Ohio 6s, 1870 5 103*a*105	none.	
Pennsylvania 5s, 80½*a*82	81*a*83	
Virginia 6s, stock, 94*a*96	92*a*94—Bd 96*a*97	
Boston City, 92½*a*93½	92*a*93	

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK JANUARY 24, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	105
U. S. 6's, 1862	112
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	116½
U. S. 6's, 1868	115½
U. S. 6's, 1868—coupon	118½
Indiana 5's	84½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	65
Illinois 6's—interest	41
Kentucky 6's, 1871	106
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	97½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	114
New York 6's, ½ y., 1866	—
New York 5½'s, 1860-'61	—
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100½
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	95
Canal certificates, 6's, 1861	101
Ohio 6's, 1856	104
Ohio 6's, 1860	109½
Ohio 6's, 1870	113
Ohio 6's, 1875	114½
Ohio 5's, 1865	103
Ohio 7's, 1851	100
Pennsylvania 5's	90
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	—
Virginia 6's, 1886	105

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	106
Cincinnati 6's	95
St. Louis	91½
Louisville 6's 1880	—
Pittsburg 6's, 1869-1871	93
New York 7's, 1857	107½
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	102
New York 5's, 1890	102
Fire loan 5's, 1886	101
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	103
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	109½
Erie 2d mortgage, 7's, 1859	102½
Erie income 7's, 1855	95½
Erie convertible bonds, 7's, 1871	91½
Hudson River 1st mort., 7's, 1869	105
Hudson River 2d mort., 7's, 1860	90
New York and New Haven 7's, 1861	100
Reading 6's, 1870	73
Reading mortgage, 6's, 1860	78
Michigan Central, convertible, 8's, 1860	105
Michigan Southern, 7's, 1860	—
Cleveland, Col. and Cin. 7's, 1859	100
Cleveland and Pittsburg 7's, 1860	92
Ohio and Pennsylvania 7's, 1865	—
Ohio Central 7's, 1861	—

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Jan. 21.	Jan. 14.
Albany and Schenectady	99	97
Boston and Maine	103½	103½
Boston and Lowell	107½	106½
Boston and Worcester	99	99
Boston and Providence	85½	85½
Baltimore and Ohio	64	63½
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	101	99½
Eastern	94½	94½
Erie	78	78½
Fall River	98½	99½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	68½	69
" preferred	..	109
Hartford and New Haven	115	115
Housatonic (preferred)	—	—
Hudson River	64	66
Little Miami	—	—
Long Island	16½	16½
Mad River	—	—
Madison and Indianapolis	90	98½
Michigan Central	93	94½
Michigan Southern	103	102½
New York and New Haven	113	113
New Jersey	—	112½
Nashua and Lowell	104½	104½
New Bedford and Taunton	116	116
Norwich and Worcester	50½	49½
Ogdensburgh	26½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	28½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	61	57½
Rochester and Syracuse	116½	106
Stonington	50	50
South Carolina	—	—
Syracuse and Utica	123½	—
Taunton Branch	109	109
Utica and Schenectady	129	127½
Vermont Central	24½	24
Vermont and Massachusetts	26½	26½
Virginia Central	—	—
Western	101½	102
Wilmington and Raleigh	56	—

Harlem Railroad.

This road is to be opened for travel on Monday next, 19th instant.

Ohio.

Springfield and Mansfield Railroad.—This road is a link in the great chain of railroads extending from the Eastern States to Indianapolis and the Mississippi river. It extends from Springfield, Ohio, through Champaign, Union, Delaware, Knox, Holmes and Ashland counties, to the most southerly projection of the Ohio and Pennsylvania railroad at Loudonville, and is about 110 miles long. When completed, we shall have a direct continuous line of railroad to Cincinnati, Indianapolis, Terre Haute, etc., traversing the central parts of Pennsylvania, Ohio and Indiana, as well as the southwest by way of Cincinnati. The Pennsylvania road and the Ohio and Pennsylvania road are both near completion, and already there are two fine railroads from Cincinnati to Springfield.

The Springfield and Mansfield railroad company was organized last spring, and already 48 miles of the road are under contract and in progress of construction, and the remainder of the line, say 62 miles, is nearly ready for letting. The line of the road lies in an agricultural district, without any large city to give impetus to the work, but the means of the company, by county, township and other subscriptions, amount already to upward of $1,200,000; while the estimated cost of the entire work is less than $2,000,000. This will account for the fact that the President of the company, who is now in this city, has, within a few days past, made a very advantageous sale of $50,000 of county bonds. If we may judge from the activity and vigor with which this work has been commenced and thus far prosecuted—the cheapness of the road—the rapid accumulation of means for making it—the alacrity and unanimity with which county and township votes for the subscription of stock have been carried—the wealth and productiveness of the central part of Ohio, through which the road is to pass, and the great importance of this link in the chain of travel between this city and the great southwest and west, it will not be long until the Springfield and Mansfield railroad will be in active operation.

As already stated, the road passes through one of the best portions of Ohio. The following table, copied from the Auditor's report for the State of Ohio for 1851, will show the population for 1850 and the valuation for 1851 of the counties traversed by the above work:—

	Pop.	Amount of land.	Valuation.
Clark	22,174	250,000	4,506,231
Champaign	21,257	268,000	3,424,496
Union	12,205	270,490	1,297,590
Delaware	21,870	283,354	2,816,504
Knox	28,567	327,691	4,052,492
Holmes		259,762	2,423,418
Ashland		264,939	3,570,151

	Valuation of town property.	Personal.	Aggregate value.
Clark	814,115	1,659,137	6,949,483
Champaign	389,477	1,215,703	5,029,676
Union	92,940	404,719	1,795,249
Delaware	437,389	890,788	4,144,481
Knox	668,215	1,029,479	5,750,186
Holmes	127,307	667,949	3,218,644
Ashland	230,677	878,163	5,678,991

This amount of property lies chiefly in the hands of farmers, who, although they contribute comparatively but little towards the construction of railroads, supply them with a large amount of business when completed.

The following statement of the production, exports and imports of that district, coming immediately within the range of the line of the road, is based in part upon actual returns, and partly upon estimates based upon evidence collected from authentic sources, viz:

	Raised bu.	Consumed.	Exported.	Tons.
Wheat, corn and other grain	15,000,000	9,000,000	6,000,000	52,000
Barrels of pork, beef, Whiskey, sand, oil, butter, etc.	60,000	20,000	40,000	7,245
Cotton, horses, sheep and hogs	500,000	400,000	100,000	10,000
Pounds wool	600,000	200,000	400,000	200
L'mb'r, stone, limestones, and other articles not enumerat'd				15,000
Imported—Box and bale goods, cotton, groceries, salt, coal, iron, nails, stoves and other castings, machinery, furniture, etc.				25,000
				109,445
				$328,335

Allowing a charge of three dollars per ton upon the amount estimated to pass over the road, viz: 109,445 tons, and we have a revenue from this source of $328,325.

The number of passengers carried on the Cleveland and Columbus railroad for the six months ending Dec. 1, 1851, the first year of its operation, was 101,731. It is believed that at least one-half of this number will pass over the Springfield and Mansfield railroad, when its directness, and the important connections it will make, are taken into consideration. In addition to the above estimate, which is based upon the travel which it is expected will take this route between the Ohio and the lakes, it is calculated that at least 50,000 passengers between Pittsburg and Cincinnati will take this route. The local travel is estimated at 30,000; making in the aggregate 165,000, which, at $3 each, would yield a revenue of $495,000
Estimated income from freight 328,325
$823,325
Working expenses one-half, would leave for net revenue 411,662

The following extract from the recent report of the company shows the amount of corporate subscriptions already obtained, and the connection of of the project with the routes of travel between the eastern cities and Cincinnati:

The entire route of the road, through the valley of the east branch of Mad river, the Darby Plains, the black table lands of Union county, the level walnut lands of Delaware, the valleys of Dry creek and Vernon rivers, and the wheat region of Knox, passes through a district of very rich, beautiful country near the middle of the State, very inviting for the construction of a railroad, and affording a large amount of business. Not to mention the individual subscriptions to the stock of this road, the public subscriptions made and authorised to be made, show ths importance of the road, in the estimation of those who are best acquainted with the line of its location. The line of the road is in an agricultural district, and as already stated, the project was not commenced until the spring of 1851. The public subscriptions are, by Clark county, $60,000, city of Springfield, $20,000, Goshen township, Champaign county, $15,000, Delaware county $50,000, three townships in Delaware county $50,000, Knox county, $150,000.

The distance, by this route, from New York, by way of Philadelphia and Pittsburg to Cincinnati, when the road now in progress of construction shall be completed, may be thus stated: New York to Philadelphia, ninety-four miles, Philadelphia to Pittsburg, three hundred and fifty-four miles, Pittsburg to Loudonville, one hundred and fifty-two miles, Loudonville to Springfield, one hundred and ten miles, Springfield to Cincinnati eigty-four miles, making seven hundred and ninety-four miles, or about one hundred and twenty-one miles less than by the lake shore and Dunkirk route.

The distance from Cleveland to Cincinnati by the above route will be as follows:

Cleveland and Columbus railroad to Delaware	112
Springfield and Mansfield	48
Little Miami	84
	244

Grants of Public Lands for Railroads.

An effort is to be made at the present session of Congress to obtain grants of lands to aid the construction of numerous railroads in the southern and western states. The most important of the projects seeking assistance, are the Pacific, and Hannibal and St. Josephs Railroads, in Missouri; two roads in Iowa; one from Dubuque to Keokuk, and the other from Rock Island to Council Bluff; a road from Lake Michigan to Lake Superior, and the Arkansas Central Railroad from Little Rock to the Mississippi River. We name these, as the lands asked for are contiguous to their proposed lines. There is another class of roads, which will also make application for aid; upon the ground of their great public utility rather than upon the fact that the general government is to be an immediate gainer by their construction.

The argument made use of by the class first named, is this; the general government is the owner of vast bodies of land in the new States; which, at the present time, sell very slowly, on account of their remoteness from settlements, and from markets. Private enterprise has projected railroads through, or in vicinity of these lands, which when opened, will cause them to sell rapidly. The builders of these roads take the ground that if government is to be benefitted by them, it should repay a portion of the advantage thus derived, by contributing something towards their construction, upon the same principle by which the owner of property on a street, is assessed the *benefits* of the widening it, to make good the losses of those who suffer by the operation. The justness of this principle is admitted by all, and is of common application, in the ordinary affairs of life. Were government to be placed in the same category with the citizen, there can be no doubt it would be amenable to this principle. We certainly cannot see why it is absolved from a recognized duty incumbent upon the citizen, simply for the reason that it is composed of the *aggregate* of citizens. To our mind both the advantage and the consequent obligation are indisputable, as far as the roads named, and those similarly situated, are concerned.

The next reason urged for the grants to railroads, is of a general nature. It may be stated thus: the opening of a new route or channel of travel and commerce, is a public advantage, as it reduces to all classes the cost of what each is compelled to purchase, and increases the price of what each has to sell. The Erie Canal may be taken as a good illustration of this idea. Through this great work, produce ane merchandize, of the value of $175,000,000 pass annually. Now there can be no doubt that the people of the eastern states eou'd well afford to pay a sum yearly, equal to the cost of this work, rather than to be without it. So vast has been the influence of this work that it is not too much to say, that the United States would have by no means

been what she is, without it. If it had not been constructed, both the eastern and western states would have been *now*, where they were 20 years ago. A work that has cost some 20 or 30,000,000 has added more than a thousand millions to the aggregate value of the property of the whole country. Now whatever is true of the Erie Canal is true to some extent of every work having a similar object. The only question therefore for government to decide as far as those projects that come within its legitimate action are concerned, is this, will they be of greater public advantage, than the amount of public aid required for their construction? we are opposed to the general government engaging directly in works of internal improvement, or in making appropriations for them out of its treasury, except for those of an extraordinary character such as the railroad to the Pacific; but when the expediency of a railroad is fully established, there certainly can be no objection to aid its construction by a portion of our public domain, the value of which is altogether remote and contingent. By such an act government in no manner involves itself in the transaction beyond the first step, nor parts with any thing but prospective means. The public *loss* in any event must be slight; the gain as we have shown before must be enormous. The country is certainly far better off with the public lands covered with a dense population than it would be, to possess the title to such lands without inhabitants. The revenue derived from the people occupying them, would be much greater than that derived from the sale of the lands in the outset. Every new settler upon our public domain, by the additional demand which he creates, is a direct advantage to every other branch of industry. The policy of government should as far as possible promote the settlement of our wild lands, and the development of our numerous resources. The most effectual way in which to accomplish these objects, which have been yet discovered, has been railroads.

These general statements will be fully admitted. "But" says the eastern man "the advantage is all on one side. The roads which it is proposed to aid, are situated in the western states. They will do me no good, but the proceeds of the lands, by lessening the amount of taxation will." This is a great mistake. The eastern manufacturer and merchant, and in fact the eastern farmer is as much benefitted by the construction of a western railroad as is the western man. In the first place the equipment for the roads are furnished by eastern manufacturers The transportation of the iron gives employment to eastern shipping. The increased population, caused by the road creates an additional demand upon all the various fabrics manufactured in the eastern states, to which so large a portion of its population and capital are devoted. The surplus produce which the road brings to market, gives increased business and profit to the eastern merchant, and diminishes the cost of bread stuffs and provisions to the eastern consumer. What has built up New York and Boston but western trade? where would either of them be now without the railroads and canals which have been constructed for the purpose of opening to them that trade? They sympathise most deeply in every forward step which the west has made. Their commerce could not have existed but for the produce which the west has sent to them for exportation. Their manufactures would never have had an existence but for the demand which has grown up from newly settled portions of the country. The public land of one portion of the country gives food to the other, which pays for it in fabrics, so that labor is just as valuable in the most sterile portions of Massachusetts as upon the richest bottoms of the Mississippi River, and the manufacturer of the latter state is just as much benefitted by the fertile soil of the west as the person who actually cultivates it.

In no way can the interests of the Eastern States be so effectually advanced as by the construction of railroads in every portion of the country. Every new road creates an increased demand for the products of their industry. A railroad in Missouri does this to a much greater extent than one in Masssachusetts or New York. Is it not therefore better for our eastern people that the proceeds of our lands should be applied to railroad enterprises, than frittered away upon useless objects, as they certainly will, if as now, they are left a prey to speculators and politicians.

Which is the Nearest Point on Lake Erie to the Atlantic Cities?

Upon the completion of the Buffalo and Conhocton Valley railroad, the distance of the three cities of Baltimore, Philadelphia and New York from Buffalo will be as follows:—

Baltimore to Buffalo, via Harrisburgh and Williamsport	407
Philadelphia, via Water Gap and Lackawanna railroad	492
New York, via Conhocton Valley railroad	432

From Philadelphia to Erie, by way of Sunbury, the distance is stated to be 427 miles. From Baltimore over the Sunbury and Erie railroad, the distance is 462, showing the distance from Buffalo to Baltimore 55, and from Buffalo to Philadelphia 35 miles less than from any other lake port. It is also believed that the grades on the route from Buffalo to the above cities, by the routes named, are much more favorable than to Erie.

Buffalo is not only the nearest lake port to the Atlantic, but produce from the western part of Lake Erie, and from the upper lakes, can be brought to the former city at better rates than to either Erie or Dunkirk; for the reason that it is now a large city, the terminus of the Erie canal, and the only point from which any amount of back freight can be had. In nine cases out of ten, a vessel unloading either at Dunkirk or Erie, would be compelled to proceed to Buffalo for a return freight. The latter therefore is the most accessible from the seacoast, and for this reason, the favorite and most convenient one for the commerce of the lakes.

Such being indisputable facts, is it not the true policy of Baltimore and Philadelphia to finish the Williamsport and Elmira railroad, and the road from the Water Gap to Scranton; routes which only involve the construction of a small amount of new line, at a comparatively low cost, before attempting the construction of the Williamsport and Erie railroad, a distance of 240 miles, at least, requiring a very large outlay? Buffalo is nearer Williamsport by an equated distance than Erie.

We believe that no important commercial town can grow up between Buffalo and Cleveland. We feel certain that Buffalo will always continue to be the great exporting port for the lakes. Upon the enlargement of the Erie canal, produce will be taken from that city to New York at a cost not much exceeding $2 per ton. This fact forever forbids the idea of a rival for her appropriate business.—Should Baltimore and Philadelphia succeed in securing a railroad to Erie, it would as we have shown, be superseded by a road to Buffalo. Let them strike at once for the great centre of lake trade, and not waste time nor thought upon lines, which shall be found to be failures, as far as their great object is concerned, after they shall be completed.

We would here state that Buffalo is 37 miles nearer New York than Dunkirk, and that it is about as near to go to the latter by way of the former, as to pursue the route of the Erie road from Elmira. We regard this fact as forever settling the question against the probability that the latter can ever become a rival of the former.

Ohio.

Cleveland and Pittsburgh Railroad Company.—The annual meeting of the stockholders of this company was held at Ravenna on the 14th inst., at which a large majority of the stock of the company was represented. The old board of directors was re-elected, as follows.

Zalmon Fitch, Ellery G. Williams, Henry W. Clark, Cleveland; Henry N. Day, James Butler, Hudson; Cyrus Prentiss, John B. King, Ravenna; James Farmer, Salineville; Duncan McDonald, James Stewart, John S. McIntosh, Wellsville; Charles Knap, Jr., Pittsburgh.

At a subsequent meeting of the directors, the below named gentlemen were re-elected officers for the ensuing year:

Cyrus Prentiss, President.
Samuel Foljambe, Secretary.
Wm. Wadsworth, General Treasurer.
Wm. H. Stanley, Local Treasurer, Cleveland.
John S. McIntosh, Local Treasurer, Wellsville.

The re-election of the above officers [says the Portage Co., Whig,] cannot but be received by them as a compliment of the highest character,—as it is an expression of confidence richly deserved by them. The affairs of the company have been conducted to the entire satisfaction of the stockholders.

The board of officers deserve the highest commendation for their untiring exertions to forward the interests of the road, and we are rejoiced to know but a few weeks will elapse before the road is completed to Wellsville.

We are permitted [says the Whig] to take from the report, [not yet ready for publication,] the following figures, in reference to the business of the road for the first nine months ending Jan. 1, 1852. There passed over the road in that time seventy-two thousand, two hundred and forty-five passengers, from which the company received. $56,666 28
For freight 33,382 82

Total $90,049 10

It will be remembered that for some seven months of the time only 38 miles of the road was in operation, from Cleveland to Ravenna, and that the business has been confined almost entirely to that which has accumulated along the line of the road. This is over eleven per cent. on the portion of the road in operation, and about five per cent on its entire length.

New York.

New Road to the Springs.—The Albany Journal states that measures are in progress, and that a meeting will shortly be called, to organize a company to construct a railroad from Cohoes direct to Saratoga Springs, on a line which will make the distance between Albany and the Springs one mile less than from Troy to the Springs by the Rensselaer and Saratoga railroad. The route will be very straight and the grades favorable, and the distance can be run with so much more speed than any other line, as to ensure to the proposed road the bulk of the northern travel and freight.

STATISTICS OF TRAFFIC RETURNS OF RAILWAYS IN THE UNITED KINGDOM;

For Ten Years ending 27th December, 1851.

Compiled by Mr. J. T. Hackett, for "Herapath's Journal."

	Total Receipts.										Average traffic per mile per week.										Mileage.
	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	'51	'50	'49	'48	'47	'46	'45	'44	'43	'42	1851
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	
Jan .. 4	232,005	196,089	169,854	151,112	138,670	119,945	99,513	78,567	70,419	58,878	37	37	38	43	51	57	56	49	46	52	6257
Jan ..11	222,381	189,187	168,987	151,727	132,411	116,084	94,569	80 855	69,052	60,890	36	36	38	44	49	55	53	51	46	51	6257
Jan ..18	225,185	187,800	171,807	150,069	136,884	115,181	97,619	80,992	72,506	64,673	36	36	39	43	50	55	55	51	48	51	6257
Jan ..25	213,212	191,170	172 613	149,910	133 388	115,793	98,346	81,978	74 184	63,974	34	36	39	43	49	55	55	52	49	52	6257
Feb... 1	227,953	197,386	176,890	152,493	143,132	117,818	97,771	83,746	76 079	69 315	36	37	40	44	52	56	54	53	49	55	6257
Feb... 8	224,724	200,583	179,016	151,246	137,675	119,170	99,652	81,007	71 208	57,560	36	38	40	43	50	57	55	51	47	51	6262
Feb...15	226,605	191,855	179,606	151,563	124,384	118,654	94,518	82,644	69,231	63 539	36	36	40	43	45	57	52	51	45	51	6262
Feb...22	224,792	199 218	177,432	153,187	126,879	119 513	96,319	78 246	69,499	66,939	36	38	39	42	46	60	53	48	46	52	6262
Mar.. 1	231,146	208 505	181,525	160 365	138,965	123,128	98,030	80 391	73,348	68,702	37	39	40	44	50	58	54	50	48	51	6262
Mar.. 8	229,986	211,963	185,623	160,267	140,004	121,920	97,437	82,733	75 030	70,194	37	40	41	44	50	58	54	51	49	51	6284
Mar..15	228,949	211,834	184 897	162,600	139,095	126 291	100,661	80,581	76,582	72,857	36	39	40	45	49	60	56	50	50	53	6284
Mar..22	230,510	211,899	187,001	162,435	143,870	123,941	103,235	85,033	78 547	75,993	37	39	41	44	51	58	57	53	52	55	6284
Mar..29	234,245	215,747	191,985	170,296	146,477	126,234	110,212	92,652	80,138	78,874	37	40	42	46	51	60	61	58	51	57	6301
1st quar.	2,951,693	2 613,237	2,330,236	2,027,270	1,783,834	1,563,672	1,287,882	1,069,425	955,823	871,888	471	491	517	568	643	652	715	668	629	682	
April . 5	244,446	227,138	202,569	176,776	156,609	132,091	117,190	100,220	87,041	84,004	39	42	41	48	54	60	65	62	50	61	6301
April .12	249,530	231,865	204 421	173,760	160,482	136,210	115,687	103,051	89,840	81,875	40	43	45	47	55	62	64	64	57	59	6301
April .19	260,996	228,719	203,766	178,711	166,186	143,261	117,085	105,321	91,659	81,441	41	42	44	48	57	66	64	65	59	59	6301
April .26	264,057	231,228	203,218	180,000	162,881	144,650	120,515	106,462	98,630	84 392	42	43	44	51	55	67	66	64	63	61	6301
May . 3	271,404	244,041	210,581	199,315	166,807	139,977	123,622	105,667	95,356	87,176	43	45	46	54	57	64	68	65	61	63	6301
May .10	260,583	235,371	204 591	193,820	167,194	146 296	129,395	102,490	93,611	89,707	41	43	44	52	56	66	71	62	59	65	6316
May .17	271,515	248,390	232,250	192,250	169,318	144,618	150,194	103,316	91,526	89,502	43	45	43	51	57	65	83	62	58	67	6316
May .24	280,212	271,722	222,170	197,200	179,010	142,335	131,031	111,982	89 976	97,666	44	50	48	52	60	64	72	67	57	72	6316
May .31	279,351	255,850	236,700	191,643	193,321	154,053	127,760	120 926	99 534	80 232	41	46	50	50	64	70	70	72	63	63	6316
June . 7	298,671	250,910	223 330	198,936	181,882	171,643	129,768	116,446	99,411	91,150	47	46	48	52	60	78	71	69	69	63	6321
June .14	314,501	251,178	220,200	218,156	166,678	154,935	140,690	114 829	102,688	92,765	50	46	47	57	55	69	77	68	65	65	6321
June .21	307,492	265,357	226 482	208,540	177,027	155,768	142 893	118,977	103,364	81,773	49	48	48	54	55	70	78	70	86	63	6321
June .28	327,175	270 834	232 314	208,235	184,574	156,341	137,800	118,225	103,379	92,427	52	49	49	54	58	70	71	69	65	64	6351
2d quar.	3,629,933	3,214.903	2,792,592	2,526,342	2,231,909	1,922,178	1,684,630	1,425,113	1,246,015	1,134,110	575	588	600	670	743	871	920	849	792	825	
July.. 5	319,402	259,172	229,066	206,211	189,192	162,301	140,336	118,843	107,755	84 217	50	46	49	53	59	68	76	70	68	63	6351
July..12	325,750	280,853	240,315	224,103	189,623	161,177	144,312	124,888	112 345	103,542	51	49	50	57	59	67	76	69	71	71	6351
July..19	338,154	277,949	243 539	222,326	195,407	173,216	154,131	130,807	112,704	100,081	53	48	51	56	61	73	80	73	71	70	6351
July..26	337,822	280,242	241,557	234,206	201,707	173 341	158,609	140,554	111,164	101,708	53	48	50	58	63	72	80	78	70	71	6368
Aug.. 2	351,639	293,607	262,573	237,899	212 514	177,358	158,735	139,056	112,859	109,440	55	50	54	59	66	73	81	77	71	77	6368
Aug.. 9	355,840	296,675	259,300	222,814	216,276	177,635	162,433	142 059	116 944	103,001	55	51	53	56	67	73	80	79	74	72	6470
Aug..16	353,197	298,437	249 070	225,916	210,027	174,237	152 684	133,120	112,617	94,131	55	50	51	56	65	71	80	74	71	69	6470
Aug..23	343,054	286,185	245 571	222,101	213,755	177,389	155 286	135,090	111,235	90,590	53	48	50	55	66	73	76	75	70	66	6470
Aug..30	339,690	288,833	245,884	227,050	207,888	175,808	149,441	137,951	110,685	96,247	53	49	50	56	63	72	73	76	70	75	6471
Sept.. 6	335,165	291,191	240,601	237,241	212 143	181,823	156,428	134,430	108,693	95 351	52	49	49	57	64	74	77	76	68	67	6471
Sept..13	337,259	286,954	233 855	233 100	209 571	180,352	153,288	128,658	112 132	103,403	52	48	47	56	62	72	75	73	71	69	6471
Sept..20	339,250	283,751	230,600	233,050	207,634	183,962	153,079	128,165	109,717	95 523	52	47	46	56	61	73	75	72	69	64	6481
Sept..27	336,071	283 699	230,910	220 956	204,402	174,146	149,040	131,170	109,745	96,778	52	47	46	52	60	73	73	74	69	65	6488
3d quar.	4,412,293	3,707,548	3,152,841	2,947,066	2,670,139	2,272,745	1,987,805	1,720,905	1,448,695	1,274,017	686	630	646	727	816	934	1002	966	913	899	
Oct .. 4	333,481	279,628	223,973	221,196	210,609	175,612	145,276	128 364	106,610	96,179	51	46	45	52	62	70	71	72	67	65	6488
Oct ..11	347,457	272 861	233,907	222,013	199,393	167,374	145,651	128,135	108,192	94,740	54	45	47	52	58	66	71	72	68	64	6491
Oct ..18	305,485	269,911	229,017	211,547	194,773	163,655	148 509	118,533	103,942	90 379	47	44	46	49	57	64	73	66	66	60	6498
Oct ..25	279,786	258,757	221,746	201,925	188,087	155,350	143 530	113,977	98,459	84,217	43	42	44	47	55	60	70	64	62	56	6498
Nov.. 1	271,887	250,795	217,521	197,657	180,805	154,692	142,946	109,047	93,903	86,776	42	41	43	45	53	60	70	61	59	57	6498
Nov.. 8	261,800	245 523	209,607	190,401	175,406	150,642	132 023	101,408	86 949	77,861	40	40	42	44	51	58	65	57	55	51	6498
Nov..15	258,560	239,848	198,651	185,876	164,947	142,611	124,962	99 012	84,640	76,827	40	38	39	43	48	55	61	56	55	51	6498
Nov..22	249,150	229 267	196,632	177,149	164,003	138,000	120,234	97,330	81,134	73 058	38	35	38	41	48	53	54	55	51	49	6537
Nov..29	247,100	229,842	197,962	178,883	159,604	133 259	123 218	97,323	77,107	76,028	38	35	39	41	47	51	60	55	49	48	6537
Dec .. 6	246,380	224,043	192,820	179,161	155,486	132,126	117,540	94,394	81,773	74,455	38	35	37	41	45	51	58	54	52	49	6537
Dec ..13	252,200	233,268	199,580	183,036	153,127	133,706	117,023	95,690	84,977	76,783	39	38	39	42	45	51	57	54	54	51	6537
Dec ..20	258,210	244,194	218,123	209,218	161,407	136,918	124 057	108,044	102,610	87,118	40	39	42	48	47	53	61	61	55	58	6537
Dec ..27	262,490	243,360	198,596	200,236	181,142	147,331	124,438	104,270	81,646	70,919	41	39	38	46	52	56	61	68	51	48	6537
4th quar.	3,573,989	3 222,297	2,728,138	2 558,328	2 289,789	1,931,279	1,708,907	1,395 539	1,191,942	1,061,766	551	518	539	591	368	748	832	795	752	707	
Total...	14 567,908	12 757 985	11,603,807	10,059 006	8,975 671	7,689 874	6,669,224	5,610,982	4,842 475	4,341,781											

The above table shows a considerable increase in the traffic returns of railways in the United Kingdom during the past ten years. The increase has been above one million a year. In the year 1851, 1842, the receipts amounted to £4,341,781, and in to £14,567,910, making an increase in the annual receipts of £10.226.139 over those of 1842, at an additional cost of £176,795 000. The table includes all the weekly returns which have been published, but not the traffic of all the railways in the United Kingdom. Among the new railways of which the traffic is not published, are the Ambergate, 24 miles; the Cork and Bandon, 20 miles; the Cockermouth and Workington, 8¼ miles; Caledonian and Dumbartonshire, 8 miles; the Buckingham shire, 53 miles, the East and West India docks, and Birmingham Junction, 6 miles, Newry, Warrenpoint, and Rostrevor, 5¼ miles; Newmarket, 27 miles; Stirling and Dunfermline, 17 miles; South Staffordshire, 30 miles; Waterford and Kilkenny, 12½ miles; Whitehaven and Furness, 35 miles; total, 203 miles; and upon which about £4,747,900 has been expended.

The old companies who do not publish their traffic returns are, the Ardrossan, 12 miles; the Bodmin and Wadebridge, 14½ miles; the Liskeard and Caradon, 8¼ miles; Llannelly, 23½ miles; Preston and Longridge, 6½; Llynvi Valley, 17½ miles; St. Helen's, 11½ miles; Stockton and Darlington, [including Wear Valley, 43 miles; Middlesborough and Redcar, 8 miles] 89 miles; total, 188½ miles, upon which £2,918,285 has been expended. The unpublished traffic receipts of the new lines amount to about £169,400 and of the old lines to £250,000, making together £419,400. This sum added to the £14,567,910 in the above table, would show that £14,987.310 had been received on the railways in Great Britain during the year 1851. The aggregate length of railway being 6,928 miles, and the average receipts per mile about £2,163 per annum. The cost of construction of the 6,928 miles amounted to £236,841,420, being £34,186 per mile.

According to the above table, the additional mileage opened in 1843 was 56 miles, in 1844, 194 miles; in 1845, 263 miles; in 1846, 593 miles; in 1847, 839 miles; in 1848, 975 miles; in 1849, 835 miles; in 1850, 1078 miles, but the latter include 487 miles which were open in 1849, but the traffic returns were not published until 1850. The mileage added to the returns, during the year 1851, including that of some old lines, was 299 miles.—This shows a falling off in respect to the mileage of new lines, but the effect has been to increase the amount of the average receipts per mile per annum; and this would be the case generally with all the large railway companies, provided they had the moral courage to close their capital accounts, to attend to the development of their traffic, and abstain from making any further new lines or extensions. There does not appear to be any ground for complaint in respect of the aggregate amount of traffic on railways in the United Kingdom since they have been established. And were it not for the adverse interests operating at railway boards, the blunders of engineers as to the value and cost of works, the letting of large contracts by private agreement at excessive prices, exorbitant payments for land, the continual litigation and parliamentary warfare, and the unwarrantable expenditure on capital account, the receipts would have been ample to pay a very fair dividend on the outlay.

The annual increase of traffic has been very considerable, partly arising from the further development of traffic on the trunk lines, and partly from the additional receipts derived from the opening of new lines and branches. The increase of traffic in the year 1843 over that of the preceding year amounted to £500,874; in the year 1844, to £768,337; in 1845, to £1,058,342; in 1846, to £1,020,650; in 1847, to £1,285,797; in 1848, to £1,083,335; in 1849, to £942,000; in 1850, to £1,744,168; and in 1851, to £1,809,925.

The average traffic receipts per mile per annum, were as follows:—For 1842, £3,118; for 1843, £3,085; for 1844, £3,278; for 1845, £3,469; for 1846, £3,305; for 1847, £2,870; for 1848, £2,556; for 1849, £2,302; for 1850, £2,227; and for 1851, £2,283.

The amount of capital expended on the railways referred to in the table up to July, 1842, was £52,380,100; in 1843, £57,635,100; in 1844, £63,489,100; in 1845, £71,646,100; in 1846, £83,165,100; in 1847, £109,528,000; in 1848, £148,200,000; in 1849, £181,000 000; in 1850, £219,762,730; and in 1851, £229,175,235.

The average cost of the railways in operation per mile would appear to be, in 1842, £34,690; in 1843, £36,360; in 1844, £35,670; in 1845, £35,070; in 1846, £31,860; in 1847, £31,709; in 1848, £34,234; in 1849, £35,214; in 1850, £35,229; and in 1851, £35,058. The most unsatisfactory feature in railway statistics is that of the average cost per mile, which has increased to a considerable extent on some lines, while on the whole it has not diminished, notwithstanding that many comparatively cheap lines have been added to the system since 1842, at which time the average cost was £34,690 per mile, and the average receipts for traffic during that year was £3,113 per mile, while in 1851, the average cost was £35,058, per mile, and the receipts from traffic, notwithstanding the Great Exhibition did not exceed £2,283 per mile.

Until the capital accounts of the old and completed railways are closed, the average cost per mile will go on from year to year gradually increasing, and the result will be to increase the riches and importance of certain lawyers, engineers, contractors, and landowners, and to reduce the dividends of the shareholders until they become small indeed. The influence of railway shareholders over their property will decline in proportion as amalgamations and new lines increase, and if they continue to neglect their duty—the positive closing of their capital accounts—they will have only themselves to blame for the gradual confiscation of their capital and revenue.

Ohio.

Akron Branch Railroad.—This road, which branches off from the Cleveland and Pittsburg railroad at Akron, was opened for travel as far as Cayahoga Falls on the 1st inst.

Virginia.

New Railroad Movement.—The Wheeling Times of the 7th instant contains the proceedings of a meeting of the citizens of Marshall county, Virginia, held December 26th, for the purpose of considering the proposed grant, by the present Legislature of Virginia, of an act authorising the construction of a railroad from Piles's Fork, on the line of the Baltimore and Ohio railroad, to the Ohio river at New Martinsville, Wetzel county, by way of the waters of Fishing creek.

The route proposed offers the *shortest*, and its friends say, much the best connection, between the eastern terminus of the Cincinnati and Marietta railroad, and the line of the Baltimore and Ohio railroad. The nearest and best way to the *connecting link* going eastward from Athens, is directly through Marietta. A line from Athens to the Baltimore road, at Piles's Fork, through Marietta and by the way of the valley of Fishing creek, is some twenty miles *shorter*, than the line from Athens, to the Baltimore and Ohio railroad, at Three Forks, through Parkersburg.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Sixth Avenue Railroad Company.

This company having duly organized under the general railroad law of the State, books of subscription to 2,500 shares of $100 each of the capital stock, (35 per cent to be paid thereon,) will be open at the office of Gilbert & Johnson, 52 Wall st., on the 22d inst., and for ten days thereafter.

D. P. BARHYDT, Secretary.

New York, Jan. 20th, 1852.

DIRECTORS.

James S. Libby,	George R. Howell,
Wm. Flagg,	Wm. Ebbitt,
H. A. Johnson,	Wm. W. Gilbert,
Isaac Seymour,	Wm. H. Anthon,
D. P. Barhydt,	S. S. Bowman,
Wm. P. Libby,	John C. Howell.

James Dusenbury.

President—James S. Libby.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,

Jan. 22, 1852. No. 9 Liberty Square, Boston.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Colum-

bia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.

By his Attorney, G. M. KNEVITT.

New York, 1851.

Railroad Iron.

2000 Tons of Guest & Co. make (GL) weighing about 58 lbs. per yard, to arrive at New York during April and May, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich St., New York.

Also for sale—

430 Tons Rails, weighing 61 lbs.			
475	"	"	53½ "
50	"	flat	2½x½.

To Contractors.

IN gross, will be received until the 25th day of January, 1852, proposals for the grading and entire construction of the Ohio and Indiana Railroad, extending from Crestline, the point on the Cleveland and Columbus Railroad where the Ohio and Pennsylvania railroad terminates, to Fort Wayne, Ind., 131 miles long.

The location, stock subscription, and releases, are in condition to warrant an early commencement and vigorous prosecution.

This road is the third link in the great chain of roads from Philadelphia to Chicago.

W. MERRIMAN, Pres't.

Bucyrus, Ohio, Dec. 25, 1851.

To Civil Engineers and Contractors.

THE advertiser, an Engineer recently from England, is desirous of an engagement, having been employed on some of the principal lines in that country and France. Satisfactory testimonials from parties in England and America. Address A. B., at the Railroad Journal office.

January 1, 1852. 1m*

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.

Winter Arrangement.



The Passenger Trains will run as follows until further notice:

TRAINS GOING EAST.

Leave LaPorte, 7·30 a.m., White Pigeon, 10·40 a.m., Adrian, 3·10 p.m.

Arrive at Toledo and Monroe, 5·45 p.m.

TRAINS GOING WEST.

Leave Monroe and Toledo, 8·15 a.m., Adrian, 11 a.m., White Pigeon, 4 p.m.

Arrive at LaPorte, 6·30 p·m.

E. P. WILLIAMS, Sup't.

Adrian, December 22, 1851.

Straughan, J. R.,
Ohio and Indiana Railroad, Bucyrus, Ohio.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING
OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

American Lap Weld Iron Boiler Flues.

MANUFACTURED by the Reading Iron Tube and Boiler Flue Works, from 1¼ to 7 in. diameter, and in lengths to eighteen feet, made from the best Pennsylvania refined cold blast charcoal iron, and equal in finish to any imported. Also made to order a but welded flue with patent lap welded ends, and when preferred they will be finished with a screw and ferrule on the ends. All the above will be made of any thickness of iron ordered. Also, welded wrought iron Tubes for water, steam and gas. Extra heavy tubes made to order, for sale by our agent, A. B. Wood, 23 Platt street, New York, and Samuel Griffiths No. 15 North 7th street, Philadelphia, or at our works.

SEYFERT, McMANUS & CO.,
January 3d, 1852. Reading, Pa.

THE FIFTH EDITION OF
NEW YORK:
Past, Present and Future,
BY E. PORTER BELDEN, M. A.,

HAS been issued, by PRALL, LEWIS & Co.—We have made arrangements by which we have bound, and will continue to bind with each Edition of the above, the

AMERICAN ADVERTISER,
A Reference-Work for Purchasers,

Containing the Cards of Merchants and Manufacturers in every line of business. Price, including both of the works, 25 cents and upwards.

STURGES ON THE GAME OF DRAUGHTS,
Second American Edition. Price, in muslin, 75 cents—in paper 50 cents.

The Cheapest Almanac of the Season!

AMERICAN COMMERCIAL ALMANAC, 1852,

Containing, besides the Astronomical matter, numerous statistical details relative to the government, judiciary, population, resources and commerce of the Union, all the details of inland and foreign postage, and the *Constitution of the United States* in full, the latter of which alone usually sells for twice the price of the Almanac. Price 6¼ cents single, $4 per hundred, $35 per thousand.

PRALL, LEWIS & CO., Publishers,
76 Nassau street, N. Y.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

New England Car Spring Co.,

No. 104 Broadway, New York,

MANUFACTURERS OF

INDIA RUBBER CAR SPRINGS &

HOSE,

Of F. M. Ray's improved form, and dealers in every description of Rubber Goods for Railway purposes.

All Goods manufactured by this company are warranted of the best materials, and the same composition which has estnblished the reputation of F. M. Ray's India-rubber Car Springs.

F. M. RAY, Agent.

Railroad Iron.

THE undersigned offer for sale 1000 tons Railroad Iron, (about 56 lbs. to the yard,) now at Brooklyn.

CHOUTEAU, MERLE & SANFORD,

Oct. 1, 1851. 51 New st.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

PREMIUM

RAILROAD CAR SPRINGS,

AND OTHER

India-rubber Goods.

TWO Prizes were awarded me last month by the American Institute—one for *best Car Springs*, the other for *best Overshoes*. This proves the superiority of the Goods made by me.

HOSE and STEAM PACKING, and all other India rubber goods for Railroad purposes, on hand and for sale cheaper than any other house.

Car Springs, 50 cents per lb. for cash—of the best quality and of all sizes, (Fuller's patent.)

I now give notice that Fuller is the original and true inventor of the India-rubber Spring, and companies who use Springs made by other parties will eventually have to pay me damages. H. H. DAY,
23 Courtlandt st., New York.

Inventor and owner of 17 I. R. Patents, and the oldest Manufacturer of India-rubber in the U. S.

December 6, 1851.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Civil and Mining Engineers and Surveyors.

A YOUNG MAN having lately completed an engagement of six years with an eminent Civil and Mining Engineer in Scotland, is desirous of a situation in that capacity. Has had considerable experience in the mines of Scotland, and is in possession of all instruments necessary for land and mining surveying. Address A. S, care Mr. D. H. Arnot, 50 Wall St., N. Y.

Dec. 13th. 1m*

Railroad Iron.

2000 TONS of an approved pattern 59 to 60 lbs. per lineal yard, now manufactured in England, and ready for immediate shipment, from thence.

Also, 2,500 tons of different patters in port and expected to arrive within sixty days. For sale by

DAVIS, BROOKS & Co.
28 Beaver Street, New York.

CONTRACTS made for Railroad Iron at a specific price delivered in England, or at port in the United States.

TO FOUNDRYMEN, AND Contractors for Iron Castings.

THE Proprietor of the Rossie Furnace, St. Lawrence County, N. York, having lately erected at their works a Casting House 125x75, with suitable Cupolas, Cranes, etc., and a Machine Shop, furnished with a considerable stock of tools, and a water wheel of 30 horse power—the whole carried out in the most substantial manner—offers the use of these premises, in connection with the sale of Rossie Iron, to manufacturers and contractors for castings and machinery.

There are 2000 tons of hot and cold blast iron now at the works, any part of, or more than which, might be contracted for in connection with the above; and as liberal terms of credit would be extended to parties offering satisfactory security, it is supposed that the conditions contemplated may present no ordinary advantages to persons desirous of a large business on a limited capital.

It may be useful to add that the Cold Blast Iron made at these works is of a very superior quality for Car Wheels.

Rossie is 6 miles from the River St. Lawrence, and connected by a good Plank road all but 1 mile. For further particulars, apply to D. W. Baldwin, Agent, at the works, or at the office of the subscriber, Ogdensburg, St. Lawrence Co., N. Y.

G. PAIRSH.

December 20, 1851. 6t*

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the Importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

LOWMOOR IRON.

THE *LOWMOOR* IRON COMPANY having appointed WM. BAILEY LANG their sole agent in America and Canada, he is now prepared to receive and execute all orders for Railway Tire Bars, bent, welded, and blocked Railway Tires, Axles, Piston Rods, and Boiler Plates. Also, plain, angle, rivet and every other description of Lowmoor Iron.

All communications respecting the above are requested to be sent to Wm. Bailey Lang, at his Steel Warehouse, No. 9 Liberty Square, Boston, or to the Lowmoor Iron Works, Bradford, Yorkshire, England. 30th Sept., 1851.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Stone Masons.

THE NEW ALBANY AND SALEM RAILroad Company have about 10,000 c. yards of Abutment Masonry to let at private contract, to be completed by the 1st of July, 1852.

To contractors who can produce testimonials of character for ability as STONE MASONS, fair, remunerating prices will be given.

Early applicants, by securing the work now offered, will gain advantages over competitors for the erection of an additional 15,000 yards, to be let out early next spring, in bridging the streams between Bedford and Michigan City, via Bloomington, Gosport, Crawfordsville and Lafayette, (the most productive and healthy region in Indiana,) by the knowledge they will have acquired of the resources of the country.

Application may be made in person, or by letter addressd to the undersigned, at New Albany, Indiana. S. B. WILSON, Engineer.

Engineer's Office, New Albany, Sept. 29th, 1851.

To Chief Engineers, Directors of Railroads, Canals, etc.

A Civil Engineer and Surveyor, who has been professionally engaged under the British Government, East India Company, etc., is desirous of obtaining employment as an Assistant. No objection to the South or West. Address for one month to C. E. & S., American Railroad Journal office.

August 16, 1851.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Iron.

THE undersigned, Agents for British Manufacturers, continue to sell Railroad Iron of the best quality, and of any weight or pattern required; deliverable at any part of the United States or Canada.

They have now on hand, ready for delivery New York:

2,000 tons of an approved pattern, weighing about 60 lbs. to the yard.

WM. F. WELD & CO.,
42 Central Wharf, Boston.

To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address

J. B. GRAY, Philadelphia.

July 10, 1851. 4m

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,

Sept. 30, 1851. No. 51 New st.

THE NEWCASTLE MANUFACTURING Co continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack Screws, Wrought Iron Work and Brass and Iron Castings, of all kinds connected with Steamboats. Railroads, etc.; Mill Gearing of every description; Cast Wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

Practical and Scientific Books

PUBLISHED BY

HENRY CAREY BAIRD,

SUCCESSOR TO E. L. CAREY, PHILADELPHIA.

For sale by Dewitt & Davenport, Tribune Buildings, New York, and Booksellers generally throughout the United States and Canada.

Now being published in Twelve Parts, price 25 cents each, the PRACTICAL MODEL CALCULATOR, for the Engineer, Machinist, Manufacturer of Engine work, Naval Architect, Miner and Millwright.—By Oliver Byrne, Compiler and Editor of the Dictionary of Machines, Mechanics, Engine Work and Engineering, and Author of various Mathematical and Mechanical works—illustrated by numerous Engravings; forming, when completed, one large volume, octavo, of nearly 600 pages.

It will contain such calculations as are met with and required in the Mechanical Arts, and establish models or standards to guide practical men. The tables that are introduced, many of which are new, will greatly economise labor, and render the every-day calculations of the *practical man* comprehensive and easy. From every single calculation given in this work other calculations are readiiy modeled, so that each may be considered the head of a numerous family of practical results.

The examples selected will be found appropriate, and in all cases taken from the actual practice of the present time. Every rule has been tested by the unerring results of mathematical research, and confirmed by experiment, when such was necessary.

The Practical Model Calculator, will be found to fill a vacancy in the library of the practical working man long considered a requirement. It will be found to excel all other works of a similar nature, from the great extent of its range, the exemplary nature of its well selected examples, and from the easy, simple and systematic manner in which the model calculations are established.

Parts 1, 2 and 3 now ready.

American Miller and Millwright's Assistant, By W. C. Hughes. 12mo., illustrated... $1 00
Byrne's Practical Model Calculator. In 12 parts, each 25
Byrne's Treatise on the American Steam Engine. 8vo, [in press] .....
Booth's Encyclopedia of Chemistry. In one vol. royal 8vo, 974 pages, sheep 5 00
Builders' Companion. By A. C. Smeaton.—Seventy illustrations, 12mo., cloth..... 1 00
Cotton Spinner and Manufacturers' Companion. By Scott and Byrne. In one vol. 8vo., cloth, with large working drawings 3 50
Cabinet Maker and Upholsterer's Companion. 12mo., cloth 75
Dyer and Color Maker's Companion. 12mo., cloth 75
Elwood's Grain Tables. A new edition, in one vol. 12mo., cloth 1 00
Encyclopedia of Useful Knowledge. 8vo., illustrated 5 00
Fisher's Photogenic Manipulation. 16mo., cloth 62
Gregory's Mathematics for Practical Men. Illustrated, 8vo., cloth..... 1 50
Household Surgery, or Hints on Emergencies. By J. F. South, M.D. 12mo., cloth 1 25
Leslie's Complete Cookery. 41st edition, 12 mo., sheep 1 00
Morfit's Perfumery: its Use and Manufacture. 12mo., cloth 1 00
Morfit's Treatise on Tanning, Currying, and Leather Dressing in General. In one vol. large 8vo., [in press] .....
Norris' Hand-book for Locomotive Engineers. By Septimus Norris. 12mo., cloth..... 1 50
Neill's Fruit, Flower and Kitchen Garden. Illustrated by numerous plates, 12mo. cloth. 1 25
Overman on the Manufacture of Iron and Steel. Illustrated, 8vo., cloth, new edition. 5 00
Practical Metal Workers' Assistant. By C. Holtzappfel, with numerous illustrations, 8vo., cloth..... 4 00
Painter, Gilder, and Varnishers' Companion. New edition, 12mo., cloth..... 75
Randall's Sheep Husbandry in the South. Illustrated, 8vo., cloth..... 1 25
Steam for the Million. 8vo., paper..... 37

Best Cast Steel Axles & Tires,

(A NEW ARTICLE,)

For Railroad Carriages and Locomotives.

THE quality of this Steel is sufficiently attested in the announcement that it has carried off the first prizes awarded at the World's competition of 1851, in London. The axles are in general use on the Continent, and are now offered in competition with any other that can be produced; and to be tested in any way that may be desired by the Engineers of the United States, either by impact or by torsion. This Steel is manufactured by Fried Krupp, Esq., of Essen, in Renish Prussia, represented in the United States by

THOS. PROSSER & SON,
28 Platt st., New York.

November 1.

To Railroad and Canal Companies, Contractors, etc.

THE Undersigned wishes to direct the attention of Chief Engineers and Contractors to the facilities he possesses for supplying them wit workmen, laborers, etc. of any description, and also to remind them that he forwards such men to whatever destination they may be required.

Companies or Contractors desirous of receiving peaceable and industrous men, will be promptly supplied at the shortest possible notice.

C. B. RICHARDS,
No. 85 Greenwich Street, New York.

REFERENCES :—Chas. H. Webb, Esq., Supt. of the St. George's and British Protective Society, New York; Messrs. Harris and Leech, Philadelphia, Wm. P. Malburn, Esq., Albany.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Trautwine on R. R. Curves.

By JOHN C. TRAUTWINE, Civil Engineer,
Philadelphia, Pa.

JUST published, accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by Wm. Hamilton, Actuary of the Franklin Institute, Philadelphia. Price $1.

Also, "*Trautwine's Method of Calculating Excavation and Embankment.*"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidity, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, $1. For sale by Wm. Hamilton.

June 28, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

Bridges & Brother,

DEALERS IN

RAILROAD AND CAR FINDINGS,

64 Courtlandt street, New York.

Having established a general Depot for the sale of articles used in the construction of Railroads, Locomotive Engines and Railroad Cars, we would invite your attention to our establishment. We have already in store a good assortment of CAR FINDINGS and other articles used in the trade, and feel justified in saying, that should you desire anything in our line, we can supply on terms perfectly satisfactory, and in the event of your desiring to order, you may feel assured that your terms will be as good as though you were here to make your own purchases.

Among our goods may be found Railroad Car Wheels, Axles, Jaws and Boxes, Nuts and Washers, Bolts, Brass Seat Hooks and Rivets, Window and Blind Springs, Lifters and Catchers, Door Locks, Knobs and Butts, Ventilators and Rings, Car Lamps, Coach and Wood Screws, Jack and Bed Screws and Babbitt's Metal; also Plushes, Damask, Enameled Head Linings, Cotton Duck for Top Covering in width sufficient without seams, Curled Hair and all other articles appertaining to cars.

Also a new and valuable CAR DOOR LOCK, well adapted to the Sliding Door. This is decidedly the best yet introduced.

LOCOMOTIVE ENGINE LANTERNS, the best article made in the country. Whistles, Gauge and Oil Cocks, Hemp Packing, American, Russian and Italian. We are also agents for Lightner's Patent Journal Box for Car Axles, that invaluable invention, for the economical use and preservation of Car Journals.

Coach VARNISH and Japan of the best quality.

We would also offer our services for the purchase as well as for the sale of goods on commission.—Both members of our firm have had the experience of many years in the manufacture of Railroad Cars, and our Senior was a member of the well known house of DAVENPORT & BRIDGES, Car Manufacturers, Cambridgeport, Mass. With our knowledge of matters pertaining to Railroads, we feel quite confident in giving satisfaction to both buyer and seller, and hope that through assiduity and attention to any business entrusted to our care we shall merit a continuance of confidence and patronage.

BRIDGES & BROTHER.

July 22, 1851.

To Railroad Car Builders and Manufacturers Generally.

THE Cincinnati, Hamilton and Dayton Railroad Company, at Cincinnati, have ten acres of land adjoining the City and near the Ohio River—their Road running through its center—which they will lease for a term of years, or perpetually, for the establishment of a Car Manufactory, or for any purpose connected with the furnishing of Machinery for Railroads.

The Company have at their Depot grounds, at Cumminsville, about five miles north of the city, six acres of land, eligibly situated for a variety of Manufacturing purposes, which they offer for lease on advantageous terms.

They have, also, on the line of their Road, in the town of Hamilton, 25 miles north of the city, about forty acres of land, situated on the Hamilton Hydraulic Works, where a Water Power can be displayed advantageously, and the same had on favorable terms. This property is also eligibly situated for Manufacturing purposes, and will be *sold or leased* on accommodating terms.

The above described property is admirably situated for the successful prosecution of the objects referred to, connected as the Road passing through it is with other Railroads built and building into Western and Northern Indiana, and Northern and Eastern Ohio; and the first described land lying near the line of the Cincinnati and St. Louis Railroad.

To skilful and enterprizing Car Builders, possessing sufficient capital for the prosecution of that business, the inducements are peculiarly flattering.

For further particulars address, at Cincinnati,

S. S. L'HOMMEDIEU,
Pres't C., H. and D. R. R.

Dec. 9th.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 5.] SATURDAY, JANUARY 31, 1852. [WHOLE No. 824, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Southwestern Railroad Convention.....65
Railroads in Virginia—Letter of Col. Garnett..66
Terre Haute and Richmond Railroad.....72, 67
Cleveland and Pittsburg Railroad.....72, 68
Atlantic and St. Lawrence Railroad.....69
New York Railroad Returns.....69
Steam Marine of the United States.....70
Hannibal and St. Joseph Railroad.....71, 70
Commerce of the New York Canals.....71
Alabama and Mississippi Railroad.....71
Influence of Railroads upon the value of Property.....71
Albany and Schenectady Railroad.....71
India Rubber Springs.....72
Erie Railroad.....72
Boston and Worcester Railroad.....72
Stock and Money Market.....73
Northwestern Railroad.....74
Railroad Accidents.....74
Railroads through Central Tennessee.....76
West Chester and Philadelphia Railroad.....76
Madison and Indianapolis Railroad.....76
Ohio and Pennsylvania Railroad.....77

American Railroad Journal.

Saturday, January 31, 1852.

New Orleans and Southwestern Railroad Convention.

We gave in our paper of the 17th instant, a notice of the first day's proceedings of the great southwestern railroad convention. We did not receive a report of the subsequent day's proceedings in season for our last, and as so long a time has now elapsed since its adjournment, we must now content ourselves with a brief notice of its doings, intending to refer to the subject again, when we receive the full report, which we presume will be shortly published.

Upon the permanent organization of the convention, the more important business was referred to three committees, which were constituted as follows:—

Committee on Roads.—Virginia, G. N. Burwell, Dr. James McDowell, Windham Robertson: Mississippi, R. S. Glandney, E. L. Ace, J. W. Vick; Texas, J. T. Mills, C. C. Alexander, H. G. Collett; Arkansas, Albert Pike, John Martin, A. Fowler; Missouri, H. Couteau, P. R. McCreary, Edward J. Gay; Kentucky, William Soery, J. N. Beadles; Alabama, P. J. Weaver, L. B. Goldsby, G. P. Biernis; Tennessee, J. H. Otey, L. J. Polk, J. A. Porter; Louisiana, [W. S.] Campbell, L. G. De Russey, B. H. Payne; Florida, W. J. Keyser, J. M. Landren, J. Forsyth.

Committee on Ways and Means.—Virginia, same as routes; Texas, A. Morrill, J. P. Allen, T. G. Wright; Mississippi, Shep'd. Brown, Samuel White, H. G. Street; Arkansas, Luther Chase, G. D. Ferguson, R. H. Settoon; Missouri, W. C. Kennett, R. A. Barnes, R. J. Lockwood; Kentucky, William Soery, J. N. Beadles; Alabama, P. J. Weaver, J. W. Lapsley, J. P. Parham; Tennessee, L. S. Polk, J. A. Porter, A. Heiman; Louisiana, James Robb, H. Phillips, J. P. Benjamin; Florida, Joseph Forsyth, W. J. Keyser, J. M. Landren.

Committee on Resolutions.—Mississippi, J. S. Yuger, H. G. Street, R. A. Johnson; Virginia, same as routes; Texas, J. T. Mills, T. G. Wright, H. G. Callett; Arkansas. Albert Pike, John Martin, S. C. Faulkner; Missouri, William Wade, Franklin Chiles, D. J. January; Kentucky, William Soery, J. N. Beadles; J. W. Lapsley, W. T. Burr, J. B. Parham; Tennessee, George W. Polk, J. H. Otey, A. Heiman; Louisiana, M. M. Cohen, A. Deschamp, J. H. Overton; Florida, J. M. Landren, W. J. Keyser, J. Forsyth.

The committee on routes reported through its chairman, Wm. M. Burwell, Esq., of Virginia, the following system of internal improvement as indispensable to the developement of the agricultural, commercial and mineral wealth of the Southwestern States and cities; also as essential to the equality and unity of the States of this confederacy; and they earnestly recommend the same to the patriotic consideration of the Legislatures and citizens of the Southwestern States.

1. A national road to the Pacific ocean; with one terminus on the Mississippi river north and one south of the mouth of the Ohio river, so as to divide the advantages of each road as equally as possible among the different States of the Union.

2. The Southwestern National railroad, from Washington City, to New Orleans, passing thro' the States of Virginia, Tennessee, Alabama and Louisiana, constituting the shortest practicable line of mail and travel transit and consisting of the following continuous sections now under consideration, to wit:—

The Richmond and Lynchburg railroad, the Virginia and Tennessee road, the East Tennessee and Virginia road, the Georgia and Alabama road, the Alabama and Tennessee River road, the Selma and Jackson road, the New Orleans and Jackson road.

3. For Kentucky.—The Memphis and Louisville road, the Louisville and Nashville road.

4. For Tennessee.—The Memphis and Louisville road; the Memphis and Charleston road; the Louisville and Nashville road; the Nashville and Southwestern road; and the roads embraced in the National route, above referred to.

5. For Alabama.—The Mobile and Ohio road; and the roads embraced in the National route referred to.

6. For Georgia and Florida.—The Gulf road, or a continuation of the Southwestern road of Georgia to Pensacola Bay; the Florida and Pensacola road.

7. For Mississippi.—The Mobile and Ohio road; the New Orleans, Jackson and Nashville road; and the New Orleans, Holly Springs and Ohio road; the Vicksburg and Jackson road, extended by Brandon eastward towards Salem.

8. For Arkansas.—The Arkansas and Mississippi river road, from Fort Smith or Van Buren to Little Rock, and thence to White river, and there diverging to Memphis and Selma; a road from Northeastern Texas to Little Rock, crossing Red river at or near Fulton.

9. For Louisiana.—The New Orleans, Algiers, Texas, and El Paso road, the Madisonville and Jackson road, the Vicksburg and Shreveport road, the New Orleans and Nashville road.

10. For Texas.—The continuation of the New Orleans, Opelousas, and El Paso road through Texas.

11. For Missouri.—The road from St. Louis westward; the Hannibal and St. Joseph road.

12. From Paducah, at the mouth of the Tennessee river, to the Tennessee State-line, and from Louisville to Paducah, to intersect the road from New Orleans to Mobile. Adopted.

The following is the report and resolutions offered by the committee of Ways and Means, thro' their chairman, James Robb, Esq., of New Orleans. The committee recommended—

First, application to Congress for grants of land.

Second, application for voluntary subscriptions; and—

Third, application to the Legislature for a tax on landed property.

Resolved, That the completion of the great system of internal communication by railroads thro' the Southern and Southwestern States, is an object of such importance as to justify and require a liberal application of the resources of the States interested in these works.

Resolved, That the voluntary subscriptions of

private individuals are inadequate to the accomplishment of works of such magnitude.

Resolved, That the public lands of the Western and Southwestern States of this Union ought to be liberally appropriated to the objects now proposed, and that this appropriation ought to be made by a general law applicable within proper restriction, to all railroad enterprises in which the people of the west and southwest are interested.

Resolved, That the great additional value given to public lands by railroads passing in their neighborhood, and the augmented revenue derived from the increased population and wealth which result directly from such works, render it peculiarly proper and equitable that the general government, which shares in the benefit, should contribute by grants of land in the cost of such works.

Resolved, That it is the right of the people, whenever they may deem it proper, to subscribe through their municipal and parochial corporations to the stock of railroads calculated to advance their interests, and that the Legislatures of the different States ought by law to authorize their cities, parishes and counties to make such subscriptions, when desired by the respective inhabitants.

Resolved, That the resources for the payment of such subscriptions, when made, ought to be derived from taxes levied on landed property, inasmuch as that species of property is more than any other benefitted and enhanced in value by works of internal improvement.

Resolved, That whenever subscriptions are made by cities, counties or parishes, it is inexpedient that the administration of the stock thus subscribed should remain under the control of the local authorities; and that it ought to be distributed amongst those whose property has been taxed for its payment in proportion to the amount paid by each, to the end that each individual may be stimulated by personal interest to a vigilant supervision of the conduct of the work.

Resolved, That a committee of three be appointed by the chair to address to the Congress of the United States, and to the Legislatures of the separate States, memorials in support of the principles contained in these resolutions.

The convention also resolved, that it was the duty of Congress to take the necessary steps to remove the obstructions to navigation in the Mississippi river. The vote upon this question was as follows —Yea, Florida, Mississippi, Texas, Tennessee and Virginia. Nay, Georgia and Missouri.

In what we have given we have merely stated some of the most important results of the convention. In addition to the reports of the committees, and various resolutions having reference more particularly to specific objects, the convention was addressed at length by some of the ablest men of the south, among whom were Hon. J. P. Benjamin, Hon. James Robb, of New Orleans, Wm. M. Burwell, of Virginia, Col. Tarpley and J.S. Yerger, of Mississippi, and various other gentlemen. As the speeches will probably be reported in full, we prefer to wait for such report to giving the brief notices of them that appear in our exchanges.

The object of the convention was to devise and adopt a plan for carrying out a comprehensive system of railroads, best fitted to meet the wants and develope the resources of the south. We have no doubt its results will be most salutary. The delegates of the different States returned with greater zeal, and stronger confidence in their ability to carry out their several portions of the great system proposed. The convention will do much to secure that unity of purpose, and concert of action, so indispensable to success in the Southern States.

Notwithstanding the cheering prospect, we fear that New Orleans will not at once secure all that she promises to herself. In the *outset* she is fairly distanced. Though ranking among our first class cities, she is the only one in the United States of any magnitude, that cannot boast of a mile of railroad, the object of which is to connect with the interior. Her great misfortune has been that a large portion of her business men have felt no interest in the future welfare of the city. They have regarded it merely as a temporary residence, to be abandoned as soon as a competency shall be amassed. The little city of Savannah can show a tenfold greater outlay than New Orleans for works of a permanent character, constructed for the purpose of adding to its business. It is the efforts that the cities of Charleston, Savannah and Mobile have been making, and the encroachments they are making upon her business, that has aroused the former to the necessity of doing something to recover her lost ground, and to ward off the impending danger. She acts now, not from the love, but the necessity of it. We still think that she will shirk the most important duty of the whole, that of providing the means of construction, for the only 2 domestic works which she proposes to aid, (the Opelousas, and the New Orleans and Jackson railroad,) by private subscriptions. Instead of this, we understand that she proposes to raise the money upon the credit of the city. The result will be, that half the money provided in this manner will be squandered, while what is effected will be only half done, for the reason that what is every body's business is no body's. If the city votes two millions to the above projects, the citizen feels himself absolved of all responsibility, and as he does not pay his portion of the money at once, out of his own pocket he cannot be made to feel any concern as to its proper expenditure. If, on the other hand, the whole amount needed should be raised by private subscription, all the stockholders would constitute themselves into a committee of vigilance, to see that their contributions were well and economically laid out.

However surprising the statement may seem, the only dangerous rival of New Orleans is N. York. Our people expect to draw a great part of the trade of the southwest through the Erie canal. That great work, upon its enlargement, will accommodate boats of 224 tons burden. From Lake Erie, three lines of canal will soon be completed, striking the Ohio river at Portsmouth, Cincinnati and Evansville. The Illinois canal, though only about two years have elapsed since its completion, is rapidly changing the course of trade between the Mississippi and the lake. The numerous lines of railroad in operation and progress will exert a similar influence. The fact that these canals and railroads will be rivals for the same business, will bring down the charges for transportation to the lowest point, while the immense revenues of the Erie canal, and its unlimited capacity for business, will enable us to invite western and southern produce over this route by the imposition of merely nominal tolls. One hundred millions of dollars would not begin to cover the amount that has been expended by the Eastern and Western States for the purpose of drawing the internal commerce of the country through the northern routes. During all the time this vast outlay has been going on, New Orleans has not expended a dollar to strengthen her own position, and counteract the efforts of her rival.

We make these remarks out of no sectional or unkind feeling towards New Orleans. We take as much interest in the efforts she is now making as any of her citizens, and as heartily wish her success. Our only motive is to point out her true position, and show to her the sacrifices she will be called upon to make to secure success to her present movement.

Lynchburg, Jan. 17th, 1852.

COL. E. FONTAINE:

Dear Sir—I now proceed to comply with my promise, of vindicating the course I have pursued in my recent report in reference to the connection by railroad between the Ohio river and the city of Richmond. In attempting to point out the best connection, I was compelled to compare it with other schemes proposed for the same purpose. In this way I was obliged to show in what respects the line proposed by me was superior to the Central railroad, as *the* great road east and west. Still I do solemnly declare, that, could both be constructed, without too great a burthen on the State treasury, no man would be more sincerely rejoiced than myself.

I have not the slightest fear that any one who knows me will believe me capable of being influenced by other views and motives, than what will most conduce to the *real good* of the *whole* of that state, the love for which was the first lesson of my childhood and will be the last feeling to be conquered by death.

In discussing this question I will appeal to reason alone and will not be tempted to forget that courtesy, which I have ever shown to those who honestly differ from me in opinion.

In comparing the distances, I used the best authority in my reach, and gave the details by which the result was obtained, on purpose that any error into which I might inadvertently fall might be pointed out. It seems that I made the Lynchburg route the shortest by 7¼ miles, when it should have been 3¼ miles. I am willing to grant that neither the one nor the other of these computed differences of distance would be decisive of the question.

I next stated that, assuming the Central railroad to be completed 16 miles west of Charlottsville, this point being 170 miles from the mouth of Greenbrier, with *the Blue Ridge Tunnel* to go through, we might assume that the State had to build 170 miles of new road at a cost of $20,000 per mile, amounting to $3,400,000. I was aware that there were some miles of the road graded between the tunnel and Staunton, and I was also aware that a letting had been advertised west of Staunton. Still, I repeat, does any practical man doubt that (including the cost of the unfinished portion of the tunnel,) there is yet required an expenditure of $20,000 per mile for a distance of about 170 miles to reach the mouth of Greenbrier.

And as you have asked the question whether the Virginia and Tennessee railroad company really has funds enough in hand to complete and equip their road to Christiansburg, I will reply yes, and ask a question in return. Has the Central railroad company really funds enough in hand to complete and equip their road 30 miles west of Staunton?

I did assume that only the distance between Christiansburg and the mouth of Greenbrier, 77¼ miles, had to be provided to reach that point by way of Lynchburg, and this distance has been very fully estimated at $1,545,000.

As above stated, there are ample means in hand to complete and equip the Virginia and Tennessee road to Christiansburg, *and far beyond it.* The State already has a canal between Lynchburg and Richmond. Moreover, at the date of my report, the Danville railroad was on the eve of completion to its junction with the Southside road, and the Southside road was under contract to a point within 21 miles of Lynchburg. I see by their report that the Southside railroad company still want six hundred thousand dollars to complete their work.

I therefore repeat that Richmond must make about 92¼ miles more of new road, and spend $1,855,000 more money to reach the mouth of Greenbrier by way of Staunton, than would be required by way of Christiansburg.

There may not be this difference in the funds provided by statute, but there is this difference in the sums to be *raised and paid out*, to complete a line of transportation between these points. The next subject to be examined is the comparison of grades. I had called attention to the fact that the inclines at the summit, between the mouth of Greenbrier and Covington were *five* miles of 105 feet per mile on the east side and *two* miles of 92 8-10 feet per mile on the west side of the mountain. I had contrasted these with the grades on the Vir-

ginia and Tennessee railroad, which never exceeded 60 feet per mile ascending eastwards, nor 68 feet per mile descending eastwards.

Mr. Shaw contends that these high grades being concentrated at one point, where assistant power may be used, obviates the objection.

I will admit that it is much better for such grades to be thus concentrated at one point, than for like grades to occur at several distant points. I do not admit that this arrangement is better than to have the same amount of ascents and descents distributed over the road by more moderate grades.

In the first place, this plan of an assistant engine to be used at such places has been much talked of, but I am not aware that it has ever been tried at any place in our whole country, when there was a large trade to accommodate. We do not yet know exactly how it will work.

In the second place, I say that the general experience of practical men and business communities is greatly against the use of these exceptional high grades.

1. On the Boston and Albany road, there are for a short distance, grades of 83 feet per mile used. The capitalists of New England are now constructing a new road at great expense, and making a tunnel four miles long through the Hoosic mountains, to save 18 miles of distance, and to substitute for these 83 feet grade, others of 68 feet per mile—the very limit used on the Virginia and Tennessee railroad, in favor of the heavy trade.

2. On the Albany and Schenectady road, there was an incline rising out of the valley of the Hudson. This, being at the terminus of the road, was the very best position for an exceptional grade.—Experience has substituted for this incline a newly graded road of some six miles of more moderate ascent. A similar case occurred near the Schenectady end of the road.

3. On the New York and Erie railroad a case occurred where at first there seemed to be an imperious necessity for the use of high exceptional grades on each side of a summit. After full consideration, it was determined to expend $100,000 per mile for a considerable distance to reduce these grades to 60 feet per mile, the very grade used as the limit opposed to the heavy trade on the Virginia and Tennessee railroad.

4th. In Pennsylvania, there was a line of improvements between Philadelphia and Pittsburg, passing the Alleghany mountain by a series of inclined planes, worked by stationary power. These are nothing more than the *reductio ad absurdum* of exceptional grades. The same community are now constructing the most costly road in the United States, to avoid these inclines and substitute a succession of more gentle grades. Such was the delay and expense attending the use of these inclines last summer, that Philadelphia merchants paid the freight on their goods to New York, and sent them west by the New York and Erie railroad.

5th. In Maryland, there was an exceptional grade at Parr's ridge, on the Baltimore and Ohio road, which the company found it necessary to avoid, at considerable expense, by making a new road of some miles with easier grades.

6. In South Carolina, there was an inclined plane on the Charleston and Hamburg road at Aiken, which was not worked by stationary power. There was a double track and a locomotive being attached to one end of a rope, passing around a drum at the head of the plane, by its descent on one track would draw the load attached to the other end of the rope, up the other track.

The delay and expense attending the use of this incline was found to be an insupportable burthen on the company, and they have recently, at a heavy cost, substituted for it several miles of more gradual ascent.

Thus much for the experience, north and south, in the use of exceptional grades, and thus much for the *principle* advocated by Mr. Shaw.

Now for his facts. After assuming, according to his own peculiar principle, that his exceptional grades of 5 miles, at 105 feet per mile, and 2 miles at 92·8 feet per mile, are matters of small moment, he quietly states:

That, elsewhere, between Covington and the mouth of Greenbrier, the ruling rades are 40 and 50 feet per mile. On this fact he bases a comparison between the two lines proposed for connecting Richmond with the mouth of Greenbrier.

In this connection, he alludes to a grade of 50 feet per mile, on the Danville road near Richmond. Moreover, in his published report, he introduces the very letter I am now discussing, together with a newspaper article, previously published by him, on the James River and Kanawha improvement. He prefaces this introduction with these remarks: "Without playing the partisan, it cannot be disguised that the interests of the Central railroad and that from Covington to Ohio are one. They cannot be disconnected, and no liberal person can or will, I am pursuaded, accuse me of doing more than my duty in uniting them in a common defence."

Would not every man suppose, after this, that Mr. Shaw had intended to give a fair comparison of the grades on the two lines connecting Richmond with the mouth of Greenbrier?

And what will be thought of the fairness of this comparison, when we advert to the following facts. Between Covington and Staunton there are grades of 80 feet per mile. This fact I obtained from the Railroad Journal.

It may be seen also, in Col. Crozet's report to the Board of Public Works, dated November 30, 1849, that there are 11¼ miles at the Blue Ridge tunnel which vary from 70 to 75 feet per mile. Now why, in this full, fair and just comparison of the merits of the two lines have these facts, so material to a proper decision of the question, been entirely overlooked. Surely the advocate of the Central railroad was not afraid to let these facts be known.—He seems to be fond of *exceptional grades*, and a few more or less should not alarm him. How many other grades there are between Covington and Richmond, exceeding 40 and 50 feet per mile, neither the public nor myself have now the means to ascertain. There did not seem to be any strong desire to call their attention to those I have mentioned.

By the bye, this last one is between Richmond and the point where she has to come in competition with Baltimore with her 140,000 inhabitants, a most important position.

Perhaps it was to divert attention from this danger, hat an effort was made to frighten Richmond with the competition of Petersburg (with her 14,000 inhabitants,) and to erect, at the crossing of the Danville and South Side roads, a grand obstruction to the commerce of Richmond. Nothing could be more convenient for both parties than the manner in which those tracks cross each other. One track is elevated above the other so that the trains can pass on each road without interfering with the other. On each line the grade is ascending eastward. By following the descent of the one and the ascent of the other, a short distance from the crossing, two points are obtained which are exactly on the same level. These two points are joined by a turn-out, affording an easy transfer of cars from one to the other.

I think it will be clear, to all who have followed me in this investigation, that there is a vast superiority in grades of the line through Christiansburg and Lynchburg, over those of the line through Staunton and Charlottesville. Virginia has a powerful competition in Baltimore, with her 140,000 inhabitants, and her air-line road through Parkersburg to Cincinnati.

She has one hope, and only one. Her very lethargy is her best defence. Virginia is confessedly behind all the States north of her, and many of those south of her, in works of internal improvement. But she has one great advantage, the experience of the whole world is her property if she desires to use it. All the improvements made by others may be adopted, and all their errors avoided. If she throws away this advantage, then indeed is her case hopeless. I have shown how the most practical men and the most experienced communities value the injury done to a line of railroad by some one exceptional grade of great inclination.—Will Virginia shut her eyes, and fall into the same error and have to pay her way out of it, as they have done? Nature has given her the very best line by which the valley of the Ohio can be connected with the Atlantic coast, will she avail herself of it?

I say that even if the Central road is made, and I sincerely hope that it may be in due time, it does not, by any means, diminish the necessity for a far better line by the route proposed. It would be madness to throw away such an advantage in the battle with Baltimore.

There is another item of experience by which Virginia may profit. There has been a curse entailed on us by the early Pioneers in railroads, which we have borne so long, that many are not aware of its existence *as an evil.* I mean the narrow guage of 4 feet 8½ inches. When railroads were first introduced in England, some wise man measured the thread of the wheels of a road waggon and thereby fixed the guage for railroad tracks. When the Yankees started railways, they thought certain destruction would attend any departure from English precedent, and the South generally entertained the same opinion of Yankee precedent, But after all, South Carolina was the first to *secede* and Georgia followed. They adopted a guage of five feet—hence, among other causes, their brilliant success. Now I would respectfully ask—is Virginia to sleep forever under this incubus, because, at an early day, the Central railroad was commenced with a narrow guage. Or is Virginia to use the only advantage left her, the experience of others?

The Danville, the South Side and the Virginia and Tennessee railroads now have a guage of five feet, and it would be suicide, in the State to reject the advantages of this improvement in her contest with Baltimore.

I wish to reply to other things in your communication and Mr. Shaw's letter as well as to an article in the Times of the 13th, signed "Virginius," advocating your views, but I will reserve these topics for a future letter. I am

Very respectfully,
your ob't ser'vt.
CHAS. F. M. GARNETT.

Third Annual Report of the Board of Directors of the Terre Haute and Richmond Railroad Company.

TERRE HAUTE, Jan. 5, 1852.

Since our last annual report of 6th January last, the work of constructing the road has been steadily progressing, and its condition is as forward as could reasonably have been anticipated could all events affecting it have been foreseen. The arrival of the iron at New Orleans, was delayed some two months beyond its anticipated arrival at that point, which compelled us to defer the work of laying track a proportionable time.

In addition to this, the extraordinary low water of the Ohio river during the summer and fall, hindered the transportation of a part of the iron from New Orleans to Mobile, so that the work of laying track at the east end of the line, was interrupted after its commencement some four weeks, in addition. But for these circumstances, the whole line would have been completed by the first of December last, according to calculations as was set forth in our last report.

The work of laying the rail is going on steadily, and with as much expedition as the character of the weather will allow; and we can give assurance of the completion of the entire line in four weeks of favorable weather; there being but 7 miles of track to lay.

At the date of our last report the receipts in the Treasury amounted to $235,312 36, and the expenditures to $231,167 21; and during the last year our receipts have been $744,442 67, and our expenditures $718,137 07; making the total receipts $979,755 03, and the expenditures $949,304 28; leaving a balance in the Treasury of $30,450 75.

About three fourths of the road has been partially ballasted, and the work of ballasting is progressing. But a considerable portion of the track will have to be raised, and the ballasting increased, by additional gravel during the ensuing season, as was at first contemplated, to make it a first class road.

We are laboring under many disadvantages for want of good engine houses and machine shops, all of which will be remedied as soon as practicable. The depots at Terre Haute, Greencastle, and Indianapolis, will be completed in a few days.

We have ten water stations on the line, a part of which are temporary, but will answer our present purposes.

On the opening of the line we shall be provided with *seven engines*, three first class passenger cars, one baggage and one mail car, forty box cars, thirty platform cars, and seventy gravel cars. We shall want a large number of coal cars, as we anticipate the transportation of coal will be a heavy part of the business of the road. For this business the gravel cars can be used temporarily; but it is evident that the whole equipage of the road will require to be largely increased during the ensuing season to meet the demands of business upon it.

Such has been our anxiety to complete the construction of the road, that we have resisted the importunities of citizens to carry freight at any price, as it would impede the prosecution of the work.—But such was the pressing demand to carry passengers on the finished part of the road, that we were induced to attach a box car to each of our iron trains for that purpose, and are now receiving about one hundred dollars per day from that source, which we believe is but a fraction of what will be received from passengers, when the road is completed for business.

It only remains for us to congratulate you that this great work, which has been the object of so much solicitude and earnest exertion during the past three years, is now so nearly consummated, and to express our increasing confidence that in its income to you and us, and in its influence upon the public prosperity and welfare, our most sanguine expectations will be more than realized.

C. ROSE, President.

FINANCIAL STATEMENT.

Dr.

Capital stock paid in			$362,262 85
Engineer's certificates (payable in stock) outstanding		7,574 78	369 837 63
Bills payable, (for railroad iron, etc			295,360 53
Six per cent bonds sold			60,500 00
Seven per cent bonds sold			250,000 00
Sundry accounts, (payments on accounts unsettled)			2,495 29
Transportation account, [received from passengers]			1,561 58
Total			$979,755 03

Cr.

Surveying and engineering	$14,594 06		
Grading, bridging, etc	320,743 23		
Contingencies	12,693 21		
Office furniture	499 09		
Relinquishment of right of way	4,762 91		
Cross-ties	34,734 01		
Cord wood	2,078 73		
Tools and materials	571 88		
Depots and water stations	11,091 18		
Gravelling track	7,445 77		
Railroad iron, chairs, spikes and laying	406,060 46		
Equipment account, [cost of engines, cars, etc	77,809 74		
Discount and interest account	56,220 01		
Total expenditures	$949,304 28	—949,304 28	
Balance			$30,450 75

As follows:—

Vigo county bonds	$16,400 00	
Sundry accounts, bills receivable, etc	1,672 95	
Amount in hands of treasurer	12,377 80	
		$30,450 75

The officers of the company for the present year are as follows:—

DIRECTORS.

C. Rose, S. Crawford, J. D. Early, Jas. Farrington, D. Deming, C. Warren, W. D. Griswold, A. McGregor, E. J. Peck, Daniel Yandes, Thomas Irons, W. H. Thornburgh, Aaron Wood. C. Rose, President; S. Crawford, Vice-President; E. J. Peck, Treasurer; Chas. Wood, Secretary; T. A. Morris, Engineer.

Cleveland and Pittsburg Railroad.

Annual Report of the Directors to the Stockholders.

The President and directors submit to the stockholders the following statement of the progress of their enterprise since their last annual report, and of its present condition.

During the year the work has been in steady progress. Although from divers causes the expectations expressed in the last report in regard to the time of completing the road have not been realized, we have the prospect before us that but a few days more will elapse, before our cars will be able to run over the entire road from Cleveland to Wellsville. But ten miles of track remain to be laid at this date, and the heavy work on the Yellow Creek summit—which is the point where the delays have been chiefly experienced—will be ready for the track, and the rail laid through the summit in the course of three or four working days. It is confidently believed, that by the end of the present month, the road will be prepared for the running of regular passenger trains to Wellsville.

The ballasting of the road in the thorough manner ever contemplated by the board, will require the constant employment of two, at least of our locomotives for the rest of the ensuing year. When this work shall be accomplished, it is believed that our road will compare favorably with the best roads in the country, in all the elements that enter into a good construction.

The extension of the road up the Ohio river, to connect with the Ohio and Pennsylvania road, at the mouth of the Big Beaver, has received the attention of the board. The measure has been presented to the citizens of Pittsburg and of the towns along the line, and has met with a favorable reception. It is hoped that at the proper time, the aid will be extended by the enterprise and sagacity of that city, which the importance of the work to its commercial interests so obviously requires. The locating survey of the line has been made by the engineers. The distance to the east bank of Big Beaver is found to be twenty-one and a quarter miles. The grades will all fall short of twenty feet to the mile, and the radius of no curve, except at stations, will need be less than twenty-five hundred feet. The cost of the work, owing to the bridges to be erected above high water mark, will somewhat exceed the average cost of the rest of the line. The line can, however, be run with great ease, and be maintained at small expense.

The engineering corps have also surveyed a line of road, diverging from our line at the mouth of Yellow Creek, and extending down the Ohio river to Bridgeport, opposite Wheeling. The distance is found to be but thirty-eight miles; the grades not to exceed at any point fifteen feet to the mile, and no curves necessary of a radius less than twenty-eight hundred feet. The cost of constructing this line will be less than the preceding. The estimated expense of the road when completed for the cars, including equipment for one year, is eighteen thousand dollars a mile.

The importance of this extension of our line will be seen at once in the light of its connections. At Steubenville it will connect with the Steubenville and Indiana road; and at Bridgeport, with the Ohio Central, the Marietta, and the Baltimore and Ohio roads. All these connecting roads will form great thoroughfares, and will yield a heavy am't of business, both for the extension to Beaver, and also for the main line to Cleveland. The two virtual termini of our road at the present time, Cleveland and Pittsburg, are therefore deeply interested in the construction of this line. The citizens of Wheeling as well as other towns along the line, are zealously engaged in endeavors to effect the construction of the road; and it is expected will take upon themselves the burden of providing from among themselves, and from those interested in the connection, the cash funds requisite for the work.

The engineers are also now engaged in surveying the Tuscarawas branch extending from Bayard down the valley of the Sandy and Tuscarawas, a distance of thirty miles, to New Philadelphia.—This line, in respect to cost, and facility of working, is of the most inviting character; and extending through one of the best portions of the State in fertility and natural resources, both agricultural and mineral, and by its continuation to Zanesville, opening a ready connection with the southern and southwestern part of the State, has been regarded as one of the most important tributaries of our road. It is understood that the cash means of construction for this branch, can be readily furnished along the line.

Five miles from Bayard, on the line of the Tuscarawas branch, diverges the Carrol county branch leading to Carrollton, the county seat, a distance of fifteen miles from Bayard. The ten miles to be constructed and owned by the branch company, are already graded, and by an understanding between the two companies, the entire line for fifteen miles is to be completed for running by the first of July next. This branch will form a valuable auxiliary to our road, particularly in the large amount of agricultural products which it will bear from that fertile section to our main line, for transportation to their northern market.

The enterprising citizens of Hanover, a prosperous town lying about one mile and a half from the track of our road, have also undertaken the construction of a branch from their town to the line of our road. The requisite funds having been secured, all that is needed is the closing of the proper papers by the parties to the agreement, in order to secure the early construction of this branch.

The Ohio and Pennsylvania railroad company have been for some time running in connection with our road, and using stage coaches over the uncompleted part of their line. Yesterday, we were gratified to learn that their track was completed through, and the trains passed over the entire line from Pittsburg to Alliance. These two roads will be powerful auxiliaries to each other in the interchange of freight and travel.

The Akron branch company celebrated the opening of their road from Hudson to Cuyahoga Falls, last week, on New Year's day. On the 14th of March last, the stockholders will recollect they were called together to act on the adoption of the amendment of our charter, which authorised the construction of this branch by a separate company. Since that time the branch company has been organised, and has advanced thus rapidly with their work. The continuation of this road, which is now in successful progress, and will be completed to a favorable point on the Ohio and Pennsylvania road for connecting with Wooster during the present year, to Williamsburgh, the county seat of Holmes county, will furnish another important tributary to our road.

The board will adhere to the opinion that as a general principle these branches should be constructed and maintained as a distinct interest by the parties respectively concerned in them.

These connections, with several others that have been under consideration and in negotiation, will effectually fortify our work against all injurious competition, and insure to us an amount of business which must exceed even our former estimates and expectations, however large they may have seemed to some to have been. Traversing a populous and productive portion of the State; its termini on Lake Erie and the Ohio river, whose waters it connects by the shortest practicable line; connecting, moreover, at favorable points with all the great railroads connecting the Atlantic cities with the valley of the Mississippi, and with its numerous tributaries stretching out, right and left, over a rich and well settled territory, its rank, as affording a safe and lucrative investment to its stockholders, must be with the first in the land.

An arrangement has already been made in part, to supply suitable connections with our road by the Ohio river at Wellsville. Under this arrangement the Forest City, a new first class boat, has commenced running from Pittsburg to Wellsville. A similar connection will soon be formed with Wheeling. The importance of these connections, when the road is in operation to the Ohio river, will be obvious.

On the eighteenth day of March last, the first train of cars passed over the road from Cleveland to Ravenna, a distance of thirty eight miles; the 5th day of November, the regular passenger trains commenced running to Hanover station, a distance of 75 miles from Cleveland. The business on the road so far as completed has far exceeded the anticipations of the most sanguine. The whole number of passengers carried over the road, for what may be regarded as the first nine months of our

operations ending December 31st, is 73,245; from whom the receipts for fare amount to $56,666 28. The freight receipts for the same period are, $33,-312,82. Making a total of receipts $90,049,10.—The expenses of running for this time amount to $13,815,00. Leaving as net profits the sum of $76,-234,10 or more than $8,500 a month which would be at the rate of about five per cent a year on the estimated cost of the whole road from Cleveland to Wellsville, or discriminating for the different lengths of time over the different portions of the road now in operation, more than eleven per cent. on the cost of those portions respectively.

Besides this regular business of the road, a large amount has been done for the company in the transportation of material, and ballasting. Three locomottves with their trains of gravel and platform cars have been employed in this way.

From such an opening of operations on our road we are justified in entertaining the most gratifying anticipations for the future.

It would be impossible at the present time to exhibit in detail to the stockholders the actual cost of the different parts of their work. The unexpected delay in the completion of the road for running, and the consequent accumulation, beyond original estimates of interest, both upon the work, and upon the bonds issued by the company, together with the increased expense in the improvement of the track, and the provision of more extended station grounds at Cleveland and at other points, as well as of other ampler means for the accommodation of the swelling business offering to the company, will cause an excess above the original estimates of the cost of the road. This excess will not however be great and will be counterbalanced by the increased value of the means and facilities of the company for conducting its business. The completion of the work, which is now to be expected in a few days, will put the board, in possession of the means of preparing a full and detailed statement of expenditures on the work.

The board are happy in being able to say that notwithstanding this increased expenditure, the delay in realizing an income from our investment, and the severe pressure in the money market during the year, the work has not lanquished for want of means, nor have heavy sacrifices been submitted to, in sustaining the credit of the company. The character of the enterprise has kept up the confidence of capitalists and enabled the directors to procure the means necessary for carrying forward the work without interruption or hindrance.

The board take pleasure in repeating their testimony to the continued skill and fidelity of the chief and assistant engineers and their assistants on the line.

CYRUS PRENTISS, Pres't.

Ravenna, Jan. 7th, 1852.

Massachusetts.

Worcester and Nashua Railroad.—The stockholders of this corporation have chosen as directors for the ensuing year:—Alex. De Witt of Oxford, Stephen Sallisbury and Isaac Davis of Worcester, Jacob Fisher of Lancaster, Thos, Chase of Nashua. Edward Lamb and Seth W. Fowle of Boston, Geo. T. Rice and Geo. Bowen of Worcester.

A dividend for the last 6 months of $2,25 per share has been paid this month, being equivalent to 9 per cent per annum on the shares not costing over fifty dollars.

Atlantic and St. Lawrence Railroad.

The distance from Portland to Island Pond, in Vermont, the point of junction with the St. Lawrence and Atlantic railroad, is 149 miles. 91 miles of which to Gorham, N. H., have been in operation since July last. 31 miles more to Northumberland, on the Connecticut river, have been all graded, and the rails laid upon a portion of it. 12 4 10 miles further distance, to the west side of the Connecticut river, at the mouth of the Nulhegan river, have been mostly graded. 14 6 10 miles further distance only remaining to be graded, and the bridge over the Connecticut to be built, to complete the whole distance to the point of junction with the St. Lawrence and Atlantic railroad, at Island Pond.

From the London Times.

Future of Gold.

The question as to the probable effects of an abundance of gold is again in agitation. California has thus far realized more than was expected by the most sanguine, the product at the end of each year having exceeded the highest estimate at the commencement, and there are now indications of a similar promise from the new regions in Australia. A disposition, however, still prevails to believe that no extraordinary changes in the relations of money are impending. When the Californian mines were first discovered, it was admitted that if anything like eight or ten millions sterling should annually be produced for a series of years, there could be no doubt strange effects would be witnessed. But it was contended that instead of this continued yield, there would be a gradual decline after the first year or two. The idea now being effectually set aside, a new argument is adopted. The exports of gold from California for the twelve months ending the 31st December, 1850, were equal, it is supposed, to £12,000,000, while for the present year, judging from the first nine months, they may be estimated at £15,000,000.—In the face of this supply there has been no very observable disturbance in the measure of value. It is therefore assumed that the augmented quantity has been met by an augmented demand, and that with the increasing traffic of the world a like annual addition will henceforth easily be absorbed.

This inference, although it is urged by some all economical writers, appears altogether unsupported. The only tests of the result of the increased supply would be an alteration in the relative value of gold and silver, or a general and unaccountable rise in the prices of all articles. That the extensive displacement of silver which has occurred in France, and which was plainly forseen, has prevented the first of these from being available, except to a limited extent, while, with regard to the second, the charges in our commercial system have been such as to produce a rapid fall in all commodities far more than sufficient to neutralize any moderate influences of an opposite kind.

Apart from free trade, moreover, there is quite enough to account for the increased influx having thus far produced no palpable manifestations. The Bank of France at this moment holds £8,000,000 sterling in excess of what she possessed in 1849, the extent to which hoarding both of gold and silver has been carried on all over the continent during the past three years, and especially in Italy and throughout the Austrian empire, has perhaps been unprecedented; a drain no less remarkable has been caused by the Irish emigration, which has carried large totals to western America, where much of it will long remain; and finally, there has been the return to India of a great portion of that specie which was suddenly drawn to England after the panic of 1847.

Exceptional circumstances exist, therefore, sufficient to render it unnecessary to assume that an increase in the demand for gold has suddenly sprung up to an extent such as steadily to absorb fifteen millions per annum. The tendency of civilization is to render needless the use of the precious metals for the purposes of barter, and although new channels and settlements for a time create fresh demands, there is no reason to suppose that they more than counteract the economical influences elsewhere in progress. Even California herself is not believed to have absorbed, in the shape of circulation, more than two or three millions, while on the other hand we have to bear in mind the effects of extended banking accommodation and the use of money orders, postage stamps, and other similar contrivances, which are more or less being imitated in every part of the world.

Hence we may still infer that previously to the discovery of California the production of gold increased as it had been by the large suppl. from Russia, was equal most probably to the annual demand; that its value is consequently liable to be reduced nearly to the extent of the exports from California, and that such reduction will of course be measured by the proportion which the new supply may bear to the existing stock. What the amount of that stock may be is wholly unknown, but there can be little question that 15 millions per annum is not relatively an insignificant addition to it. Some investigators have surmised that 400 millions is about the total in circulation throughout the world. If that can be taken as in any degree correct, it will easily be understood that the California supplies must soon make themselves seriously felt wherever the condition of Europe shall cause the quantities now eagerly secreted to return to active purpose.

But it is, after all, not a question of an addition of fifteen millions per annum. If any reliance can be placed on ordinary evidence, the production from California alone is only likely to be limited by the amount of population able to reach the State and the rapidity of the arrangements for obtaining machinery. It is impossible to name any other reason why the fifteen millions should not be increased to thirty or sixty. No word of failing supplies has yet reached us. On the contrary, the miners seem disposed to welcome as many fellow laborers as may seem fit to join them, and every one asserts that the country is rich, and that as far as the present generation are concerned, it may be pronounced inexhaustible. The old impression that gold is never found in large or continuous quantities is wholly dispelled and scarcely any news could now arrive from California, Bolivia, Peru, or Austria, that could take the public greatly by surprise.

In the face of these circumstances, it must be injurious to encourage the tendency, always too strong in the majority of minds, to believe that the old routine of things is to go on as it has always gone. it can do no harm to keep the *possibilities* of the cause constantly in view, so that people may learn gradually and quietly to adapt their interests to whatever may occur.

New York Railroad Returns.

NEW YORK AND HARLEM RAILROAD.

The certified returns, for the year ending September 30, 1851, show the following result:

Capital stock as by charter, old, $3,-500,000, preferred $1,500,000.....	$5,000,000 00
Amount of stock subscribed, old $2,-388,750, preferred $1,500,000.....	3,888,750 00
Amount paid in, as by last report...	3,887,930 00
Total amount now paid in of capital stock.....	3,888,750 00
Funded debt as by last report.....	365,593 48
Total amount now of funded debt...	869,201 48
Floating debt, as per last report.....	212,684 57
The amount now of funded and floating debt.....	984,567 76

Average rate per annum of interest on funded debt, 6¼ per cent.

	1850.	1851.
Cost of road & equipment.....	$4,466,208 05	$4,873,317 76
Expenses of maintaining road.....	38,278 98	57,071 88
Expenses of repairs of machinery.....	33,394 31	56,388 98
Expenses of operating the road.....	175,045 74	233,177 03
Earnings and Cash Receipts and Payments.		
Earnings from passengers.....	$324,368 18	$372,652 10
Earnings fm. freight.	114,405 94	156,806 52
Earnings from other sources.....	43,793 39	61,483 52
Receipts from passengers.....	324,368 18	372,652 10
Receipts from freight.	112,067 45	156,835 74
Receipts from other sources.....	41,193 38	57,205 73
Payments other than for Construction.		
Payments for construction expenses.	$246,719 03	$348,587 89
Payments for interest	31,154 71	52,745 68
Payments for dividends.....	210,475 77	215,542 00
Total amount of surplus fund.....	49,663 02	23,729 59

Length of road in operation at the date of the last report was 96 miles; but the road is now completed to Chatham, 130¼ miles from New York, and was this day opened for travel.

The number of passengers carried in cars, 2,673,-077. Total amount of freight, 2,399,435 tons.

NEW YORK AND NEW HAVEN RAILROAD.

Capital stock, as by charter and subscribed	$3,000,000 00
Amount paid in, as by last report	2,499,250 00
Total amount now paid in of capital stock	2,788,375 00
Funded debt, as by last report	881,000 00
Total amount now, of funded debt	1,376,000 00
Floating debt, as per last report	37,487 14
The amount now, of floating debt	69,534 18
Total amount now, of funded and floating debt	1,445.534 18

Rate of interest per annum on funded debt, 7 per cent.

	1850.	1851.
Cost of road & equipment	$3,417,737 14	$4,233,909 18
Expenses of maintaining road	26,512 74	48,844 12
Expenses of repairs of machinery	47,725 00	64,287 61
Expenses of operating road	163,648 64	241,144 64
Earnings and Cash Receipts and Payments.		
Earnings from passengers	$402 358 17	$595,500 86
Earnings from freight	26,818 91	104,664 21
Earnings from other sources	32,612 23	28,342 17
Receipts from passengers	402 358 17	595,500 86
Receipts from freight	26,818 91	104,664 21
Receipts from other sources	45,412 23	28,342 17
Payments other than for Construction.		
Payments for transportation expenses	$237,886 38	$354,276 19
Payments for interest	51,554 00	76,195 00
Payments for dividends	174,930 09	174,930 00
Payments to surplus fund	10,217 93	.....
Total amount of surplus fund	13,297 71	63,385 18

Length of road, 61 miles. Number of passengers carried in cars, 796,936. Total freight carried. 60,-525 tons. For the year ending Sept. 30, 1850, this company paid the Hartford and New Haven railroad Co, $20,000; the Harlem, for use of road for 545,623 passengers, $48,379 83, for freight, etc., $11,748 63, and the State of Connecticut one year taxes, $7,387 58. Total, $87,514 04.

Steam Marine of the United States.

At the last Session of Congress, the Senate, by resolution, directed the Secretary of the Treasury to collect and report statistics, exhibiting officially the external and internal steam marine of the United States. The aggregate results far exceed, in magnitude and importance the most extravagant estimates and anticipations. These reliable facts and statistics were reported to the Senate on Thursday last, by the Secretary of the Treasury. We take the subjoined statement from the report.

The steam marine of the United States, on the Atlantic and Pacific coasts and the Gulf of Mexico, is as follows:

From Passamaquoddy bay to Cape Sable, there are 46 ocean steamers; 274 ordinary steamers; 65 propellers, and 80 ferry boats. Tonnage, 154,270 tons. High pressure steamers 116; low pressure 342. Number of officers and crew, 6,348. Passengers annually, 33,114,782. Average miles travelled, 8,118,989. These statistics refer to the year ending July 1, 1851.

The steam marine on the Gulf of Mexico, from Cape Sable to the Rio Grande, consists of 12 ocean steamers; 95 ordinary steamers; 2 propellers.—Tonnage 23,244. High pressure, 97; low pressure, 10. Number of officers and crew, 3,473. Passengers during the year, 148,700. Number of miles travelled, 1,360,380.

The steam marine on the Pacific coast consists of 37 ocean steamers; 13 ordinary steamers; tonnage, 34,986. High pressure, 3; low pressure, 47. Officers and crew, 1,949. Average miles travelled, 79,209.

The aggregates of the external steam marine are:

Ocean steamers, 96; ordinary steamers, 382; propellers, 67; ferry boats, 80. Total, 625. Total tonnage, 212,500. High pressure, 213; low pressure, 412. Officers and crew, 11,770. Annual passengers, 33,342,846. Of the annual passengers 24,009,550 were by ferry boats.

The shipwrecks in the United States, on the Atlantic and Pacific coasts and Gulf of Mexico, during the year ending July 1, 1851, were 50 ships; 59 brigs; 190 schooners; 9 sloops and 20 steamers.—Total, 328, of which 278 were by tempest, 14 by fire, 15 by collisions, 19 by snags and 2 by explosion. The number of lives lost was 318.

The "human movement," by steamboat, on the principal tide water lines was as follows:

	No. of pass.
On Long Island Sound	302,397
On Hudson river	995,100
Between New York and Philadelphia by steamers	840,000
On Potomac and James rivers and Chesapeake Bay	422,100
Gulf of Mexico	169,508
Pacific coast	79,209

In 26 districts on the Atlantic coast, there were 160 vessels lost, valued at $1,559,171, and on which insurance was paid to the amount of $968,350.

In New York the marine insurance paid was	$3,520,161
In Philadelphia	906,616
In Boston	554,865

The total marine (not inland) insurance paid during the year is estimated at $6,227,000.

The inland steam marine of the United States comprises three grand divisions—the Northern Frontier, the Ohio Basin, and the Mississippi Valley:

Steamers.	Tonnage.	Officers and crew	Passengers.
Northern Frontier has 164	69,165	2.855	1,513,390
Ohio Basin 348	67,601	8 338	3,464,967
Mississippi Valley 255	67,957	6,414	882,593
Total 767	204,723	17,607	5,860,950

Of the passengers, 2,481,916 were by ferry boats, and in addition to the above, there were 1,325,911 passengers by railroads, 86,000 by canals, and 27,-872 by stages on the Northern Frontier line of travel, and 265,936 railroad and 28,773 stage passengers on the Ohio Basin line.

TRAVEL TO AND FROM INLAND COMMERCIAL CENTERS.

Pittsburgh (last year)	466,856
St. Louis	367,795
Buffalo	622,423
Chicago	199,883
Total	1,656,957

The resident population of these four cities is but 217.966.

The travel to and from Buffalo "comes and goes" as follows:

By ordinary steamers	157,257
Propellers	14,300
Ferry Boats	26,280
Buffalo and Rochester railroad	262,386
Niagara railroad	119,200
Erie Canal	43,000
Total	622,423

St. Louis has 131 steamers; New Orleans 109; Detroit 47; Buffalo 42; Pittsburg 12. During eight years, ending July 1, 1851, the tonnage in the Buffalo Districts has increased 19,217 tons; in Presque Isle, 2,777; Cuyahoga 4,563, and in Detroit 14 416. The steamboat tonnage on the Upper Lakes has more than quadrupled in eight years, and on the Mississippi Valley it has doubled in nine years.

The steamboat disasters on the Mississippi and tributaries, since the introduction of steam, to the year 1848, are, by collision, 45; fire, 104; snags, 469—total, 618. The original cost of the boats, $9,899,742; deficiency in value, $5,186,757; final losses, $4,719,991. The loss in 1849 is stated at $2,000,000.

Losses on the lakes and rivers during the year ending July 1, 1851, by tempest, 35; fire, 30; collision, 18; snags, 32. Persons lost on the lakes, 67, and on the rivers, 628—total, 695.

The average tonnage of lake steamers is 437 tons; of the Ohio basin, 206; and of the Mississippi valley, 273.

Of the 558 ordinary steamers on the rivers, 317 are enrolled in the districts of the Ohio basin, and 241 in those of the Mississippi valley.

Of the 147 ordinary steamers and propellers on the lakes, 31 are enrolled on the lakes Champlain and Ontario and the St. Lawrence, 66 on lake Erie, and 60 at Detroit and the lakes above.

Of the 164 steam vessels on the lakes, 105 are ordinary steamers, 52 are propellers, and 43 are ferry boats.

Of the 601 steam vessels on the rivers, 558 are ordinary and 43 are ferry boats.

With but two very slight exceptions, there is an uninterrupted line of steam navigation from the waters of the Gulf of St. Lawrence to those of the Gulf of Mexico—a distance of about 28,000 miles, and upon which is employed, for the purposes of trade and travel, a steam tonnage of 69,166 tons.—The Ohio basin forms, in itself, a cross section of about 1,100 miles in length.

The steam marine of Great Britain, and her dependencies, is stated to consist of 1,184 boats, with 142,080 tonnage; while the inland steam marine of the United States consists of 766 boats, with a tonnage of 204,723 tons—showing that, exclusive of the steam tonnage of the Atlantic and Pacific seaboard and the gulf coast, the inland steam tonnage exceeds that of Great Britain and her dependencies by 62,643 tons.

Missouri.

Hannibal and St. Joseph Railroad.—We copy from a western exchange the following description of the route of the Hannibal and St. Joseph railroad:

The distance from Hannibal to St. Joseph, by the U. S. surveys, does not exceed 180 miles; and the probable location of the road will not exceed 210 miles in length.

The physical geography of the country, bounded by the great rivers Mississippi and Missouri, is somewhat peculiar, forming a system of country unlike others, and partaking of the characteristics of those great rivers. The streamlets drain the country from north to south, and discharge themselves into those large rivers. The chief of these smaller streams, on the line of the road, are—Salt river, East and West Chariton, Grand and Platte rivers. These, again, have their tributaries, intersecting them from the east and from the west, and forming favorable approaches. Between each tributary, larger and smaller, flanked by forests of timber, are the most beautiful and fertile prairies, ready for the plow, and for conversion at once to cultivation in any one year.

The climate is indicated by the fact, that the line between Missouri and Iowa is very nearly that of the 40th degree of north latitude. The Hannibal and St. Joseph road passes parallel with this, from river to river, at the distance of ten Congressional townships, or 60 miles south of the said line.

The chief characteristic is that of the richest agricultural lands, from river to river, with hardly thin, or hilly, lands enough for pasturage. Large banks of stone coal are found in almost every interior county, cropped out in the high lands, and dipping in their approach to the large rivers. Besides, there is an abundance of iron ore, with very flattering prospects of rich lead ore, in several of the localities. The streams are of but little or no value for purposes of navigation, but afford a great abundance of mill power, now idle and unproductive, for want of access to any market.

The productions consist of every variety of vegetables common to the climate, and the soil is peculiarly kind, for the peach, grape, apple, and other fruits. Corn, wheat, hemp and tobacco, are the staple productions of both prairie and timbered land, as well as oats and grasses, as yet used only for domestic consumption

But one town is named in the charter—that of Palmyra, in Marion county—between the extreme points of termini. This fact, as has always been the case in such enterprises, has been productive of more difficulty than all the rest of the troubles!

The road will probably pass Palmyra, Shelbyville, Bloomington, Linnæus, Chillicothe. Far West, and several other towns, to St. Joseph. The importance of any and of all of these places depends upon the location of the road.

An approximation to the present population may be made, from the estimates of 1850; though the increase is not less than 25 per cent. in each county, since the census was taken. The estimates, then, were nearly as follows; Marion, 9,600; Shelby, 4,200; Macon, 6,600; Lynn, 4,200; Livingston, 3,900; Davis, 4,800; Dekalb, 2,504; Caldwell, 2,500; Clinton, 3,600; and Buchanan, 15,000; making 56,600; to which add 25 per cent., and some 70,750 would be as nearly the present population as we can now arrive at.

Finances of Michigan.

The funded and fundable debt of the State not yet due is as follows:—

General fund bonds, due May, 1856	$100,600 00
University bonds, due July, 1858	100,000 00
Detroit and Pontiac railroad bonds, due July, 1858	100,000 00
Penitentiary bonds, due Jan., 1859	20,000 00
" " " 1860	40,000 00
Full paid $5,000,000 loan bonds, due Jan., 1863	180,000 00
Adjusted bonds, due Jan., 1863	275,732 83
Internal improvement warrant bonds, due Jan., 1870	234,200 00
Total	$1,049,932 83
The part paid of the $5,000,000 loan bonds outstanding, will, if funded previous to January, 1853, amounted to	1,503,336 30
Bonds issuable for outstanding internal improvement warrants, say	15,000 00
Making the total funded and fundable debt not yet due	$2,568,269 13

The amounts due the educational funds are considered permanent loans, and will probably so remain—at least until the other portion of the State indebtedness shall have been cancelled:

Amount due primary school fund	$238,252 18
" university fund	22,608 39
Amount due Normal school endowment fund	2,220 06
Total due educational funds	$263,080 53

York Canals.

We copy from the Albany Evening Journal the following statement of the tonnage and value of the property which went from the Hudson river on all the canals, during the seasons of 1848, '49, '50 and '51:—

	Tonnage.	Value.
1848	329,561	$74,943,459
1849	317,364	75,266,078
1850	418,370	85,177,068
1851	519,937	90,451,154

Statement of the tonnage and value of the property which came to the Hudson river in the same years:

	Tonnage.	Value.
1848	1,447,905	$50,883,907
1849	1,579,946	52,375,521
1850	2,033,863	55,474,637
1851	2,010,700	54,474,294

Statement showing the aggregate movement from and to the Hudson river during the same years and the aggregate value of the same:—

	Tonnage.	Value.
1848	1,777,466	$125,827,357
1849	1,885,416	127,098,569
1850	2,452,233	140,641,705
1851	2,530,637	144,925,448

The following statement exhibits the amount of tolls received on all the canals for four seasons:—

1848	$3,252,212
1849	3,268,226
1850	3,273,899
1851	3,329,304

North Carolina.

Raleigh and Gaston Road.—We learn that the meeting of the stockholders of the Raleigh and Gaston road, at Henderson, on the 13th instant, was organized by calling John D. Hawkins, Esq., to the chair, and appointing Mr. Hyman, of Warrenton, Secretary. The Hon. W. N. Edwards appeared as the representative of the state stock, and on the part of the stockholders there was quite a full representation.

We learn that representatives from the Seaboard and Roanoke railroad were present, who made a subscription on the part of that road of half the stock under the act of 1848-'49, required to construct the junction road from Gaston to Weldon. The road will be put at once under contract, and will be completed, it is expected, by the time the Gaston road shall have been relaid. The distance between Gaston and Weldon is about twelve miles.

The stockholders re-elected the old board of directors; and the directors re-appointed the same officers. The salary of the president of the road was fixed at $2,000, to begin after the road is completed.

The Clarksville branch, to join the Gaston road near Ridgeway, will, it is said, certainly be built. We learn that the junction will be made some six miles this side of Ridgeway, so that the Clarksville passengers and produce will go some thirty or forty miles on the Gaston road. The Legislature of Virginia has already subscribed $100,000 to the Clarksville road, and the Seaboard and Roanoke railroad authorities will, it is expected, also subscribe a considerable amount. This branch will add considerably to the business of the road.

We learn that upwards of seven miles of the Gaston road have been re-laid, and that the whole cost, per mile, has been $5,000.

The next annual meeting of the stockholders will be held in this city, on the second Thursday of November.—[*Raleigh Standard.*

Alabama and Mississippi Railroad.

There is something more than a paper railroad, and we are pleased to learn that a surveying party is now running the line from Selma to Uniontown, Perry county, a distance of thirty miles. The entire length of the road will be ninety miles and intercept the Mobile and Ohio railroad at a point one hundred and forty miles above the city. The surveyor reports very favorably of the ground so far as he has gone over it, and it is believed the road can be built at a cost not exceeding $8,000 per mile. At present the object of the company is to construct the road with all possible speed to Uniontown. That point is the centre of one of the wealthiest sections of the State, and all around are spread out broad plantations, rich and productive, whose soil cannot be exhausted by a century's tillage. It is there where the finest cotton is grown; and as it is, in the rainy season, almost a perfect terra incognita, we cannot doubt that the proverbially liberal and intelligent planters will aid with open hands in the work.—*Mobile Planter.*

Influence of Railroads upon the Value of Property.

We copy from the Cleveland Herald the following, in regard to the influence of railroads in increasing the value of property.

It is astonishing the change that railroads have made in our city. There are lots in Cleveland valued by the Assessor in 1846, for less than $100, (and it was thought that they were valued too high) that cannot be bought now for $1,000. There are two or three ten acre lots in the vicinity of the Depot of the machine shops of the Cleveland and Pittsburg railroad that were offered at some $5,000 within the last six years that cannot now be bought for less than $1,000 per acre. Since Alfred Kelley took out the first wheelbarrowful of earth from the track of the Cleveland and Columbus railroad in 1847, the value of the real estate has been doubled, and I am decidedly of the opinion that if the entire real property of the *now* city was to be sold at public auction, it would sell for more than threble the amount it would have sold for in 1847, and yet we have only just begun to feel the benefits of our railroads. Cleveland started late in the railroad enterprise, but that start was a strong one. Our city has $400,000 invested in railroads, and in railroads and plank roads our citizens have at least $600,000 more, making a total of $1,000,000. Leonard Case, Esq., has some $60,000 of railroad stock, and with all his far-sighted sagacity, he has never made an investment that will pay him better. Let me illustrate. His ten-acre lots on the northeasterly part of the city, numbering 300 acres or more were assessed I think in 1846, at some $40,000, and he offered to sell the lots for 20 per cent. less than the Assessor's value. Some $7,000 or $8,000 were deducted from the assessment. I presume that the ten acre lots now could not be bought at an average of less than $500 per acre. On Euclid street, lots that were worth from $100 to $250, six or seven years ago, are now held at figures varying from $1,000 to $1,500 per acre.

New York.

Albany and Schenectady Railroad.—The earnings of this road for the year ending January 31st, 1852, (a portion of this month estimated) are $260,041 07

The expenses of the road for the year have been as follows:

For operating the road	$102,611 49	
Interest on debt	49,597 00	
Canal tolls, (which ceased Dec. 1	9,548 42	
Paid for construction and charged to expenses	9,000 00	
		170,756 91
Balance		$89,284 16
Dividends paid August 1, 3½ per cent	$35,000 00	
Dividends payable Feb. 1, 4 per cent	40,000 00	
		75,000 00
Leaving a surplus on the 12 months		$14,284 16

The present surplus or revenue fund of the company is $45,530, out of which the directors have ordered the payment of their subscription of $25,000 to the stock of the Great Western, Canada West, railroad company. Thus providing for this outlay without any increase of the debt of the company, while the stock taken will be as asset in the Reserve Fund.

J. F. Winslow, Esq., of Troy, has been elected to fill a vacancy in the directorship, occasioned by the resignation of Rufus King, Esq.

Vermont

Vermont and Canada Railroad.—This company has increased its capital by the issue of $250,000 new stock, making the whole cost of the road $125,000.

Vermont Central Railroad.—The Boston Courier states that arrangements are in progress for the surrender of the collateral bonds of the Vermont Central railroad, due in the year 1854, amounting to about a half million of dollars. These bonds are now pledged by the Treasurer for about $300,000, borrowed on his individual premises. To secure the payment of this amount, property amply sufficient, has been assigned to the directors, in trust. The corporation has resumed the payment of its own notes, from the proceeds of the mortgage bonds, and will probably soon be free from its financial trouble.

Missouri.

Course of the Hannibal and St. Joseph Railroad.—The Hannibal Union, in answer to a correspondent, says:—

On the United States surveys, Hannibal and St. Joseph lie in the same township, north No. 57, and within a half a mile of the same section line, as he may see from one of our excellent maps, made from the official surveys of the country. The direct line, taken for a base, departures may be expected, as well to favor the largest stock, as the adaptation of

the country. This line, with all the probable variations, will pass through Marion, Shelby, Macon, Linn, Livingston, Caldwell, Davis, De Kalb and Buchanan. The county towns in these are Palmyra, Shelbyville, Bloomington, Linneus, Chillicothe, Far West, Gallatin, Marysville and St. Joseph.

We cannot doubt the directors of the railroad company will seek to strike all accessible business towns, especially such as have subscribed liberally.

American Railroad Journal.

Saturday, January 31, 1852.

Rubber Springs for Railroad Carriages.

The Rubber Spring has now come into universal use and favor. When properly cured, it makes the best and cheapest bearing and buffer spring that has ever been invented. The present winter has been a severe test of their quality. It is well known that India Rubber in its raw state, freezes perfectly solid, so as to be as inelastic as a ball of ice. Unless the spring is well made, it is as useless for this purpose, as would be a block of iron. The New England Car Spring Company, are the leading manufacturers of this article, and claim the exclusive right to make and sell them under Mr. F. M. Ray's patent which has been issued to him as the *inventor*. The springs are manufactured under Mr. Ray's special supervision, at the companies factory in this city. We have good reason for believing that all the springs sold by this company are of the *best* quality. We have not heard of a single instance of complaint from any quarter, and we know that they must have been well prepared to have remained unaffected, by the late excessive cold weather. The company enjoy a high reputation for the article they sell, and purchasers may rest assured that they will not lose it by making a poor article. A good rubber spring is, as we said before, the best one in use. A bad one, is good for nothing.

Erie Railroad.

An inquiry has been made of us, whether the Erie R.R. Co. can execute a mortgage of their road for a further issue of bonds, which shall take precedence of the income and convertible bonds which have been issued by the company to the amount of $10,000,000. It can clearly do this as far as the convertibles are concerned, and we believe it can give preference to further issues over the incomes, whenever the conditions upon which they were issued, are fulfilled. The company in their report prior to that issue state, that the whole income of the road was pledged for their payment "until the net earnings of the road shall be equal to $1,200,000. Whether any legal measures were adopted to give validity to this announcement we are not informed. Such an obligation, we presume, would be discharged whenever the net earnings should reach the sum named.

Whether the event supposed is likely to take place our readers must judge for themselves. The company must yet have a large sum of money to complete the road. If further loans can be effected without any further security than the promise of the company, we suppose they will be placed upon the same footing with the two last. If not, we presume that the alternative of another mortgage will be resorted to.

We believe that about two-thirds of the expenditure necessary to complete the Erie railroad, and give it a double track, has already been made.—The double track, which is indispensable, will cost from ten to fifteen thousand dollars per mile. An equal sum will be necessary to pay off the debts of the company, to provide the additional equipment to carry out the required improvements at Dunkirk and New York, and to meet the cost of the myriads of items that go to make up the construction account. We base our opinion upon the experience of other roads. Compared by this standard, our estimate of final cost is a low one.

Ohio.

Cleveland and Pittsburg Railroad.—We give this week, the late annual report of the Cleveland and Pittsburg railroad. It presents a full and interesting account of the company's affairs, which must be very gratifying to the stock and bondholders in the road. The road connecting the Ohio and the lakes by the shortest practicable route, occupies a very strong line. The affairs of the company from the first have been ably managed, and the work of construction has been carried forward with vigor and energy. The result has been, to secure a degree of public confidence towards its stock and securities, which is felt in that of but few western projects. The road has already given an earnest of what may be expected from it, in the shape of income. For the present winter it is proving itself to be a great public benefit, being now used as the great route of travel between the east and the west.

The western roads that are now coming into operation, have been singularly well managed, and are rapidly building up a high reputation for railroads in that section. They are economically built and well managed, and with the enormous business that must be thrown upon them, they must pay much better than the average of eastern roads.—Such is the feeling that exists towards them, and the only reason why the securities of the former sell so low, is the immense amount offering. As soon as the demand for money for railroad purposes shall become less, most of the bonds which have sold as low as 85 cents on the dollar, will go up to par. Some of the western convertibles have already reached that point.

The most important extension of the Cleveland and Pittsburg railroad, is that to Wheeling. This would be advisable, if for no other purpose than to open from the lakes a communication to that important town. But during the year the Baltimore and Ohio railroad will be completed. To this the Cleveland and Pittsburg is the appropriate extension to the lakes, and must become the channel of trade between them and Baltimore, as well as of Philadelphia. Wheeling is the prospective point of junction of several extensive lines; with all of which, it is highly important that the Cleveland and Pittsburg railroad should be connected.

With such prospects before the latter road, we see no reason to doubt that its stock and bonds will become favorite securities for investment.

Georgia.

Muscogee Railroad.—This road was opened on New Years day twenty miles from Columbus, and the laying of the iron on the balance of the track is going on rapidly. A very short time only will elapse before there will be a continuous line of railroad from Savannah to the Chattanooga river.

Illinois Central Railroad.

D. A. Neal, Esq., who went out with Hon. R. J. Walker to negotiate the loan for the Central railroad has returned, and we learn reports favorably in reference to the probabilities of obtaining the loan.

Indiana.

Terre Haute and Indianapolis Railroad.—It will be seen by a report of the directors of this company, in our present issue, that another important link, in the great chain of railroads extending from the Atlantic cities, to the Mississippi river, has been virtually completed. It is indeed the first portion to be finished in the Western States, and will be ready for use, long before the trunk lines from Philadelphia and Baltimore shall come into operation. This fact reflects the highest credit upon the Terre Haute company, as their line was one of the most difficult and expensive in the western country. This company are mainly indebted for their success to their President, to whose personal reputation, and character, the project owes the highest opinion that is entertained for it, and which secured a ready sale of its securities, at a high rate, whose well known energy and vigor, has pushed forward the work with remarkable despatch. We have no doubt that the road as soon as it is fairly under way, will, in its receipts justify the good opinion to which we have referred, even before the Illinois link carrying it to St. Louis, shall be constructed. Upon the completion of that, it must become a part of the through route not only between the eastern cities, but between Cincinnati and St. Louis, and in addition to a lucrative local, it must have a most profitable through traffic.

The road traverses a very extensive coal field which is to supply Indianapolis and Terre Haute with fuel. As it will be furnished at a very low rate, it cannot fail to make the former an important manufacturing town. The business of the eight lines of railroad centering at that point, will alone be sufficient to build a city of 50,000 inhabitants; and when we add to this, the fact that the three great elements necessary to constitute a great town, food, coal, and iron, will be supplied in the greatest abundance, and at the lowest cost, we cannot doubt it will become one of the largest inland towns in the United States.

Massachusetts.

Boston and Worcester Railroad.—By the twenty second annual report of this corporation, it appears that the income for the year ending November 30, was.....$743,922 60

Reserved income of the previous year.....	$69,516 66	
From which has been paid on account of an accident in 1847.....	6,359 88	63,156 78
Total credit to income account.....		$807,079 38
Which has been disposed of and appropriated as follows;—		
Working expenses.....	387,327 15	
Interest.....	20,422 24	
Two dividends, 3½ per cent.	315,000 00	$722,749 39
Surplus income.....		84,329 99

The expenses exceed those of the preceding year by $10,286 07, principally on account of repairs of engines, passenger cars, damages and law expenses. Two engines of great power and satisfactory speed have been added; the passenger cars have received unusually large repairs; twenty merchandise cars have been broken up as not worth repairing, and sixteen new ones substituted; an appropriation of $3,950 has also been made to build the remainder. A claim of long standing against the old Colony railroad company has resulted in a verdict in favor of the Worcester Corporation for $20,000, or of $42,000 depending upon the decision of a law question reserved.

The passenger receipts show an increase $6,113 46; the freight receipts a decrease of $11,247 51; rents and mails an increase of $129 81; making a total decrease of $5,604 24 in the income of the road. The decrease in freight is attributed to the competition of other roads, which have used extra-

ordinary exertions to divert freight from the West, by reducing prices, and by active solicitation through their agents. In other respects the income of the road has had a steady advance, at once the proof and consequence of the prosperity and growth of the towns on its line.

Virginia.

We refer our readers to the controversy which is going on in this Sate, between the Central, and the Virginia and Tennessee railroads, in reference to their proposed extension to the Ohio river. We give this week Mr. Garnett's reply to the letter of Mr. Shaw, published in our paper of the 3d inst. We hope to see both of these roads carried forward. Their respective lines are too wide apart to allow them to become rivals for local, which, upon all roads, is more important than the through traffic. The fear, we presume, is, that the State will aid the extension of only *one* line; hence the desire of each to be the recipient of its bounty.

Stock and Money Market.

Money continues abundant, and the greater ease is showing itself in the rise of fancies, which has been large during the past week, in the Erie and Reading, which are the two great speculative stocks. There has been at the same time an improvement in almost all other securities. Money is plenty, and there is confidence that it will remain so for some time to come. This is very favorable to our roads in progress, as it will enable many of our important lines to secure the necessary means for their completion the present season. They must make hay while the sun shines.

Though there is a fair demand for railroad bonds, we learn that the orders by the last steamer have been light, owing probably to the season of the year.

The quotations of securities of new works range all the way from 80 to 90 on the dollar. At these rates there appears to be no difficulty in any way, of companies, entitled to credit, borrowing sufficient sums to carry forward their projects.

Lake Imports at Oswego.—The Oswego Times gives the following comparative imports at that place for three seasons:—

Flour, bbls....	317,750	302,577	389,929
Wheat, bu....	3,615,677	3,847,384	4,231,899
Corn, do.....	383,230	426.121	1,251,500
Barley, do.....	65,256	120,652	194,858
Rye, do.....	31,426	86,439	106,518
Oats, do.....	133,697	113,463	175,984
Pork, bbls.....	35,098	26,262	27,950
Beef, do.....	20,375	6,789	15,854
Ashes, do.....	10,872	11,435	4,479
Lumber, ft.....	51,101,432	67,586,985	83,823,417

The foreign imports from Canada for three seasons, of a few articles, compare as follows:

Flour, bbls....	198,623	260,874	259,875
Wheat, bu....	632.930	1,094,444	676,202
Rye, do.....	16,044	7,199	53,950
Oats, do.....	54,700	90,156	78,771
Lumber, ft....	44,137,287	50,685,682	62,527,843
Ashes, bbls....	2,235	1,580	584
Butter, lbs....	115,759	225,087	75,000
Wool, do.....	97,142	77,944	82,908

Atlantic and St. Lawrence Railroad.—The receipts of this road for the year ending January 1st, 1852, were as follows:

For passengers	$84,541 97
For freight	90,692 29
For rents, mail service, etc	11,303 42
Total	$186,537 68

Only a portion of the road has been operated for the year.

The following table, from The New Orleans Price Current, gives an interesting statement of the cotton exports of the Union for the past thirty years. The crop of 1851, it will be seen, was worth according to the export valuation, more than $40,000,000 over the most valuable crop ever raised before:

Statement showing amount, value and average price per lb. of cotton exported from the United States from 1851 to 1852, inclusive:

Years.	Total. lb.	Value.	Average. price per lb.
1821.....	124,893,405	$20,175,480	16 2 c.
1822.....	144,675,095	24 035,058	16:8
1823.....	173,723,270	20,445,520	11:8
1824.....	142,369,663	21,947,401	15:4
1825.....	176,449,207	36,846,619	20:9
1826.....	204,533 415	25,025,214	12:2
1827.....	294,310,115	29,359,545	10
1828.....	210,590,463	22,487,229	10:7
1829.....	264,837,186	26,575 311	10
1830.....	298,450,102	29,674,882	9:2
1831.....	216,979,784	25,289 492	9:1
1832.....	322 215,122	31,724,682	9:8
1833.....	323,798,404	86,191,105	11:1
1834.....	384,717,907	49,448,402	12:8
1835.....	387,358,992	64,961,302	16:8
1836.....	423,631,307	71,284,925	16:8
1837.....	444,112,537	63,240,102	14:2
1838.....	595,952,297	61,556,811	10:8
1839.....	413,621,312	61,238,981	15:7
1840.....	743,941,061	63,870,307	8:5
1841.....	530,204,100	54,330,341	10:2
1842.....	584,711,017	47,592 464	8:1
1843.....	792,297,105	49,119,805	6:2
1844.....	663,633,455	54,063,501	8:1
1845.....	872,905,996	51,789 643	5:92
1846.....	547,558,055	42,767,341	7:81
1847.....	527,219,958	53,415,848	10:34
1848.....	814,274,431	61,998,293	7:61
1849.....	1,026,602,269	67,396,967	6:4
1850.....	635,881,604	71,984,616	11:3
1851.....	927,237,089	112,315,317	12:11

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK JANUARY 30, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¼
U. S. 6's, 1856	105
U. S. 6's, 1862	111¼
U. S. 6's, 1862—coupon	112½
U. S. 6's, 1867	116½
U. S. 6's, 1868	116½
U. S. 6's, 1868—coupon	120
Indiana 5's	84
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	68
Illinois 6's—interest	42
Kentucky 6's, 1871	107
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	97½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110½
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	—
New York 5½'s, 1860-'61	—
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	104½
Ohio 6's, 1860	109
Ohio 6's, 1870	114
Ohio 6's, 1875	115
Ohio 5's, 1865	103
Ohio 7's, 1851	100
Pennsylvania 5's	89½
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	100
Virginia 6's, 1886	106

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	106½
Cincinnati 6's	106½
St. Louis	93½
Louisville 6's 1880	93½
Pittsburg 6's, 1869-1871	95
New York 7's, 1857	106
New York 5's, 1858 '60	100½
New York 5's, 1870-'75	102
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	104
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	110½
Erie 2d mortgage, 7's, 1859	103½
Erie income 7's, 1855	95½
Erie convertible bonds, 7's, 1871	91½
Hudson River 1st mort., 7's, 1869	101½
Hudson River 2d mort., 7's, 1860	90½
New York and New Haven 7's, 1861	102
Reading 6's, 1870	74
Reading mortgage, 6's, 1860	79
Michigan Central, convertible, 8's, 1860	108
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	103
Cleveland and Pittsburg 7's, 1860	95
Ohio and Pennsylvania 7's, 1865	94½
Ohio Central 7's, 1861	92

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Jan. 21.	Jan. 28.
Albany and Schenectady	99	97
Boston and Maine	103½	104
Boston and Lowell	107½	107½
Boston and Worcester	99	99½
Boston and Providence	85½	85½
Baltimore and Ohio	64	65
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson Canal)	101	107½
Eastern	94½	94½
Erie	78	79
Fall River	98½	98½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	68½	68
" preferred	..	108½
Hartford and New Haven	115	115
Housatonic (preferred)	—	—
Hudson River	64	63
Little Miami	—	—
Long Island	16½	18
Mad River	—	—
Madison and Indianapolis	90	98½
Michigan Central	93	93½
Michigan Southern	103	102½
New York and New Haven	113	113
New Jersey	—	112½
Nashua and Lowell	104½	104
New Bedford and Taunton	116	114
Norwich and Worcester	50½	52
Ogdensburgh	26½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	28½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	61	63½
Rochester and Syracuse	116½	110
Stonington	50	50
South Carolina	—	—
Syracuse and Utica	123½	127
Taunton Branch	109	109
Utica and Schenectady	129	127½
Vermont Central	24½	24½
Vermont and Massachusetts	26½	26½
Virginia Central	—	—
Western	101½	101½
Wilmington and Raleigh	56	—

Illinois Central Railroad.

We learn that recent advices are favorable to the negotiation of the company's loan in Europe.

Virginia.

Northwestern Railroad.—The Mayor of Baltimore, in his communication to the City Council, January 19th, 1852, speaks of the great importance of the Northwestern railroad, and urges the necessity of its construction.

The Chief Engineer of the road, Benj. H. Latrobe, Esq., assumes that the cost of the whole work will not exceed $3,000,000, and that the time required to complete it will be little more than two years.

The importance of this road to Baltimore, and the necessity of its construction, are admitted by every one. The only question arises as to the way in which it shall be constructed. The Mayor does not consider it advisable for the city, in her present state of embarrassment, and with her heavy debt, to undertake more than she has already assumed in the prosecution of the great works in which she is engaged.

The work of the greatest importance at the present time is the Baltimore and Ohio railroad, for upon the success of that road depends the ability of of the city to develope her further plans of improvement.

For this reason the Mayor would not recommend any project for the completion of the Northwestern road, which could in any manner embarrass or hamper the city during the construction of the Baltimore and Ohio railroad.

He presents the following as the most feasible plan for accomplishing the work:

1st. An individual subscription, say $500,000.

2d. The city of Baltimore to lend her bonds to the Northwestern company, to the extent of $1,500,000, the city to have a preferred lien upon the entire work.

3d. The Baltimore and Ohio railroad company to lend their bonds to the extent of $1,000,000, on the completion of their road to the city of Wheeling.

4th. The iron rails to be purchased with the bonds of the company.

This would present the following exhibit:

Individual subscription, say	$500,000
Bonds of the city of Baltimore	1,500,000
Bonds of the Baltimore and Ohio railroad company	1,000,000
Iron rails purchased by the bonds of the company	500,000
	$3,500,000

Or an amount sufficient to cover principal and interest during the progress of the work.

With regard to the loan of $1,500,000 of Baltimore city bonds to the company, the Mayor states, that the city holds at the present time, 42,048 shares in the capital stock of the Baltimore and Ohio railroad company. This, at the prevailing market rates, say 60 per cent, would be equivalent to a capital of $2,522,880.

The original subscription was 35,000 shares; the excess, therefore, say 7,048 shares, equivalent at market rates, to a capital of $422,880, is what has been suffered to accumulate from dividends, which have been paid in the stock of the company; the earnings of the road having gone to capital.

This dividend stock, the Mayor considers to be specifically pledged to the payment of the internal improvement tax, incurred by the city's subscriptions to the Baltimore and Ohio Railroad stock. He would, therefore, separate it from the Parkersburg loan, if made, and would hold it as a fund, applicable to this purpose alone; the amount being at this time about 7,048 shares, the city might safely calculate on realizing for the same, in the next three years, an amount more than equivalent to the whole tax imposed upon her by her interest in the Baltimore and Ohio Railroad. This fund disposed of, the city would hold in that company her original capital of $3,500.000.

The Mayor proposes to transfer this interest, or such portion of it as may be required, to the North Western Co., with a view to the prompt construction of that work, and to prevent the liability of increased taxation, by the necessity for a levy to meet the principal or interest upon the loan to the N. W. Company. The interest upon her $1,500,000 of bonds would be $90,000 per annum, which amount would probably be met by the North Western Co.

In order to reduce the indebtedness of the N. W. Co., he recommends a sale from time to time, after the opening of the road to the Ohio river, of so much of the stock held by the city in the Baltimore and Ohio Railroad Co., as would absorb an equal amount of indebtedness, the object being simply to transfer the city interest from one road to the other.

If the results of the Baltimore and Ohio Railroad be such, as there is every reason to suppose they will be, the Northwestern road should be finished within two years from the time of its commencement. Therefore the Mayor proposes that it be immediately placed under contract. From the period when the road could be ready for contract, until the opening of the Baltimore and Ohio Railroad in January, 1853, it is believed by the friends of this measure that less than $500,000 would be expended. After that period the force now employed on the Baltimore and Ohio Railroad could be transferred to the North Western Railroad, and the work prosecuted with the utmost vigor.

Railroad Accidents and Legislation Thereon.

We have been requested to publish the following excellent article, which first appeared in the Albany Evening Journal:—

The Governor, in his Message, alludes to railroad accidents, and suggests that passengers should be protected by proper police regulations. We are inclined, at first view, in this land of laws, to think that *every thing* may be regulated by law;—that not only the *moral* action, but the *physical*, may be controlled and restrained by law. This presents a very interesting question. In remedial efforts, we naturally look to the causes of the evils that we seek to correct. Of late there have been several accidents upon railroads. It may be that the number is increasing. If the causes of them are correctly appreciated, it is quite natural that they should increase.

They arise, *first*, from the opening of new roads. *Second*, from the great increase of speed, and from the low rates of fare. It will probably be found that the proportion of accidents upon all well regulated railroads, diminishes in proportion to the length of time that the railway has been in operation. This very naturally arises from the fact that the managers become more experienced in the operation of the road. In no department is thorough experience and consistent conduct more indispensable than in the management of the railroad. It is a very common, but very erroneous, mode of accounting for accident, to say that the men on railways are not selected from among the intelligent and elevated classes, and are not well enough paid. The man who has long run an engine, or long been a brakesman, or a switch tender, has learned mechanically, physically, and habitually, how to discharge his duties in the best manner; and such a one is far safer than much more intelligent, much higher paid, but of little or no experience. This is a business to be learned by long practice. The necessary power of conducting it safely does not come instinctively or from study. Those who are inventive, quick, and therefore perhaps capricious, are not the best operatives upon the railway. Such have not the adaptation to discipline, and the controlling sentiment that impels them only to do precisely what they have *learned* to do, and therefore know is safe. The men on railways *long in operation*, have learned the powers of the machinery they manage, and they therefore know and execute faithfully their own duties. On new roads, or those recently put in operation, *new* men, under *our* system, and perhaps under any, will be most likely to be put out. New men are constantly seeking places, and new boards of directors have friends to provide for. The thorough manager of an old road does not like to have the men that he has confidence in, leave him; and he will not consent to their doing so, if he can keep them. From these causes, on new roads there are, from a measurable necessity, new men. The road and its way and structures, are not fully tested. The machinery, and its adaptation to the business, is also not thoroughly understood. It takes time to work the road and machinery, and the men, up to their best fitness. While this time is going on, a liability to accident, of necessity, must exist. It implies no wrong, no crime, no want of care, for the *necessary skill* has to be learned, in short, to be acquired by actual experience. Now, as more and more new roads are being opened, and this process of learning their proper management is going on, and of course more and more people travelling, the hazard of accident must increase.

It is not the accidents that have occurred on old roads within the last year that has induced allusion to the subject. It is rather those which have arisen on roads more recently put in operation.—So far as accidents arise from the causes mentioned, the only remedy would be to require a railroad to be opened and operated for a year or two, without carrying any passengers. In this way the men would learn; the road would be tested, and defects in the machinery would be discovered. How far either railroad promoters, or the public travellers themselves, would want this to be tried, is not quite certain. The latter would be inclined to get in those trains, and risk the danger.

The history of railway accidents will show that they do not lessen in proportion as the road becomes better settled, longer used, and operated by men experienced in the work itself. As there is no way of giving men experience by law, or testing machinery by law, the only way that law can accomplish a useful purpose, is to provide for a *thorough two year's use* of a railroad, with all its men, rolling stock, etc., without carrying any passengers. It is scarcely possible to tell what is good machinery till we try it. The payment of a fair price, and the employment of skilful men in the construction, should be a perfect answer to any charge of neglect against a company. These, however, will not absolutely insure perfect safety, or entire certainty. Like everything else, it has been tried, and with the exercise of the same good sense that we apply to all other business, we shall examine it, and see if the average of success, of safety, and

of real practical utility, does not greatly exceed any other mode of conveyance, ever before adopted. If it does, we shall hope for continued improvement, and shall not be inclined to bestow blame without much reflection.

The second cause of such accidents is high speed. There probably cannot be found a person, whose opinion is worth heeding, who will not at once say, that the liability to accident is very much in proportion to the speed. The law to remedy accidents from this cause, should of course apply to those properly responsible. Conceding the position to be sound, that the risk is in proportion to the speed, those who *require*, as well as those who *consent*, to such a high rate of speed as becomes hazardous, are not without their portion of the responsibility. The several railroad companies are urged by the public sentiment to constantly increased speed.—Those which yield to the press upon them, and attempt to satisfy this demand, are of course praised and encouraged. By and by, a fearful accident, which is the legitimate consequence of such speed, occurs. We then are quite apt to forget the impulses that we ourselves may have given.

Racing on steamboats has long been considered as sure to be followed by accident. Just so it will be on railroads. We *talk* freely of a speed of forty miles an hour, and all wish to ride at that rate. How few would think that *they* were in fault if they urged or assented to that rate of speed.—Men who are used to the railroad and to the working of the rolling stock, know what such a rate of speed is, and how wonderful is the operation. Let us examine it. An engine, tender and train of four passenger cars and one baggage car, when properly loaded, will be not much less than eighty tons weight. This body, at the rate of forty miles an hour, moves about sixty feet in a second. That is, between two beats of a clock, it flies across a common street. The driving wheels, if six feet in diameter, revolve three times in a second. The common wheels to the cars revolve about eight times in a second. The revolutions of the driving wheels are produced by the motion of the piston in the cylinder. To each revolution of this wheel, there are two motions of the piston. Thus, there are six motions of the piston to the second, and at each of these motions, a valve is opened or closed, for the taking or exhausting steam from the cylinder. This must be a complete and pertect operation, each time, to produce the speed. But there are two cylinders, working at opposite sides of the engine, and at different points on the crank of the wheel, or axle, as may be, and they do not move at the same instant, or, rather, they alternate, and thus, each performing the same office, they divide a second into twelve equal parts or periods, in each of which the perfect and complete operation of taking or exhausting steam is performed, and at the end of each motion the piston actually *stops* and turns the other way. Now, the eye could not count or comprehend these motions. The ear could not distinguish the exhausts, though each is as perfect and distinct as when the engine is drawing a heavy load four or five miles an hour, when it seems to labor and to cough as if struggling with its load. This is a speed of forty miles an hour analyzed. Now must there not be very greatly increased liability to accident at such a rate of speed? Who can see the strains upon parts of the machinery, that may result in a fracture, when moving at this rate?

It is now considered that by a succession of blows, or of equivalent strains, that the fibre of iron changes. This is an imperceptible operation. It is accelerated by the number and severity of the blows or strains. It must increase in proportion to the velocity. During the action, human scrutiny is powerless to detect failure in some parts of the engine. Now, what should the law be to remedy this hazard; in short, to protect passengers, who really wish to ride just as fast as it is possible to move them? The law must be just, reasonable and consistent, or it will not be approved. There is one very simple way in which the law can remedy this hazard, and it will do it perfectly. Let it be settled that trains of passengers in this State shall never be run faster than at the rate of *twenty* miles an hour. This ought to satisfy any one.—Make the law general, and keep all within its provisions, and no persons would be better pleased than the most experienced railroad managers.—They know that they would, in this way, carry passengers safer; their expenses would be greatly reduced; the wear upon all parts of the road, and rolling stock, would be lessened. It would be bringing the whole matter within a controleable shape. The soundness of this view must be conceded; and it is in no degree affected by the clear probability that if we had just such a law in this State, and if we obeyed it, that passengers would travel through other States, where they might be willing, for more speed, to take more hazard. Our extraordinary desire to constantly go faster, has been somewhat extravagantly presented in the story of the bomb-shell line, from St. Louis to Boston in one hour, carrying fifteen passengers inside, with the certainty that but one would get through alive. The seats would all be taken, each calculating that the lucky chance would be his.

Another reason why accidents increase, is the low fair charged. This enables, or induces a great many more people to travel; hence the liability of some to accident is increased, in some proportion, to the number. If a railroad carries a million of people in a year, the chances of personal injury is much greater than on another road where but an hundred thousand are carried. Now, a low fare greatly increases the number of persons who do travel. If the law, then, should provide for a fare of not less than five cents per mile, for each passenger, the number would be greatly reduced, and of course the liability to injury greatly lessened. Yet this would not satisfy the public sentiment.—Its tendencies are altogether in the other direction. The demand is higher speed, notwithstanding the hazard, and lower fare, so that every body may travel, and of course there may be the more chance of personal injury to some. If there were but one-tenth as many people in our State as now, that number would, of course, in the like proportion, be exempted from the danger of being struck by lightning.

The more experience is had on this subject, the more certain it will become that the causes of accident on railways are correctly stated. If a law should be passed that should require every *new* railroad that is opened to be completely furnished with engines, cars, etc., and thoroughly manned, in every department, and to be run for *one* or *two* years without carrying a passenger; and also should limit the rate of speed to *twenty* miles an hour, and should provide for a fare of not less than five cents per mile, then there would not be one case of accident on the railroad where there is now one hundred. If, however, the same number of passengers that are now carried upon the railroad should travel the same distances in any and all other modes of conveyance, whether in vessels, stages, wagons, or *on foot*, the number of accidents would probably then be a thousand where it is now one. Though accidents do occur on our railroads now, and tho' they might be lessened by the regulations suggested, yet it is believed that it is now the safest mode of travelling ever devised. The number of passengers that have been carried on some of our old railroads is enormous. The same number could not be otherwise moved, or move themselves the same distances, without ten thousand times the chance of injury.

The railroad system is in its infancy. It will progress, like every other improvement, to a perfection not now imagined. The managers of our railroads are constantly seeking for their improvement. They are generally thoughtful, careful and provident men. In the great number of persons that they employ, as in every other business in life, they are sometimes disappointed in their men. They are constantly pressed upon by vast numbers for employment, and they seek to be as guarded as possible. Machinery may sometimes suddenly fail on a railroad as it does in the factory or the mill. All over our country, accidents are occurring in every department of industry. This is not strange. We are doing more than any people under the sun ever before performed. We are dealing with powerful agencies. The accidents on railroads in this whole country, by no means equal those on the steamboats on the western rivers. The accidents on railroads in the whole world probably, do not equal those that occur to persons employed in the coal mines of Great Britain. In our own State they do not equal the accidents that occur in building.

All this is worthy of reflection, and when the proper thought is bestowed upon the subject, we shall come to the conclusion that railroads, like all other modern improvements, are working themselves up to the highest standard of usefulness.

B.

Massachusetts.

Fitchburgh Railroad Co.—At the recent annual meeting of this company, the old board of directors, viz: Jacob Forster, Henry Timmins, N. F. Cunningham, E. B. Derby, Horatio Adams, Alvah Crocker, and Israel Longley, were re-chosen with great unanimity. Mr. Shattuck, from the stockholders' investigating committee, reported various recommendations with regard to minor complaints against the road and its employees, and referring the subject of enlarging the depot accommodations at Charlestown to the directors. Some conversation ensued between Mr. Whittemore of the Vermont and Massachusetts road, and Mr. E. H. Derby, with regard to rates of freight paid by different roads, but the report was accepted, as well as that of the directors, without opposition.

The Traveller states that the annual report gives the total receipts for the year as follows:

From passengers, $257,562 27; from freights, mails, etc., $300,983 64; expenses, $312,922 22; including $53,000 for new cars, extra repairs, etc.

The debt of the company is $112,443 50; assets, $215,831 53. The increase of income over 1850 is $21,652 73; increase of expenses and charged to reserved fund, $84,467 68. The number of passengers carried is 1,315,524, an increase of 235,238 over last year. This increase is not so large as it would have been were it not that a large number of excursion trains were run in 1850, which were not run in 1851. They express the opinion that

there was very little, if any, profit in these excursion trains, as they were so crowded as to materially injure and weaken the cars.

Sparta, White County, Tennessee, Jan. 14, '52.

EDITOR RAILROAD JOURNAL:

Dear Sir—We would call your attention and that of capitalists to the proposed connecting link to two lines of railroad in this region of the great valley of the Mississippi. You are aware that railroads are building from Mobile to Selma, from Selma to Huntsville, Alabama, and from Huntsville, Alabama, to Winchester Tennessee, (the latter a depot of the Nashville and Chattanooga railroad,) from Danville to Lexington, Kentucky, and that there is already one from Lexington to Cincinnati; and therefore all that would be needed to make a trunk road from Cincinnati to Mobile would be the 180 miles from Winchester to Danville.

Your own knowledge, sir, must convince you this would be a profitable road. You perceive it passes through the great valley of the west, connecting Cincinnati with Mobile, Charleston, Savannah, etc., and the lakes and adjacent country with the gulf ports. You perceive that this road would be a great thoroughfare to the Pacific. It approximates so nearly to an air-line, that no other road could for years, if ever, be made to compete with it. Besides, on the east side is the Cumberland range of mountain, on the west, till in the vicinity of Nashville, are the bluffs and stream of the Caney Fork river. Passing through a diversified climate, it would of course have the transportation of the many diversified products of those climates.

I will trespass on your patience to describe the country through which the proposed road would pass. It is as level a country as that over which the principal Ohio roads pass. The grade would never exceed fifty feet per mile. Timber, rock, provisions and labor are so cheap that they would more than compensate for the grading and embanking. From an estimate of the expense of five of the western railroads, (with the names I will not weary you,) the average cost of this proposed road would be $15,030 per mile, adding from the most expensive New York and Pennsylvania roads $19,000 per mile.

The Cumberland Mountains are generally considered as abrupt, rocky peaks, like the Catskill or Green Mountains, which is far from the case.—Probably few in New York, except those who have visited the great prairies of the north west, have ever seen so extensive a region of level land as this range forms. Properly speaking, it is an elevated tableau, from ten to sixty miles wide and three hundred long, generally very level or gently rolling, and most finely adapted to the cultivation of all garden vegetables, northern and southern; and eminently adapted to the pasturage of cattle and sheep. At the base, inexhaustable mines of iron and coal [bituminous] of the best qualities. Timber of every variety in the United States. A fertile soil capable of the highest cultivation. Fruit also most abundantly produced. A climate unsurpassed for its salubrity. Water power affording every facility for manufacturing interests, with the raw materials of cotton and wool at the doors.

I send herewith some statistics and a diagram, which I trust will prove interesting. All we ask is for capitalists to look at the road as proposed' and they must say no more profitable investment could be made. Yours, truly,

JAS. E. MANNINO,
Sec'y. of the Sparta Railroad Convention.

Population of Alabama, Tennessee and Kentucky	2,656,700
Area of the same [sq. miles]	126,000
Average population "	23
Distance between Mobile and Cincinnati, [miles]	650
Width of country benefitted [each side 15 miles]	30
At 23 per sq. mile	448,500
No. of families, [5 persons to each]	89,700
1½ tons transported ½ distance, [325 mls] products of the soil or equivalents for each family, [tons]	134,550
At 4 cents per ton per mile	$1,749,150
Coal, lumber, iron, etc., ½d the last item	583,050
Local travel from within 15 miles each side of the road	672,750
Average $1 50 each person per year. Return freight, for consumption, on the line, at 5 cents per ton per mile	337,287
Through and other travel from without 15 miles of the road, ½ of the local travel	336,375
U. S. Mail, $100 per mile	65,000
Freight, merchandise, agricultural products, and from beyond the termini, and from other sources without 15 miles of the road, ½th of the 134,550 tons at 4½ cts. per ton	327,926
Gross receipts	$4,072,138
Deduct one-half for working the road, etc.	2,036,069
Cost of road 650 miles equipped and complete, say at $21,000 per mile.—$13,650,000.	
Net receipts, equal to 29¾ per ct	$2,036,069

Pennsylvania.

West Chester and Philadelphia Railroad.—We learn from the second annual report of the directors of this road, that the subscriptions to the stock of the company now amount to $285,950. The estimated expenses of the Co. for constructing and equipping the road are $788,677. During the past winter, proposals were received by the managers from parties of the highest responsibility and character, for building and completing the road at fair cash prices, and to take $200,000 of the capital stock of the company. There consequently remains a sum of about $300,000 to meet all necessary expenses. As no large subscriptions have as yet been obtained out of Chester and Delaware counties, and as those were obtained chiefly along the line of the road, it is the confident belief of the company that $100,000 can be raised in stock subscriptions during the present year, (1852.) The remaining $200,000 can be raised by loans to that amount.

Enough has been already subscribed to guarantee the construction of the work, and as such favorable proposals have been received by the company for building and completing the road, there is no reason to doubt the ultimate success of the project.

The line of the road has been located, and the character of the work determined. Only six miles of the line present any formidable difficulties. A great part of it is of cheap construction, and the average cost of the whole will be within the usual range of outlay on other roads in Pennsylvania.

The estimated receipts of the road, when completed, are $100,000 per annum. This estimate is based upon careful computations made by the "Central Committee" of Delaware county, and is considered by the managers of the road as perfectly reliable.

Assuming, then, that the business of the road, upon its completion, will amount in gross receipts to $100,000, the following will be the financial condition of the company:

Annual expenses, including repairs of road, 40 per cent, on $100,000	$40,000
Interest on $200,000	12,000
Amount applied to reduction of debt, and for dividends	48,000
	$100,000

A dividend of six per cent to all the stockholders would, therefore, leave a surplus of $12,000, applicable as a sinking fund to the reduction of the debt.

By this means the loans would be paid off in 12 years.

We learn that the company entered into a contract with Messrs. Malone, Clarke and Gonder on the 17th instant, for grading and building the entire route from West Chester to Philadelphia. It is the intention of the contractors to break ground as soon as arrangements can be made for that purpose, which will be in the course of another month.

Indiana.

Madison and Indianapolis Railroad.—A bill is now pending before the Legislature of Indiana to authorise the sale of the interest of the State in the above road to the individual stockholders. The only difficulty in the way of coming to terms, appears to be in agreeing upon the amount to be paid. The sum fixed in the bill is $600,000, in the bonds of the State, or the equivalent in money.

We know but little about the value of the State's interest in the road; but there are two facts which the Legislature will do well to consider in reference to the proposed sale. Experience has demonstrated the utter incapacity of the State to successfully prosecute and manage works of internal improvement. The Constitution of Indiana, which prohibits the State from engaging in any enterprises of this kind, construed by its spirit, would not allow her to be interested in them, as there is in fact no essential difference between the two. In either event, the money to be expended in, or received from the earnings of a road, would certainly be squandered upon useless and unworthy objects; and in addition to its loss, would exert a very injurious influence upon those connected with its expenditure.—In this view of the case, the State should adhere scrupulously to the *principles* laid down in the new Constitution.

Again, the State has been benefitted by the Madison and Indianapolis railroad since it came into the hands of the present managers, to an extent ten times greater than the most extravagant estimate of its interest in the road. It was the pioneer road of Indiana. It has been well and ably managed, and under this management has demonstrated the capacity of the roads of that State for business. Without such an illustration for constant reference, we hazard nothing in saying, that no one of all the numerous railroads of that State, now completed and in progress, could have stood the least chance of borrowing in this market the sums which all find necessary to carry forward their works. The Madison road has been quoted on all occasions, and its strong and influential friends in this city have been constantly used as a reference in favor of other projects in the State. It has, in this way, created a public opinion among our capitalists very favorable to them all, which is seen by the ready manner in which most of their wants have been supplied. The State of Indiana is under obligations to the Madison road, which a gratuity of the whole

amount of its interest in the same would by no means discharge.

For these reasons, we think that the State should deal generously with the company. Nothing but evil would come of it, if she should resume the possession of the road; and she, as we have shown, has been paid by the results which the road has been instrumental in effecting, ten fold more than the amount she now claims as the extent of her interest.

The people of Indiana know that the way in which their best interests can be most effectually promoted, is by the construction of railroads, to serve as channels of commerce and outlets for their produce. So long as her finished works are in favor abroad, they can borrow a plenty of money for their new schemes. The stock of the Madison road is now severely depressed by the anomalous position of the company. We are frequently asked the reason, why the stock of a company paying a dividend of 12 per cent per annum, is some 8 or 10 per cent under par. There is only one anwer to this. "There is a possibility that the road may come under the management of the State." In such an event, the stock, instead of selling at 90, would not sell for 50 cents on the dollar. On the other hand, should the State go out of the concern, the stock would be one of the highest in the market.

We have expressed our own opinion in the premises, without even having exchanged a word with any of the directors upon the subject; but taking our stand at New York, and knowing the effect that the present negotiation will have upon the new and comparatively weak projects that are struggling into life, we unhesitatingly say that the State has but one course to pursue, and that is—*to sell.*

Tennessee.

It will be seen by a communication from this State, which we publish to-day, that efforts are being made to secure the construction of a railroad through central Tennessee, skirting the base of the Cumberland mountains, and forming a very straight line between Cincinnati and Mobile, in connection with the roads in progress in Kentucky and Alabama. By referring to a map of the United States, it will be seen that the route is a very direct, as we have no doubt it is a very favorable one for cheap construction. The project is not of such great magnitude as might be supposed, as the construction of both ends of the line, from Cincinnati to Danville on the north, and from Winchester, Tennessee, to Mobile on the south, may be said to be secured, leaving a gap of some 180 miles to be filled up, which can readily be accomplished if those interested will take hold of the work with the courage and energy manifested by the East Tennessee and Virginia railroad company, for instance.—There can be no doubt that the road in question would pay, as an investment; but in its influence in increasing the value of property upon its route, there can be no question that it would pay for itself ten times over. The more remote the country traversed by a railroad, the greater its relative influence in advancing the value of every kind of property. In such case, a railroad gives an *available*, to many kinds of property, that were too far from the points of consumption, to have a *commercial*, value. Hence the great need of railroads in the southern and western States.

The route would traverse the great Kentucky and Tennessee coal and iron fields, both of which lie dormant for the want of a stimulant, which a railroad alone would communicate.

Ohio and Pennsylvania Railroad.

Accompanying the late report of this company, is a letter of the president, which contains a brief statement of the exact condition of that work.—With regard to the route the letter states that commencing at Pittsburgh, and following the valley of the Ohio river for 25 miles, and the Beaver about 9 miles, turning the river hills, its course becomes still more westwardly over the rich table lands of Ohio, and terminating at Crestline near Galion, where it strikes the Cleveland, Columbus and Cincinnati railroad, about 78 miles south west from the city of Cleveland. Its entire length, 185 miles, passing through or near to thirty or more towns and villages, and four of the most populous counties of Ohio, and district of country abounding in all the most valuable productions of agriculture.

Its extensions are eastwardly at Pittsburgh with the great Central railroad to Philadelphia and New York. Westwardly at Crestline with the Bellefontaine and Indiana, the Indianapolis and Bellefontaine, the Terre Haute and Indianapolis railroads, all in a state of great forwardness, to the Wabash river, and thence to St. Louis, 160 miles.

Its lateral connections are at the distance of 82 miles west from Pittsburgh, the Cleveland and Wellsville railroad, now completed to its intersection with our work. At Mansfield it crosses the Sandusky and Mansfield, with its extension south to Newark, Ohio. At Crestline it terminates on the Cleveland, Columbus and Cincinnati railroads.—These roads are all in operation.

The road is completed 82 miles to Alliance, where it receives the railroad from the flourishing city of Cleveland, on Lake Erie; and in less than a month the trains will be running 107 miles to Massillon, on the Ohio canal, the greatest wheat depository in the Union. And in May, 132 miles to Wooster, also a most prosperous town, the county seat of Wayne county.

The remaining work, 53 miles, from Wooster to the terminus at Crestline, will be finished within the present year. In view of the work thus far completed, the original estimate of the chief engineer, Solomon W. Roberts, Esq., is relied upon with undiminished confidence. That is to say, 185 miles of railroad, including equipments for one year's business, $3,370,000.

The subscription to the capital stock of the company to this date, including the subscription authorised by the directors of the Pennsylvania railroad company, amount to $1,728,000

The total debt of the company is as follows: Mortgage bonds secured upon the 1st division of the road, extending from Pittsburgh to Massillon, 107 miles	1,000,000
Mortgage bonds secured upon the 2d division of the road, extending from Massillon to Crestline, 78 miles; and further by a 2d lien on the 1st division as above	650,000
Total	$3,378,000

From this aum must be deducted the discount, etc. on the sales of the above $1,600,000 of bonds.

Pittsburg and Steubenville Railroad.

The following are the directors of this road for the current year:—

President—J. K. Moorhead.

DIRECTORS.

L. R. Livingston,	Henry Graff,
Lewis Hutchinson,	Thos. S. Clark,
Charles Naylor,	Jesse Edrington,
Isaac Walker,	Robert McKnight,
Robert Woods,	Jno. A. Wilson.
J. H. Shoenberger,	George Black.

Railroad Law.

Interesting to Railroad Companies.—In the case Williams vs. the Michigan Central railroad company, which was an action brought to recover damages for certain horses run over and killed by a locomotive on the road of the defendants, the Supreme Court of Michigan has decided against the plaintiff, on the ground that his horses were trespassing, no animals having the right of living on the public ways, unless the townships owns a bona fide common, and has legally given permission for its use.

BALTIMORE & SUSQ. RAILROAD COMPANY
CALVERT STATION.
CORNER OF CALVERT & FRANKLIN Sts.

PASSENGER TRAINS run daily, (except the afternoon train from Baltimore on Sundays.

PITTSBURGH PASSENGERS, and intermediate points beyond York, by
EXPRESS MAIL TRAIN.

Leave Baltimore at 7½ P. M. Arrive 8 A M.

Fare to Pittsburgh, (with only 28 miles staging,) $11 00.

Passengers for Pittsburgh by this Line have no detention, and reach that city in 22½ hours after leaving Baltimore.

THE EXPRESS TRAIN only stops at Parkton and York.

The Morning Train to Harrisburg leaves daily at 8½ A M., and takes passengers for the following points, and at the rates named:

York, . . .	$1,50
Wrightsville, . . .	2,00
Columbia, . . .	2.12
Harrisburg, . . .	2,35

This Train connects regularly at Harrisburg with the Trains of the Pennsylvania Central and the Cumberland Valley Railroad

FOR PHILADELPHIA.

Passengers for Philadelphia go by this Train to York, and thence by another Train to Columbia.—Fare $3,50.

Leaving Baltimore at 8½ A. M. and Philadelphia at 8 A. M.

The regular Trains of this Company leave and arrive at the following hours.

LEAVE—Baltimore 8½ A M. and 3½ and 7½ P. M.
do. York, 5½ and 6 A. M. and 3½ P. M.
do. Wrightsville, 8½ A. M. and 1½ and 5½ P. M.
do. Columbia, 1½ and 5 P. M.
ARRIVE—Baltimore, 8 and 9½ A. M. and 6½ P. M.
do. York, 11½ A. M. and 7 and 10 P. M.
do. Wrightsville, 8 A. M. and 12½ & 4½ P. M.
do. Columbia, 1 and 4½ P. M.

EXCURSION TICKETS.

To the following places, will be issued to parties of *ten or upwards*, on application or notice given the day previous—at the rates named:

To Harrisburg and back, .	$2,50	each.
" Columbia, " .	2,25	"
" Wrightsville, " .	2,00	"
" York, " .	1,50	"

The Regular Excursion Tickets, as usual.

From Baltimore to Green Spring, Timonium, Texas and Cockeysville, and back, *good for the day*—50 cts.

ROBERT STEUART.
Ticket Agent.

ALFRED GAITHER, Sup't.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply, at the Company's Terminus at Longueuil, of the following description of RAILWAY CARRIAGES, viz:

One hundred and twenty Baggage Carriages, enclosed, on Iron Trucks with lateral motion.
Ninety Platform Carriages, on Iron Trucks.

To be correspondent in other respects to pattern Carriages of the respective kinds, to be seen on the Road.

The Tenders may apply to the whole or any part of the supply, and the delivery must be made at the following dates: one-third at 1st May, 1853—the remainder 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed, "Tenders for Passenger Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply at Longueuil, of the following RAILWAY CARRIAGES, viz:

Six First Class Passenger Carriages.
Five Second Class " "
Three Post Office and Express Carriages.
Five Covered Luggage Vans.

To be correspondent to Carriages of the respective descriptions now on the road.

One-third to be delivered by the 1st May, 1853; the remainder by the 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Wilbur F. Brink,

MANUFACTURER OF

RAILROAD, SHIP & BOAT SPIKES,

Such as Crow Bill or Hook Head Spikes, Round and Square Head, Ship and Boat Spikes.

ALSO,

CAST AND WROUGHT IRON CHAIRS.

☞ Also, Agent for most approved make of CAST CAR WHEELS, etc., etc.,

For sale on the most reasonable terms.

Office 54 North Wharves, (above Race street,)
PHILADELPHIA.

Railroad Iron.

210 Tons 50 lbs. per lineal yard.
400 Tons 57 " "
of desirable patterns ready for delivery, for sale by

VOSE, PERKINS & CO.,
74 South street.

New York, January 31, 1852.

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.

Winter Arrangement.

The Passenger Trains will run as follows until further notice:

TRAINS GOING EAST.

Leave LaPorte, 7·30 a.m., White Pigeon, 10·40 a.m., Adrian, 3·10 p.m.
Arrive at Toledo and Monroe, 5·45 p.m.

TRAINS GOING WEST.

Leave Monroe and Toledo, 8·15 a.m., Adrian, 11 a.m., White Pigeon, 4 p.m.
Arrive at LaPorte, 6·30 p.m.

E. P. WILLIAMS, Sup't.

Adrian, December 22, 1851.

Straughan, J. R.,

Ohio and Indiana Railroad, Bucyrus, Ohio.

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

To Railroad Companies.

THE undersigned has discovered and patented an imperishable, cheap, and sufficiently elastic substance, to be introduced between the sill and rail, so that the stone sill can be used in place of the wooden sill: entirely overcoming that rigidity where the rail is laid directly on stone. Address

J. B. GRAY, Philadelphia.

July 10, 1851. 4m

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

THE FIFTH EDITION OF

NEW YORK:
Past, Present and Future,

BY E. PORTER BELDEN, M. A.,

HAS been issued, by PRALL, LEWIS & Co.—We have made arrangements by which we have bound, and will continue to bind with each Edition of the above, the

AMERICAN ADVERTISER,

A Reference-Work for Purchasers,

Containing the Cards of Merchants and Manufacturers in every line of business. Price, including both of the works, 25 cents and upwards.

STURGES ON THE GAME OF DRAUGHTS,

Second American Edition. Price, in muslin, 75 cents—in paper 50 cents.

The Cheapest Almanac of the Season!

AMERICAN COMMERCIAL ALMANAC, 1852,

Containing, besides the Astronomical matter, numerous statistical details relative to the government, judiciary, population, resources and commerce of the Union, all the details of inland and foreign postage, and the *Constitution of the United States* in full, the latter of which alone usually sells for twice the price of the Almanac. Price 6¼ cents single, $4 per hundred, $35 per thousand.

PRALL, LEWIS & CO., Publishers,
76 Nassau street, N. Y.

To Inventors.

$3,000 Reward — To Mechanical Inventors and Others.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Railroad Iron.

THE undersigned offer for sale 1000 tons Railroad Iron, (about 56 lbs. to the yard,) now at Brooklyn.

CHOUTEAU, MERLE & SANFORD,
Oct. 1, 1851. 51 New st.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

Railroad Iron.

2000 TONS of an approved pattern 59 to 60 lbs. per lineal yard, now manufactured in England, and ready for immediate shipment, from thence.

Also, 2,500 tons of different patters in port and expected to arrive within sixty days. For sale by

DAVIS, BROOKS & Co.
28 Beaver Street, New York.

Contracts made for Railroad Iron at a specific price delivered in England, or at port in the United States.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

New England Car Spring Co.,

No. 104 Broadway, New York,

MANUFACTURERS OF

INDIA RUBBER CAR SPRINGS & HOSE,

Of F. M. Ray's improved form, and dealers in every description of Rubber Goods for Railway purposes.

All Goods manufactured by this company are warranted of the best materials, and the same composition which has estnblished the reputation of F. M. Ray's India-rubber Car Springs.

F. M. RAY, Agent.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on he oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.
By his Attorney, G. M. KNEVITT.

New York, 1851.

Railroad Iron.

2000 Tons of Guest & Co. make (GL) weighing about 58 lbs per yard, to arrive at New York during April and May, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich St., New York.

Also for sale—
430 Tons Rails, weighing 61 lbs.
475 " " 53½ "
50 " flat 2½x½.

To Civil Engineers and Contractors.

THE advertiser, an Engineer recently from England, is desirous of an engagement, having been employed on some of the principal lines in that country and France. Satisfactory testimonials from parties in England and America. Address A. B., at the Railroad Journal office.

January 1, 1852. 1m*

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

RAILROAD SPRINGS.
Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

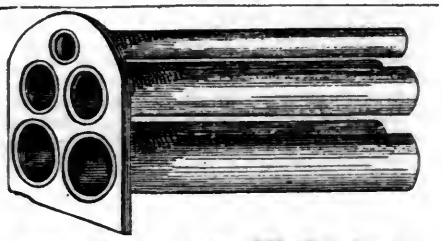
Railroad Iron.

THE undersigned, Agents for British Manufacturers, continue to sell Railroad Iron of the best quality, and of any weight or pattern required; deliverable at any part of the United States or Canada.

They have now on hand, ready for delivery New York:

2,000 tons of an approved pattern, weighing about 60 lbs. to the yard.

WM. F. WELD & CO.,
42 Central Wharf, Boston.



American Lap Weld Iron Boiler Flues.

MANUFACTURED by the Reading Iron Tube and Boiler Flue Works, from 1¼ to 7 in. diameter, and in lengths to eighteen feet, made from the best Pennsylvania refined cold blast charcoal iron, and equal in finish to any imported. Also made to order a but welded flue with patent lap welded ends, and when preferred they will be finished with a screw and ferrule on the ends. All the above will be made of any thickness of iron ordered. Also, welded wrought iron Tubes for water, steam and gas. Extra heavy tubes made to order, for sale by our agent, A. B. Wood, 23 Platt street, New York, and Samuel Griffiths No. 15 North 7th street, Philadelphia, or at our works.

SEYFERT, McMANUS & CO.,
January 3d, 1852. Reading, Pa.

THE NEWCASTLE MANUFACTURING Co continue to furnish at the Works, situated in the town of Newcastle, Del., Locomotive and other steam engines, Jack Screws, Wrought Iron Work and Brass and Iron Castings, of all kinds connected with Steamboats. Railroads, etc.; Mill Gearing of every description; Cast Wheels (chilled) of any pattern and size, with Axles fitted, also with wrought tires, Springs, Boxes and bolts for Cars; Driving and other wheels for Locomotives.

The works being on an extensive scale, all orders will be executed with promptness and despatch. Communications addressed to Mr. William H. Dobbs, Superintendent, will meet with immediate attention.

ANDREW C. GRAY,
President of the Newcastle Manuf. Co.

RAILROAD SPRINGS.
Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

To Railroad and Canal Companies, Contractors, etc.

THE Undersigned wishes to direct the attention of Chief Engineers and Contractors to the facilities he possesses for supplying them wit i workmen, laborers, etc. of any description, and also to remind them that he forwards such men to whatever destination they may be required.

Companies or Contractors desirous of receiving peaceable and industrous men, will be promptly supplied at the shortest possible notice.

C. B. RICHARDS,
No. 85 Greenwich Street, New York.

REFERENCES :—Chas. H. Webb, Esq., Supt. of the St. George's and British Protective Society, New York; Messrs. Harris and Leech, Philadelphia, Wm. P. Malburn, Esq., Albany.

PREMIUM
RAILROAD CAR SPRINGS,
AND OTHER
India-rubber Goods.

TWO Prizes were awarded me last month by the American Institute—one for *best Car Springs*, the other for *best Overshoes*. This proves the superiority of the Goods made by me.

HOSE and STEAM PACKING, and all other India rubber goods for Railroad purposes, on hand and for sale cheaper than any other house.

Car Springs, 50 cents per lb. for cash—of the best quality and of all sizes, (Fuller's patent.)

I now give notice that Fuller is the original and true inventor of the India-rubber Spring, and companies who use Springs made by other parties will eventually have to pay me damages. H. H. DAY,
23 Courtlandt st., New York.

Inventor and owner of 17 I. R. Patents, and the oldest Manufacturer of India-rubber in the U. S.

December 6, 1851.

Trautwine on R. R. Curves.

By JOHN C. TRAUTWINE, Civil Engineer,
Philadelphia, Pa.

JUST published, accompanied by a Table of Natural Sines and Tangents to single minutes, by means of which all the necessary calculations may be performed in the field.

This little volume is intended as a field-book for assistants; and will be found extremely useful, as it contains full instructions, (with wood cuts) for laying out, and adjusting curves; with Tables of Angles, Ordinates, etc., for Curves varying from 13 miles, down to 146 feet Radius.

A portable Table of Natural Sines and Tangents to minutes, has for a long time been a desideratum among Engineers, independently of its use in laying out curves.

The volume is neatly got up in duodecimo; and handsomely bound in pocket-book form.

Sold by Wm. Hamilton, Actuary of the Franklin Institute, Philadelphia. Price $1.

Also, "*Trautwine's Method of Calculating Excavation and Embankment.*"

By this method, which is entirely new, (being now made known for the first time) the cubic contents are ascertained with great ease, and rapidity, by means of diagrams, and tables of level cuttings. Thin octavo; neatly half bound, $1. For sale by Wm. Hamilton.

June 28, 1851.

Bridges & Brother,
DEALERS IN
RAILROAD AND CAR FINDINGS,
64 Courtlandt street, New York.

Having established a general Depot for the sale of articles used in the construction of Railroads, Locomotive Engines and Railroad Cars, we would invite your attention to our establishment. We have already in store a good assortment of CAR FINDINGS and other articles used in the trade, and feel justified in saying, that should you desire anything in our line, we can supply on terms perfectly satisfactory, and in the event of your desiring to order, you may feel assured that your terms will be as good as though you were here to make your own purchases.

Among our goods may be found Railroad Car Wheels, Axles, Jaws and Boxes, Nuts and Washers, Bolts, Brass Seat Hooks and Rivets, Window and Blind Springs, Lifters and Catchers, Door Locks, Knobs and Butts, Ventilators and Rings, Car Lamps, Coach and Wood Screws, Jack and Bed Screws and Babbitt's Metal; also Plushes, Damask, Enameled Head Linings, Cotton Duck for Top Covering in width sufficient without seams, Curled Hair and all other articles appertaining to cars.

Also a new and valuable CAR DOOR LOCK, well adapted to the Sliding Door. This is decidedly the best yet introduced.

LOCOMOTIVE ENGINE LANTERNS, the best article made in the country. Whistles, Gauge and Oil Cocks, Hemp Packing, American, Russian and Italian. We are also agents for Lightner's Patent Journal Box for Car Axles, that invaluable invention, for the economical use and preservation of Car Journals.

Coach VARNISH and Japan of the best quality.

We would also offer our services for the purchase as well as for the sale of goods on commission.—Both members of our firm have had the experience of many years in the manufacture of Railroad Cars, and our Senior was a member of the well known house of DAVENPORT & BRIDGES, Car Manufacturers, Cambridgeport, Mass. With our knowledge of matters pertaining to Railroads, we feel quite confident in giving satisfaction to both buyer and seller, and hope that through assiduity and attention to any business entrusted to our care we shall merit a continuance of confidence and patronage.

BRIDGES & BROTHER.

July 22, 1851.

To Railroad Car Builders and Manufacturers Generally.

THE Cincinnati, Hamilton and Dayton Railroad Company, at Cincinnati, have ten acres of land adjoining the City and near the Ohio River—their Road running through its center—which they will lease for a term of years, or perpetually, for the establishment of a Car Manufactory, or for any purpose connected with the furnishing of Machinery for Railroads.

The Company have at their Depot grounds, at Cumminsville, about five miles north of the city, six acres of land, eligibly situated for a variety of Manufacturing purposes, which they offer for lease on advantageous terms.

They have, also, on the line of their Road, in the town of Hamilton, 25 miles north of the city, about forty acres of land, situated on the Hamilton Hydraulic Works, where a Water Power can be displayed advantageously, and the same had on favorable terms. This property is also eligibly situated for Manufacturing purposes, and will be *sold or leased* on accommodating terms.

The above described property is admirably situated for the successful prosecution of the objects referred to, connected as the Road passing through it is with other Railroads built and building into Western and Northern Indiana, and Northern and Eastern Ohio; and the first described land lying near the line of the Cincinnati and St. Louis Railroad.

To skilful and enterprizing Car Builders, possessing sufficient capital for the prosecution of that business, the inducements are peculiarly flattering.

For further particulars address, at Cincinnati,

S. S. L'HOMMEDIEU,
Dec. 20d. Pres't C., H. and D. R. R.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 6] SATURDAY, FEBRUARY 7, 1852 [WHOLE No. 825, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

St. Lawrence and Atlantic Railroad.....81
County Subscriptions to Railroads.....92, 82
Macon and Western Railroad.....82
Nashville and Chattanooga Railroad.....83
Baltimore and Susquehanna Railroad.....84
Railroads in Virginia—Letter of Col. Garnett..85
" " 86
Population of Cities in the United States.....87
Funded Debt of Maryland.....87
Covington and Lexington Railroad.....87
Illinois Central Railroad.....87
Railroad Reports.....88
Stock and Money Market.....89
Compound Rail.....90
Hudson River Railroad.....90
Ohio and Indiana Railroad.....92
Hillsboro' Railroad.....92
East Tennessee and Georgia Railroad.....92
Raleigh and Gaston Railroad.....93
Evansville and Illinois Railroad.....93
South Carolina Railroad.....94

American Railroad Journal.

Saturday, February 7, 1852.

Canada.

St. Lawrence and Atlantic Railroad.—We have received the late annual report of the directors of this road, submitted to the stockholders on the 21st ult.

Since the last annual report, an agreement has been entered into between the company and the contractors, by which the latter were released from a further prosecution of the work, which has since been carried on by the company. In assuming the work of construction, the directors state that they were not actuated by any expectation that the actual cash cost of the work would be much under the estimates they had formed at the date of its execution; but they acted with reference to the improved financial condition of the company, and, especially, to the more valuable character given to the Provincial bonds, for the purpose of relieving the company from the issue of a large amount of new stock. The directors are not certain there will be a large saving under this new arrangement, but think it highly favorable that the cost of the railroad from St. Hyacinthe to the Province will fall considerably under the contract price of £6,550 per mile.

By a new enactment of the Legislature, there has been an important modification adopted in the character of the bonds to be issued in aid of Provincial railroads. The Province now guarantees the principal, as well as the interest upon the debentures, and the directors state that, whereas the highest offer previously made in London for bonds bearing the guarantee of interest alone, was 85 per cent; they have since negotiated £100,000 sterling at par, and the remainder at a premium of 3 per cent.

Another important feature in the new enactment is the provision, whereby the guarantee extends to the necessary primary equipment of the road, in the case of this company affording relief to the extent of above £50,000.

Under the terms of the guarantee bill, the company were only in a position to claim the Provincial aid on the 15th of October last. They received up to the 30th November, bonds for £175,000 sterling. They have since obtained £100,000 additional; and at the assumed cost of the road, a further amount of about £125,000 sterling will be delivered as the work proceeds.

From the delay in obtaining the Provincial bonds, great financial difficulty was for some time apprehended by the company; but they have now recovered from their temporary embarrassment, and do not contemplate any serious difficulty in completing the remainder of the work. All their engagements have been promptly met, and the directors state that they have not, up to this time, been obliged to raise money at rates of interest above 6 per cent.

The obligations for the interest on the loans, derived from various sources, have also been punctually met by the company, without encroaching upon their capital. The amount paid on these accounts in 1850 and 1851 was £12,750. During the same period, the profits of the railroad, after deducting the working expenses, were £17,761 10s. 7d.

The point of junction of this company with the Atlantic and St. Lawrence railroad has been finally determined, and the route adopted.

One important feature in the negotiations with the Portland company, is the concession to the St. Lawrence and Atlantic company of the right to construct and operate a portion of their railroad in Vermont, inasmuch as it was ascertained that the business of the respective companies would be greatly promoted by such an arrangement. The necessary legal steps for this arrangement have not yet been taken, but no difficulty is apprehended on this point, nor do the directors doubt their ability to negotiate the loan necessary for this purpose, as the security will be of the most undoubted description.

On the 20th of October, that portion of the St. Lawrence and Atlantic railroad from St. Hyacinthe to Richmond, 41 miles, was opened for traffic.

The works on the section between Richmond and Sherbrooke, 24 miles, are also in a forward state, and it is expected that the road will be opened to the latter place in June next.

The operation of the road thus far has been very satisfactory. Under the lease there accrued up to the 30th November, 1850, the sum of £5,500 0 0

And in 1851, under the terms of the lease cancelled at 21st April last.....£4,576 5 5

And since that date, to 30th November.....13,396 12 8 17,972 18 1

£23,472 18 1

It is believed that the way traffic of the road will be very large, and the directors are confident that it will amply repay the cost of construction. The business of the eastern townships is by no means yet fully felt, and will not be, until the road is extended to Sherbrooke. In addition to this source of revenue, it is expected that a great amount of income will be derived from the lumber and firewood of the timber districts between St. Hyacinthe and Richmond.

As this road forms the shortest and best route between the St. Lawrence and Atlantic, the through traffic will necessarily be very profitable.

The expenses of working the railroad during the seven months of its operation by the company have been £5,711 7s. 6d., or 43 per cent on the gross receipts. Whether this rate will be increased or not, depends in a great measure upon the nature and extent of the freight. Increased traffic will, in all probability, amply compensate for increased expenses of transportation.

The report was very favorably received by the stockholders, and the retiring directors were re-elected with great unanimity. A. T. Galt, Esq., was re-elected President of the company, and the sum of £750 was voted to him, for his services the past year.

County Subscriptions to Railroad Companies--Decision of the Supreme Court of Ohio in Bank.

The recent decision of the Supreme Court in two chancery cases, to involve the constitutionality and validity of county subscriptions to railroad companies, has been a subject of considerable comment in and out of this State. The facts have not been very well understood in many places and the decision has therefore not been very well understood. The facts are these, as we understand them from some of the parties interested:

On the 26th of February, 1846, the Legislature passed an "act to authorize the commissioners of Knox and other counties to take stock in a railroad." By the terms of this act the county of Crawford, among others, was authorized to become a subscriber to an amount not exceeding one hundred thousand dollars, to the capital stock of any company theretofore, or which might thereafter be incorporated, to construct any railroad which, of itself, or in conjunction with other companies, might open a direct communication through the county, and to or near its county seat. But before the commissioners could subscribe the stock, the question of subscription was to be referred to the qualified voters of the county at the annual spring or fall election, and receive the consent of a majority thereto. Vol. 44 Local Laws, p. 192.

On the 24th of February, 1848, the "act to incorporate the Ohio and Pennsylvania railroad company" was passed, with power to construct a railroad from the town of Mansfield, in Richland county, eastwardly, by the way of the towns of Wooster, Massillon and Canton, to some point in the eastern boundary line of Ohio, within the county of Columbiana, thence to the city of Pittsburgh; and from said town of Mansfield, westwardly, by the way of Bucyrus, in Crawford county, until it intersects the west line of the State of Ohio, at such point as may be determined by said company to be most eligible. The general rail road law of 1848 is made a part of this charter.—Local laws, vol. 46, p. 262.

At the October election, 1848, the question of subscribing one hundred thousand dollars to the capital stock of the Ohio and Pennsylvania railroad was submitted to the voters of Crawford county, and obtained a majority in favor of it.—But the commissioners never made any subscription.

On the 20th of March, 1850, "the act to incorporate the Ohio and Indiana railroad company" was passed, with capital stock to the amount of two millions of dollars, and authority to construct a railroad commencing at a suitable point to be selected by said company on the Cleveland, Columbus and Cincinnati railroad near Sultzer's tavern, in the county of Crawford; thence to Upper Sandusky, in the county of Wyandot; and thence on such route as the directors of said company, or a majority of them, may select, to the Western line of the State of Ohio, and thence to Fort Wayne, in the State of Indiana.

The 4th section of this act provides "that the county commissioners of any county through which said railroad may be *located*, by and with the consent of a majority of the legal voters of such county, * * * be and they are hereby authorized and required to subscribe, in the name and for the benefit of such county, to the capital stock of said company, any sum not exceeding one hundred thousand dollars," etc. Local Laws, vol. 47, p. 297. This charter is also subjected to the restrictions of the general railroad act of February 11, 1848.

On the 23d of March, 1850, "an act to authorize the commissioners of Crawford county to subscribe stock in railroad companies" was passed and took effect. The 1st section directs "that the commissioners of Crawford county be and they are hereby authorized and required to *change* the subscription heretofore authorized by a vote of the people of the county to be made to the Ohio and Pennsylvania railroad, and to subscribe to the capital stock of any company or companies which are now or may hereafter be incorporated to construct a railroad commencing or terminating at any point in, or passing through, or adjoining the town of Bucyrus, the county seat of said county, the sum of one hundred thousand dollars." Local Laws, vol. 48, p. 277.

So much for Crawford county.

At the October election, 1850, a vote was taken in Wyandot county, on the question for and against a subscription of $50,000 to the capital stock of the Ohio and Indiana railroad company, which resulted in favor of it by a majority of ninety-two votes.

The commissioners of that county soon thereafter, were preparing to subscribe the $50,000, in pursuance of this vote. John Carey and others thereupon filed their bill in Chancery, in the court of common pleas, *to enjoin the county commissioners from making the subscription.* They reptesent that they are citizens of Wyandot county, and owners of large tracts of real estate, as well as large tracts of personal property within the county, upon which they are required to pay taxes, and which are annually assessed upon the duplicate for county, State, and other purposes of taxation.

The bill alledges that this vote was procured by fraud and misrepresentation on the part of its advocates, and that complainants voted against the said subscription, and have never given their assent to it:—

This is the case of John Carey *et. al. vs. the commissioners of Wyandot county.*

In the case of *Griffith et. al.*, vs. *the Com'rs of Crawford county, et. al.*, it is alleged in the bill, that the county commissioners have subscribed $100,000 to the capital stock of the Ohio and Indiana railroad, and have issued bonds to the amount of $10,000, and delivered them to the railroad company, payable in fifteen years, at interest at the rate of six per cent. per annum; that the directors of the company are now about to negotiate them, to raise money to build the road; and that the commissioners of the county were to meet on the 23d of the then month of November, for the purpose of issuing bonds for the balance of said subscription.

The bill prays for the allowances of an injunction, to restrain the county commissioners from issuing any more bonds, upon their aforesaid subscription, and against the negotiation and sale of those already issued, and against the levying and collection of any tax, for the payment of interest or principal, on account of said bonds.

Injunctions were allowed by a single Judge of the Court of Common Pleas, in vacation. restraining the subscription of stock by the commissioners, and continued by the Court of Common Pleas of Wyandot and Crawford counties, until the removal of the causes into this court. On the 24th of March, 1851, the Legislature passed "an act to amend the act entitled an act directing the mode of proceeding in chancery, in the counties of Wyandot and Crawford;" by the terms of which, "any cause in equity, then pending, or which might thereafter be instituted, wherein an injunction has been allowed by the the Court of Common Pleas, or any President Judge thereof, any party against whom said injunction has been allowed, may file a motion in the Supreme court, in the county in which such case is pending, or in the Supreme court in bank, setting forth the grounds of the same; and the Supreme court in the county, or the court in the bank, shall have competent power and jurisdiction to hear and determine said motion to dissolve the injunction on ten day's notice to the other party," etc. Vol. 49, Local Laws, 321.

Under this law, applicable to the two counties named, motions were in the Supreme court of Wyandot and of Crawford county, at the July term, 1851, to dissolve these injunctions; which motions were reserved for decision in the Supreme court in bank. The *original cases are still pending in the courts where they commenced*, the common pleas of Wyandot and Crawford counties. *Nothing* was pending in the Supreme court but the *motions to dissolve injunctions* under the special law of March 24th, 1851.

The cases were considered by the Supreme court in the absence of Hitchcock, C. J., who was called home by sickness in his family.

Upon these facts, and under the laws, particularly under the special law of March 24, 1851, the court decided that the *Supreme Court had no constitutional jurisdictions of the motions to dissolve the injunctions.* It seems that the special law attempting to give jurisdiction of the motions to dissolve the injunctions conflicted with the jurisdiction of the common pleas, and was unconstitutional.

No decision has therefore been made by the court affecting the validity or touching the question of the constitutionality of county subscriptions to railroad companies. If such an idea has prevailed, it is a mistake.—*Ohio State Journal.*

Georgia.

Macon and Western Railroad.—The reports of President Scott and of Mr. Foote, the general superintendent, show the Macon and Western railroad to be in a prosperous condition. The President states that the gross income of the company from all sources, including five thousand dollars received for interest on money loaned has amounted to $216,621 56
And the expenses to 104,576 18

Leaving net $112,045 38
To which add amount at credit of profit and losses per last report 67,621 94

179,667 32

Out of which the following disbursements have been made: Dividends Nos. 9 and 10, paid February and August last $78,532 00
Paid interest on bonds 9,452 00
State tax for 1850 ..... 1,968 75

89,952 75

Showing a balance to be appropriated to dividend and reserved fund of $89,952 85

The earnings of the road as compared with those of the previous year, are as follows:

	Passengers and mails.	Freights.	Total.
1850....	$110,533 79	$96,506 92	$207,040 71
1851....	116,046 56	95,546 70	211,593 26
Increase.	$5,512 77	Dec. $960 22	Inc. $4,552 55

The freight earnings though less than last year, show a very considerable gain in the upward freights. The falling off in the downward freights is attributed to the drought in all that region of country doing business with the road. No section of the State has suffered so severely from drought, and the consequent injury to the crops of both corn and cotton, as has that through which the road passes, and from which nearly its whole present business is derived. The earnings of the road, nevertheless, for the past two years have been such (all things considered) as should give increased confidence in the value of the stock of the company. The renewal of the whole track in a thorough and substantial manner, the junction with the Central and Southwestern roads at Macon, the opening of the La Grange road to a distance of forty miles, the expected repair and re-organization of the State road, and the completion of the Nashville and Chattanooga and East Tennessee and Georgia roads, it is confidently believed, will contribute largely to the business and profits of the road. The President has no doubt but that the earnings for the present year will amount to at least $250,000, and that the current expenses will not exceed $100,000.

The railroad, one hundred and three miles in length, and its equipments, including engines, cars, machine shops, tools, depots and buildings, will when the construction now in progress, is completed and paid for, have cost the company $1,279,000 00
While the capital realized from the issue and sale of stock, amounts only to 1,018,500 00
Showing an excess of cost over capital provided, of 260,500 00
Of this sum one hundred and thirty-five thousand dollars, (the present debt of the company) have been realized by the issue of the company's bonds 135,000 00
And the President has recommended the issue and sale of a further sum of. 65,000 00 200,000 00

Which if made shows still an amount of $60,500 00

Which has been paid from the earnings of the road, since closing construction account in 1846.

The total indebtedness of the company on the 1st December, 1851, was only $135,000, liable to be increased temporarily to $200,000.

To meet and discharge this debt, the company have reserved fund.....$20,000
Supposed value of old iron on hand..... 50,000
Stock in plank road..... 12,000 82,000 00

Leaving only a balance of... $118,000 00

The prospects for an increasing and profitable business are such as to leave no doubt in the minds of the board of being able to set apart annually, after paying satisfactory dividends, an amount sufficient to pay this debt, as it matures, and as fast as this is done, annual dividends payable in stock should be made to the shareholders.

Tennessee.

Fourth Annual Report of the Directors of the Nashville and Chattanooga Railroad.

OFFICE NASH. AND CHAT. R.R. Co.,
Nashville, Dec. 9, 1851.

In conformity with the 9th section of the charter of the company, the directors take pleasure in making this their fourth report, setting forth the state of progress and affairs of the company.

The stock of the company has been increased since the last report, by the issuance, on the 1st of July last, of $23,262 50 to the Nashville, Murfreesboro' and Shelbyville Turnpike company, in accordance with the terms of a compromise made with that company, and the individual subscription of 2,885 dollars, making the capital stock at present, including the 500,000 dollars of State aid, amount to 2,586,912 50 dollars, made up as follows:—

Individual stock	$806,912 50
Subscription of the city of Nashville.	500,000 00
" city of Charleston, S.C.	500,000 00
" Georgia Railroad and Banking co.	250,000 00
" Town of Murfreesboro'	30,000 00
State endorsement of company's thirty year bonds	500,000 00
	2,586,912 50

The whole amount received in stock subscription and bonds, issued to the company, are as follows:—

Amount subscribed in stock	$616,334 98
City of Nashville bonds	500,000 00
" Murfreesboro' bonds	30,000 00
Received in city of Charleston subscription	374,000 00
Received in Georgia railroad subscription.	126,000 00
State endorsement of company's bonds.	250,000 00
Total.	$1,896,334 98
Of this amount the company have on hand in property which can be made available for the future prosecution of the work	169,547 71
Showing the actual amount of expenditure to be	$1,726,787 28

To this should be added the sum of $100,826 28 for bills payable, all of which being deducted from the amount of means already provided, leaves the sum of $754,298 95 of unexpended resources.—From this amount a further deduction of $59,298 95 is to be made, for estimated losses on stock subscription and contingencies, leaving $700,000 00 as available means.

It will be seen from the Chief Engineer's report, that the estimated cost of the road has been increased 161,495 88 dollars—(the reasons for which are there given)—to which add the difference in interest account made by paying interest on stock instead of collecting interest from delinquent stockholders, and saving the means of the company for constructing the road, would be $188,590 84; that is, adding the interest assessed of $122,058 71, and the interest charged on delinquent stock of $66,532 07, which would have been added to the capital; whereas, this is sunk, and we have paid out and assessed in addition $122,056 77. These two items, viz:—

Increased estimated cost	$161,495 88
And interest, as above	188,590 84
Thus making a difference not contemplated in the first report of the estimates of means and cost of work, of.	350,086 72
Take then the loss on sales of Nashville bonds of	62,234 00
Probable loss in collecting stock of	59,298 95
And the present oulay for station houses, depots, depot land and machinery	103,847 15
Making	225,380 10
Which added to the above amount of difference in interest and estimates of.	350,086 72
All of which makes up a total of contingencies outside of the original contemplated cost of the road proper of	$575,466 82

All of which leaves the company, by the Chief Engineer's estimate here annexed, short of means to finish the road, the sum of $141,495 88, besides the additional amount necessary to build station houses and equip the road.

The directors think the profits of the road could be made available for this purpose, but that the risk of delay in the completion of the road and the loss in profits for want of adequate machinery to meet the demands of trade on the road may be considerable.

Therefore they recommend that the stockholders give the authority to borrow $300,000 in addition to the $500,000 before authorized and partly realized with State endorsement.

The directors think with this additional loan they can go on and finish the road with success and promptness, and add to its present equipage such machinery as the demands of trade may require up to its completion, and build such station houses, water tanks, etc., as will justify and meet the demands of the large and growing trade properly anticipated.

It would be well to obtain the State's endorsement and guaranty as in the case of the $500,000 referred to. This additional means will not be wanted, probably, before the latter part of next year.

The directors, in their last report, expressed a belief that with good weather they could have sixty miles of the road done and the cars on it by this time. In this they have been successful, as there are 61 miles done on the main line and the cars on it making trips twice a day, and the timber laid on four miles of the branch road to Shelbyville. There are 100 hands laying track in one gang on the main line; two small gangs on the Shelbyville branch, laying as fast as the grading is out of the way, and will finish the branch at the farthest, by the first of February next; and a force laying from Chattanooga towards Nashville, which force will be kept large enough to keep up with the grading from that direction. There are contracts also made with responsible parties to furnish and lay down timber ready for the iron on sections 96 to 116, inclusive, making 20 miles between the Cumberland Tunnel and the Tennessee river, which contracts are to be finished before the main line reaches them. With these arrangements it is thought the road will, with certainty, be finished to the Tennessee river by the 1st of November, 1852, or within the first ten months of next year; and we feel assured that if the balance of the twenty-seven and one-half miles between that and Chattanooga shall not be done by the end of 1852, it can lack but little, as there is a large force on the work under efficient contractors, and every disposition and determination to press it to the earliest possible completion.

The income of the road, with such machinery as was necessary to carry forward the cedar timber and iron only, has been over 24,000 dollars, and the clear money over 5,000 dollars, after paying all expenses of carrying forward materials for building the road. The company have only offered to do business for the last five months, and could, with adequate machinery, have made four times as much money. The proper officers thought the machinery equal to the probable wants of trade, and the water falling, they could get no more.

It will be seen, from the Chief Engineer's report, that the sixty-one miles of road finished has cost slightly under 12,000 dollars per mile, and that the average cost of the whole road will be 15,476 21 dollars per mile.

With this low cost for a first class road, passing through one of the most fertile regions in agricultural and mineral wealth, and the proposed connections at its western terminus at Nashville with roads to Louisville Ky., and the Mississippi river in the northwest, and Mississippi and Alabama on the southwest, and the Georgia, South Carolina and Virginia roads in the east, your directors feel doubly assured of the success of the road.

The directors have been making every necessary arrangement for a vigorous prosecution of the work next year, and hope, as before stated, to complete the work within the year, or at least, to get to the Tennessee river as early in the fall as possible, when the road will do a heavy business in connection with boats between that point and Chattanooga, until the twenty-seven and one-half miles intervening shall have been completed, which can be but a few months later.

The rise in the value of land upon the whole line of the road, we think, will average ten dollars per acre for a width of 2½ miles each side, making 5 miles, and in 151 miles of main road and 8 of branch, a distance of 159 miles, making 3,200 acres to the mile at ten dollars an acre, or 32,000 dollars per mile, or 5,088,000 dollars upon the land within two and one-half miles. Then take the land within seven and one-half miles each side, and the rise is fully equal to the above, or 5,088,000 dollars, and within seventeen and one-halt, and you may safely add another 5,088,000 dollars as the rise, and another 5,088,000 dollars outside of seventeen and one-half miles, making the total rise in land 20,352,000 dollars; and this is a moderate estimate, as many lands in Rutherford, and some in Bedford, have risen from ten to one hundred dollars an acre, and many in Davidson, where the road has been finished longest, from ten to five hundred dollars an acre. It is thought the land on five miles square around the terminus at Nashville has risen 1,000,000 dollars or more, and for five miles square covering Murfreesboro', 500,000 dollars, or near it.

This rise is equal to six times the cost of the road and equipage, and the stock will be good. So the landholders have a clear gain of 20,000,000 of dollars, and the stockholders a good dividend paying stock.

All of which is respectfully submitted.

V. K. STEVENSON, President.

Accompanying the report of the President is that of the Chief Engineer, Col. J. H. Grant, which gives in detail the results stated above.

The following is a summary of the estimated cost of grading and bridging the several divisions, with the cost of superstructure and contingencies for the whole line:—

Nashville division, 60¼ miles	$311,088 19
Winchester " 63¼ "	582,644 70
Chattanooga " 27½ "	366,098 66
Shelbyville branch, 8 "	35,941 97
Superstructure	946,991 36
Expenses and contingencies	162,358 00
	$2,405,122 88

Showing an aggregate cost of $15,474 21 for the main line, and $7,150 47 per mile for the Shelbyville branch, exclusive of equipment.

The work on the first division is remarkably easy. On the second a long tunnel, and a cut 1500 feet long and 65 deep in the centre, is encountered. After passing the mountains a good deal of difficult work is encountered in getting down to the Tennessee river, which is crossed in the State of Alabama. Upon the Chattanooga division a large amount of difficult work is also encountered.—When we take into consideration the fact that

about 50 miles of this road is taken up in passing the Cumberland Mountains, which are exceedingly rugged and broken, the cost of the road appears to us at the north, as exceedingly moderate.

The road will probably be completed the present year, which is to be signalized by the opening of a great many very important lines, among which may be named the Baltimore and Ohio, the Pennsylvania, the extension of the Erie to the railroads of Ohio, and the extension of some of the leading lines in Ohio, in connection with the roads of Indiana, to the western boundary of that State. When all this shall be accomplished, easy access can, in connection with our rivers, be had to every important part of the Union.

Baltimore and Susquehanna Railroad.

Below we give the substance of the recent annual report of the directors of this company which present its affairs in a very encouraging light.

The gross earnings of the company from transportation generally, for the year ending 30th September, 1851, were $349,874·78 which shows an increase of $65,278·06, over those from the same source the previous year.

The per centage of increase on revenue has been on passengers 14½ per cent., on merchandise 27½ per cent., and an aggregate increase of 22½ per cent.

During the last fiscal year there were transported over the Baltimore and Susquehanna railroad, between Baltimore and York, 145,276 passengers, and 223,263 tons of freight. On the Wrightsville, York and Gettysburg railroad, during the same period, there were transported 28,089 passengers, and 83,372 tons of freight, and on the York and Cumberland railroad 18,198 passengers, and 19,132 tons of freight were transported during the seven months, to the 30th September, 1851, the length of time for which this company had then been working that road.

The large increase in the receipts of this company for the last year was anticipated; indeed, it had been estimated that it would reach the sum of $116,000, the realization of which was only prevented by the unprecedented low stage of water in the Pennsylvania canals and the Ohio river, for a period of more than three months, embracing that part of the season usually affording to this company the most profitable portion of its Western trade. Owing to this casualty, an important branch of our business was entirely suspended, and the merchants of our city were compelled to submit, not only to the loss of a large share of their western business, but also to the mortification of shipping goods sold to Western dealers, by way of the New York improvements.

We were, however, not alone in these difficulties —the same state of things affected in a much greater degree, the trade of Philadelphia, which passed through the same channel. We are happy to say, that this temporary obstacle to the profit and success of our road is not likely to annoy us during the present year, as both cities will have the advantage of a direct railway communication with the lakes and the city of Cincinnati, by the completion of the western division of the Pennsylvania railroad in July next, and which at Pittsburg will form connection with the Pennsylvania and Ohio railroad, now in operation as far as Alliance, where it forms a junction with the Cleveland and Wellsville road, also in successful operation to the former city.—That portion of the Pennsylvania and Ohio railroad between Alliance and Shelby will be completed early in the Spring, and when opened, will reduce the distance between Pittsburg and Cincinnati about fifty miles.

We are confident in the opinion, that but for the untoward circumstance just referred to, the earnings of the company for the past year would have reached the sum of $400,000, and we are well sustained in this view by the fact that the monthly increase up to the time of the difficulties on the line of intercommunication, was at a rate fully equal to that product. This amount of gross earnings for the past year would (after paying the expenses of transportation and the current interest) have left in the Treasury of the company, an amount equal to a dividend of three per cent. on their entire capital.

The net receipts of the company for the past year were $144,902·36, being from net transportation $120,973·88, and from other sources $23,928·48.—There has been paid to the Treasurer of the State during the company's fiscal year $71,461·36, and during the State's fiscal year $84,692·04, which latter sum was in full for the current interest due the State on the 1st October, and in accordance with the arrangement made for the funding of arrearages of interest under the act of the General Assembly of Maryland, passed at December session, 1847, which was a further supplement to the Act incorporating the Baltimore and Susquehanna railroad company. By this supplementary Act it is provided that if on or before the first day of March, 1851, a railroad shall be constructed and opened for travel between York and the Cumberland Valley railroad, or from Wrightsville to Middletown, thereby securing a connection with the line of road constructing west of Harrisburg, then all the back interest due the State of Maryland by this company should be funded for fifteen years, and that no interest should be charged on such arrears of interest so funded, for or during that period of time.—Both of the roads referred to in the act were completed and in operation prior to the time there specified, and this company have received from the president and directors of the York and Cumberland railroad company a certificate of the completion of their road, properly authenticated, applied to the treasurer of the State of Maryland to fund the arrears of interest then due, and which amounted to the sum of $1,035,980. Under the advice of Attorney General Brent this action was approved, and bonds to that amount, bearing date January 1st, 1851, at fifteen years, without interest, were issued by the company and deposited with the Treasurer of the State. These bonds, if not paid before maturity, will, under the provisions of the act, at the end of fifteen years, form part of the mortgage debt of the company.

The balance of the net receipts, after the payment to the State of the sum before mentioned, was expended for improvements of a permanent character and increasing the stock on the road.

During the seven months from the 5th of March, 1850, to the 1st of October, 1851, in which the York and Cumberland railroad has been worked by the Baltimore and Susquehanna railroad, the total earnings of the York and Cumberland road were as follows:

Passengers.....No. 18,198		$11,118·43	
Merchand'e, lbs. 38,264,012	.	9,095·79	20,214·22
Of which the York and Cumberland railroad company received.....		$11,733,52	
Cumberland Valley railroad company for bridge tolls.....		549,67	
Baltimore and Susq. railroad company.....		7,931·03	20,214·22

Assuming the business of the York and Cumberland railroad to be at the same ratio for the entire year as it is for the seven months above stated, then the result would be the transportation of 31,000 passengers and 32,000 tons of merchandise.

The business thus far of the York and Cumberland railroad, in the number of its passengers and tons of merchandise transported, compares favorably with that of this line, exceeding in tonnage the first two, and the average of the first three years, and but very little below the average of the gross number of passengers on this road for the first five years of its operation. When it is recollected that the length of road between Baltimore and Wrightsville is seventy miles, possessing the advantage of a terminus in Baltimore, and enjoying a large local travel incident to the sections of railways nearest to a city, while on the other hand, the York and Cumberland railroad has a line of only twenty six miles in extent, these circumstances considered will render the amount of business done over the latter road during the time it has been in operation, more appreciable to the minds of those interested in the information here given.

The advantages which are to accrue to the Company, and to the business and trade of Baltimore, through the completion of the various improvements with which the road will connect, are strongly stated in the Report:

In concluding this communication, it becomes us to give to you our views in regard to the future prospects of the line of railway between this city and Harrisburg. To our minds they are perfectly satisfactory; in that direction the future can develope nothing worth struggling for, that is not already within the grasp of Baltimore enterprise.

Strong in the natural advantages of her geographical position; sustained by the operation of liberal and enlightened legislation on the part of sister States, our city has it now within the limits of her own will to solve the problem of her future prosperity. How far the works in which we are more immediately interested may be relied upon as instruments to great results, we propose to show.

We have already alluded to the advantages to result to our line of road on the completion of the western division of the Pennsylvania railroad; we shall then be within eighteen hours travel of Pittsburgh, twenty-five hours of Cleveland, and within thirty-five hours of Cincinnati.

Such facilities must secure to us a greatly augmented passenger business, and a mail service commanding first class compensation—this latter would be an additional net revenue to our Company of $12,000, and to the York and Cumberland Railroad Company of $7,000 per annum.

The advantages of a connection with the Pennsylvania railroad, heretofore looked upon as an important adjunct to our success, and from which we shall doubtless realise our highest expectations, are secondary in consideration, when compared with the wide field that is opened to us by the construction of the Susquehanna railroad from Bridgeport, opposite Harrisburg, to Williamsport, and for which a charter was granted at the last session of the General Assembly of Pennsylvania. Within six miles of its Southern terminus, the proposed road will form a connection with the Pennsylvania railroad on the west bank of the river, which will very materially enhance our advantages for trade over that road. In its progress through the fertile valley of the Susquehanna, it crosses and connects with the railroad leading to the Dauphin and Susquehanna coal mines, and thence to the city of Pottsville. Next on the route, and in close proximity, are the railroads leading to the Lykens Valley, Treverton, Mahanoy, and Wisconisco and the Shamokin coal mines, to each of which there is a distinct road, and all crossed by and connected with the proposed Susquehanna railroad. As these are by us considered important points on the line of the improvement, we shall here give some of the details that have impressed us with their importance, prefacing it with the fact, that at this time we have a connection with the first named mines (the Dauphin and Susquehanna), by way of Harrisburg and Pennsylvania railroad, by no means as favorable as that by the proposed route, and the only ones with which that road connects.

We are now in receipt of a proposition from the Dauphin and Susquehanna Coal Company, to transport over our line of road during the next year, 200,000 tons of coal, which, under a charge of transportation per ton, per mile, at a rate no higher than is now charged by the Baltimore and Ohio or the Reading railroad companies, would enable the Coal Company to place coals on board ship at Baltimore, as low as it is now done by the Reading Company at Philadelphia. This trade alone would give to our own and the York and Cumberland railroad companies, an additional revenue of $210,000, and estimating the profit at a rate as shown by the experience of the two companies before named, in the transportation of coals over their respective roads, the result would be a product equal to six per cent, on the capital stock of both companies. This is a *practical* exemplification of the benefits that are to result to our roads and to our city, by the construction of the proposed railroad, and if such results as the one stated are within our reach, with all the disadvantages of an imperfect connection, under which we now labor, what may we expect when by the completion of this road, we are placed in immediate connection with the great

Southern anthracite coal fields, by far the most extensive in the country, and possessing the great advantage of cheap production.

The importance of securing this trade to the line of our roads and the city of Baltimore cannot be exaggerated. Eight years ago the coal trade of the Reading railroad (three years after its completion) was only 230,000 tons; this last year it was 1,600,000, employing from the city of Philadelphia a coast wise tonnage equal to the entire foreign tonnage of the city of New York. The gross revenues of that company for the past year reached the sum of $2,314,330, being for transportation of coals $2,018,870, and for passengers, mails and merchandise only $295,874. The latter amount of revenue, when compared with the receipts of our own companies derived from the same source, falls short of ours $54,000.

The quantity of anthracite coal mined and sent to market from the Pennsylvania mines during the past year was 4,406,829 tons, showing an increased production over the year 1850 of 1,046,831 tons.—This coal was taken from the different fields as follows; from the northern coal field, 2,120,391 tons; from the middle field, 2 184,240 tons, and from the southern field 102,198 tons. This statement illustrates the magnitude of the coal trade from that State, and the relative quantity taken from the different regions. The great disparity in the number of tons taken from the southern field, as compared with the quantity from the other two, is owing entirely to its position, and the absence of a cheap, certain and expeditious mode of transportation to a port from whence the article can be shipped to the various points for consumption at reasonable freights, and possessing such advantages as would in market place it on a footing with the coals of the other fields. To do this is one of the objects proposed in the construction of the extension, and it is the only practicable mode by which the mineral wealth of that extensive region can be developed. The sum required to consummate the work sinks into utter insignificance when compared with the vast results which must enure to all the commercial and manufacturing interests of our city.

Having thus given you some of the practical information in our possession relative to the great advantages which must result from a connection with the gold regions, we pass on to notice other points on the line of the proposed route, which offer strong inducements for its construction. In its course up the valley of the Susquehanna, this road will pass through many towns and villages, the trade of which it is believed will largely contribute to its maintenance; at Williamsport, in Lycoming county, it will connect with the Williamsport and Elmira Railroad, thus placing us in direct connection with the New York and Erie railroad, one of the great arteries of trade and commerce between New York and the Lakes. At this point we are also put in connection with all the branches of the great system of internal improvements constructed by the State of New York, and here it is by the completion of the proposed road Baltimore is enabled to realize the great advantages of her geographical position; for at Elmira the city of Baltimore will be forty miles nearer to the trade of the Lakes than is the city of New York. She will offer to them a line of communication possessing other advantages not enjoyed by those leading to her more eastern rivals; and with these inducements, and the enterprise of her merchants to back them, who can doubt the result? The amount of the Lake trade annually carried to the city of New York, by way of her improvements, is immense. So great had it become some years ago that the application of the people of Boston for a connection by railway with her improvements was agreed to by New York, since which time they have by concerted action engrossed the whole of this valuable trade, and their people grown wealthy in the prosecution of it.

We propose that Baltimore shall put in her claim for this trade; it is within her power to command her full share of it by the construction of less than ninety miles of railroad. Relying with the utmost confidence upon the public spirit and enterprise of her commercial community, we leave this subject to her decision.

The construction of the Hanover Branch railroad was commenced last spring, and is now in such a state of forwardness as to ensure its completion in April next. The amount requisite to build this road was raised by the citizens of the flourishing and prosperous town of Hanover and its vicinity; the act is highly creditable to their liberality and public spirit. A charter has been granted by the State of Pennsylvania for an extension of this work to Gettysburg, the county town of Adams county, and steps are now being taken by the active friends of the enterprise to raise the means for its construction with a certainty of realising their object. This line of road, passing as it does through a country rich in agricultural and mineral resources, and densely populated, will not only remunerate those who have invested their means in its construction, but will be an important avenue of trade to the district of country through which it passes.

R. C. McGraw, Pres't.

Virginia.

Letter of Mr. Garnett.

Richmond, Jan. 26th, 1852.

Dear Sir—I can join you most heartily, in the regret expressed in your communication to the Whig of the 23d, at the necessity which has arisen from this correspondence. And I have good reason to fear an encounter with so experienced a controversialist, whose armor is always bright and lance always in rest. Moreover, I must fight against odds, as Mr. Shaw follows in the Whig of the 24th.

Nothing could give me courage for such a controversy, but one circumstance—though the skill and the odds are against me—*the facts happen to all be on my side.*

First—I will most positively decline the change of issue which Mr. Shaw and yourself have proposed, by endeavoring to saddle on me the championship of inclined planes with stationary power. I certainly had not the slightest intention of accusing Mr. Shaw of any desire to introduce the use of stationary power on his five mile inclined plane. I was quite wide enough awake to railway progress to know that this system had been condemned in many cases where it would formerly have been used. Stationary power was formerly deemed necessary to overcome ascents, which we have since found to be far more economically worked by locomotive power.

So that many an inclined plane, which was worked by stationary power in 1835 or 1840, would have proved in 1852 only one of Mr. Shaw's exceptional grades, admirably adapted to the use of locomotives. But cases might still occur where stationary power would be found best—these being only extreme cases of high grades. The laws of gravity, which militate against the motion of heavy loads up great inclinations, do not change their character at the point where the economy of locomotive power must cease and the economy of stationary power must commence. The force necessary to propel a load up an inclined plane will always be proportioned to the inclination, and so will be the expense. An inclined plane, requiring the use of stationary power, is but the extreme of what Mr. Shaw calls exceptional grades. Nor is the risk of danger so very different. In one case we have the risk of one or more cars becoming detached and running with great velocity down the grade, and in the other case the same result may follow the breaking of a rope. As I have elsewhere said, "the laws of gravity are stubborn facts which can neither be removed nor overcome."

This point being disposed of, I will proceed to point out another case of Mr. Shaw's peculiar style of argument.

He establishes two propositions, neither of which I am disposed to deny.

1. That gradients of 110 feet per mile are perfectly practicable to the ordinary locomotive, with moderate loads.

2 That gradients of 141 feet per mile, or higher, may be surmounted, by trains, with the aid of an assistant engine of peculiar construction.

He then proceeds to say very coolly, "I therefore pass by, as not relevant to our discussion, his list of railways having *stationary* assistant engines." And yet Mr. Shaw knew that every case referred to by me did not involve the use of a stationary engine.

In the case of the road from Boston to Albany, where there are, for a short distance, grades of 83 feet per mile, there are no stationary engines.—And yet the capitalists of New England (not the stockholders in the Boston and Albany line,) are constructing a rival road, at great expense, and making a tunnel four miles long through the Hoosic mountain, to save eighteen miles, and to substitute for these 83 feet grades, others of 68 feet per mile—the very limit adopted on the Virginia and Tennessee road, in favor of the heavy trade. I grant that the saving of 18 miles had its weight in stimulating this enterprise, but the reduction of grade had its weight also. This work being undertaken by a rival interest, instead of the same stockholders, does not at all diminish the force of the argument.

In the case of the New York and Erie railroad, where the grade was reduced to 60 feet per mile, (the same with the ruling grade opposed to the heavy trade on the Virginia and Tennessee railroad,) I do not believe that stationary power had ever been contemplated. Some importance is given to the fact that Mr. Latrobe has located gradients on the Baltimore and Ohio road, of from 100 to 116 feet per mile. This was a matter of necessity, not choice—a necessity which I dare say he would gladly have avoided.

But, after all, it will be deemed by many an entirely useless waste of words thus to urge gravely, that a road, with ruling grades of sixty and sixty-eight feet per mile, is vastly superior to one where, within the space of 115 miles, and distributed over that distance, there are three [if not more?] such objectionable summits: 1. The summit between the White Sulphur Springs and Covington, where there are 2 miles on one side of the mountain of 92 8.10 feet per mile, and 5 miles on the other of 105 feet per mile. 2. The summit between Covington and Staunton, where the mountain, to use the language of the report, "surrendered to seventy feet grades going east and eighty going west." This mountain must have *surrendered at discretion*, it did not even *capitulate*. 3. The Blue Ridge Tunnel, whose grades of 70 and 75 feet are used on both sides for a distance of 11¼ miles.

And now one word in reference to Mr. Shaw's very natural desire to suppress these rebellious "*exceptionals.*" There is still profound silence as to the general character of the grades between the mouth of Greenbrier and Richmond. I only asked for such information in relation to the line by Staunton as I have frankly given in relation to the line through Lynchburg.

I am not afraid to give the fullest information in relation to the route proposed by me, but the course hitherto pursued in this controversy is not such as to encourage me to give any more information *in advance*, at least until I receive an amount of light equal to what I have given.

The friends of the Central road in the House seem to feel the same dread of investigation with their advocates out of the House, as they have, this morning, in Committee, refused to allow the two schemes to be discussed before the representatives of the people.

If these circumstances excited some suspicion at first, it has been entirely removed by information derived from a late number of the Staunton Spectator, received since the last page of this manuscript was penned. I refer to a letter from J. M. McCue, Esq., accompanied by one from Mr. W. D. Whitcomb, the engineer in charge of the survey west of Staunton, which will be found appended.

With regard to the guage, the question is by no means so firmly settled, even in England, as Mr. Shaw supposes. If a guage committee did decide in favor of the narrow guage, I have yet to learn that the Legislative committee are always infallible. Nor was the dispute confined to 4 feet, 8½ and 7 feet guages. I might quote a great number of opinions from practical men in England preferring a guage wider than 4 feet 8½, but it would swell this letter too much. Some preferred 5 feet, others 5 feet 3 inches, or 5 feet 6 inches, or 6 feet. The eastern counties railway has a guage of 5 feet.

But it is evident that the immense sums locked up in narrow guage railroads prevented a total change of plan in England.

In this country a great number of roads were finished before the question was agitated, and the necessity for making connections with finished lines

determined the guage of new lines. The New York and Erie railroad not connecting with any other, felt untrammelled, and fixed on a guage of 6 feet. The Atlantic and St. Lawrence railroad is 5½ feet. Every railroad south and west of North Carolina, without exception, is 5 feet.

There is not a civil engineer who has ever had any share in the management of railways of 5 feet guage, who does not greatly prefer it to that of 4 feet 8½ inches. I believe that a large majority of the profession in the United States prefer a wider guage than 4 feet 8½ inches. I believe the best guage to be five and a half feet, and in that opinion many practical men agree with me.

When the Virginia and Tennessee road was commenced, there were a great number of roads in progress of five feet guage that are to connect with us, which prevented me from recommending five and a half feet.

The widening of the track over three and a half inches enables you to adopt much better proportions for a locomotive, which is, after all, the most important part of a railroad. Take 40 inches for the diameter of boiler for a locomotive engine, with an addition of three and a half inches to the guage, the diameter of the boiler may be increased by a like amount. The areas of sections through each boiler will be as the square of 40 inches to the square of 43½ inches, which is an increase of more than 18 per cent to its owner.

It admits of the use of cars in which there is less dead weight in proportion to the net weight conveyed. Finally, a railroad, with all its appurtenances, is a complicated machine, and a wide guage, with cars and locomotives proportioned to it, is in reality an enlarged and more perfect machine.

There is no necessity for adapting, in Virginia's road to the Ohio river, the same guage as that used in Ohio, as no one supposes that the river will ever be bridged where this road approaches it. In Kentucky many of the roads will undoubtedly use the 5 feet, because they connect with Southern roads of 5 feet guage.

I am willing to assume that you are right in the correction you make of my statement of the distance between Lynchburg and Richmond. It may serve to show you how easily I might have been led into a small inaccuracy in that case, that you, who had full as good an opportunity to know the truth as I had, did not correct this mistake in your first reply to me. It may also serve to show how difficult it is to be minutely accurate in such matters, to call your attention to the fact that you yourself have given the length of your own road as 136 miles from Richmond to Staunton, in your letter to me, and as 137 in your report to the Board of Public Works. I am willing to assume that the distance by the two routes is the same—there certainly is not difference enough either way to affect the question seriously. I rely on our vast superiority in grades and in guage, and on the smaller amount of outlay required to form the connection by our line.

This great superiority in the characteristics of our line will give us every possible advantage in commanding the tonnage trade, against any other railroad line. It has ever been my opinion that very little travel could be drawn from Ohio by this railroad, except that for the Virginia Springs, and that which necessarily follows the trade. I hope you may be right about the travel to Washington city, but I fear you may be wrong.

The Railroad Journal of Nov. 22d, 1851, gives the following distances:

From Baltimore to Cumberland	179
" Cumberland to the Fork	101
" the Fork to Parkersburg	115
" Parkersburg to Hillsborough	115
" Hillsborough to Cincinnati	60
	570
Deduct from Knobly cut off near Cumberland.	10
	560

Major Gwynn, in reply to a note from me, states that he obtained the distance of 580 miles, by letter, from Mr. Latrobe. By this, your line to Washington would be six miles the longest. But assume them to be the same—they must be very nearly so—what is to induce travel to leave the Cincinnati and Parkersburg road to come through Virginia—and all the travel destined for Baltimore will find its nearest route to Parkersburg and thence to Baltimore, which is only 395 miles of railroad.

The line through Lynchburg being one of gradients which could draw freight from the Ohio river, as well as stimulate its production along the line itself, could command a greater amount of that travel which is created by and follows the freight. This is a travel which has been found in all roads to exceed very far every other description of travel.

In reply to your question. I will say that I do not think it very probable that the cheap agricultural tonnage would leave the Central road at Staunton for Baltimore. But that city, though 82 miles farther from Staunton than Richmond; has a great advantage in facilities for shipping, and that together with her 160,000, inhabitants, and her great command of capital, would almost certainly enable Baltimore to supply the merchandise to this country, against all competition from the cities and towns of Virginia. I have elsewhere shown that merchandise starting at Philadelphia for the West, was sent by the city of New York merely to secure certainty and expedition. These are considerations beyond all others, which control the transportation of the more costly descriptions of tonnage.—Therefore the 82 miles extra distance to Baltimore will not protect the wholesale merchants of Alexandria, Richmond, Petersburg and Norfolk.

Before closing this letter, I repeat that this whole question is one in which the seaboard of Virginia and the valleys of Kanawha and Ohio are most concerned. It is their interest to adopt that improvement which is most perfect in itself and best calculated to guard Virginia interests against all competition. The interests of the stockholders of the Virginia and Tennessee railroad in this question, is exceedingly small compared with that of the whole State. All that they ask is a calm and dispassionate examination of the whole question, by the representatives of the people, with the single eye to the interests of the State without regard to sections.

Respectfully, your ob't. serv't.
CHAS. F. M. GARNETT.

To COL. FONTAINE,
Pres. Central Railroad.

What Railroads have done for Georgia.

The Mobile *Tribune*, in the course of its comments upon that portion of the Message of Governor Whitfield, of Mississippi, in which he recommends the construction of railroads, holds the following language:

"But let us come South and compare all the States around us with Georgia. Here are Mississippi, Alabama and Louisiana. Each of these States is infinitely more favored by nature than Georgia, yet Georgia wisely followed the example of the Northern States, and now, in population and wealth, she surpasses all of her sister States in the South, save Virginia, and she, having grown great at other times, is rather decaying than otherwise. To help her, this very same policy that we are recommending has now become a paramount impulse of her people.

Twenty years ago Georgia was in a condition of decay. Some of her best lands were exhausted—her people were leaving her, and to-day, had she continued as it is proposed by some to continue Alabama, her population would not have been by one-fifth so great as it is, and her material wealth would have been much less. She, however, adopted the internal improvement policy, and we see before us its beneficent effects. Lands within her borders before worthless, are now extremely valuable—lands worked and worn out by improvident culture, have been brought into proximities which have, made it the highest interest of their owners to nurse them.

Not only this, but all sorts of industry have become active in that State. She is the only State south of Mason and Dixon's line which may be said to be self-sustaining. All the rest are stationary, and dependent for almost every thing they consume on remote States.

Here are lessons which the blindest man may read and understand, and nothing but the most culpable apathy can account for the general indifference to them.

Railroads in Virginia.

The annexed table presents a condensed view of railroad progress in Virginia, together with the interest of the State in their capital stock:

	No. miles in length.	No. miles completed.	Capital stock.	State's interest.
Appomatox railroad (late City Point).	9	9	$100,000	.....
Clover Hill.....	11½	11½	250,000	.....
Blue Ridge.....	16½	..	600,000	$600,000
Greenville and Roanoke	21	21	289,100	.....
Manassa's Gap....	103	..	800,000	320,000
Orange and Alexandria, (including branch).....	98	30	1,137,500	600,000
Petersburg and Roanoke	60	60	769,000	.....
Richmond and Petersburg.....	22	22	685,000	883,000
Richmond, Fredericksburg and Potomac.....	76½	76½	1,000,000	275,200
South Side.....	122	30	1,400,000	480,000
South Side.....	..	..	.....	325,500
Tuckahoe and Jas. River.....	4½	4½	63,600	.....
Seaboard and Roanoke.....	80	80	500,000	.....
Virginia and Central, to Covington.	195	105	1,817,300	1,094,800
Virginia and Tenn.	209	50	3,000,000	2,000,000
Winchester and Potomac.....	32	32	300,000	83,333
Richmond and Danville.....	147	46	2,000,000	1,200,000
Northwestern.....	100	..	1,500,000	.....
Baltimore and Ohio (in Virginia)....	240	99	.....	.....
Lengths of railroads in Virginia.....			1,602½ miles.	
Do. do. completed.....			676½ miles.	
Do. do. in progress (under contract)			636½ miles.	
Capital stock—leaving out the Baltimore and Ohio railroad.....			$16,117,108 00	
State interest.....			7,364,433 33	

Pennsylvania.

Philadelphia and Columbia Railroad.—The following is a statement of the operations of this road for the past year.

Total receipts from all sources.....		$698,982 53
Expenses of motive power department, including new depot at Parkersburg five new locomotives, new cars, and machinery for workshop.....	$262,096 27	
Expenses of repair department.....	71,252 52	
	333,348 79	
Deduct cost of new depot and new stock included in the above motive power, expenses not chargeable to any one year.....	53,390 42	
		279,969 37
		419,013 16
Deduct pay of collectors, weigh-masters, inspectors, etc., not paid by Superintendent.....		12,466 98
Total.....		406,546 18

Showing a net profit of over 10 per cent. on the original cost of the road and machinery.

The following shows the collections at the office of the company:

For month ending Jan. 31, 1852.....	15,389 32
Whole amount since Nov. 30, 1851....	30,392 23
Same time last year.....	25,108 42
Increase.....	5,283 81

Census of Cities of the United States in 1850.

The following is a list of the cities and towns in the United States whose population, by the census of 1850, is 10,000 and upwards.

New York, N. Y.	515,507
Philadelphia, Penn.	408,815
Baltimore, Md.	189,048
Boston, Mass.	136,871
New Orleans, La.	116,348
Cincinnati, Ohio	115,436
Brooklyn, N. Y.	97,838
St. Louis, Mo	64,252
Albany, N. Y.	50,763
Pittsburg, Penn.	50,519
Louisville, Ky.	43,190
Charleston, S C	42,985
Buffalo, N. Y.	42,261
Providence, R. I	41,510
Washington, District of Columbia	40,001
Newark, N. J	38,894
Rochester, N. Y.	36,403
Lowell, Mass	33,383
Williamsburg, N. Y	30,780
Chicago, Ill	29,693
Troy, N. Y	28,785
Richmond, Va.	27,482
San Francisco, California—estimated	25,000
Syracuse, N. Y	22,271
Allegheny, Penn	21,262
Detroit, Mich	21,019
Portland, Me	20,815
Mobile, Ala	20,513
New Haven, Conn	20,345
Salem, Mass	20,264
Milwaukee, Wisconsin	20,061
Roxbury, Mass	18,364
Columbus, Ohio	18,183
Worcester, Mass.	17,367
Utica, N. Y	17,565
Charlestown, Mass.	17,216
Cleveland, Ohio	17,034
New Bedford, Mass	16,443
Reading, Penn.	15,748
Cambridge, Mass	15,215
Savannah, Ga.—estimated	15,000
Bangor, Me	14,432
Norfolk, Va	14,326
Lynn, Mass	14,257
Lafayette, La.	14,211
Petersburg, Va	14 010
Wilmington, Del	13,979
Poughkeepsie, N. Y.	13,944
Manchester, N. H	13,932
Hartford, Conn	13,555
Lancaster, Penn	12,369
Lockport, N. Y.	12,323
Oswego, N. Y.	12,205
Springfield, Mass	11,766
Newburgh, N. Y.	11,415
Wheeling, Va.	11,391
Patterson, N. J	11,341
Dayton, Ohio	10,977
Taunton, Mass.	10,441
Norwich, Conn	10,265
Kingston, N. Y.	10,233
New Brunswick, N. J.	10,019

Camden and Amboy Railroad and Delaware and Raritan Canal.

The annual report of the Camden and Amboy railroad and Delaware and Raritan canal company just made to the Legislature of New Jersey, shows that the gross receipts of the joint companies, for 1851, were $1,285,000·85; gross disbursements, $767,357·94; total transit duties, $49,020·19; tons carried on canal, 964,771; amount of transit duties, $27,578·57. The total receipts of the railroad were 13 per cent. greater than in 1850. The number of passengers carried over the road during the year ending Dec. 31, 1851, with the amount of passage money and transit duties, are as follows: Between Philadelphia and New York, via south Amboy, first class passengers, 39,653, and the amount of passage money, $118,952·75; second class passengers 18,214; passage money, $40,064·61; third class passengers 5,510; passage money, $4,451,45. Between New York and Philadelphia, by the same line, first class passengers, 36,288½; passage money, $108,685·50; second class passengers, 15,435½; passage money, $30,805,50. Third class passengers, 32,787½; passage money, $50,511·73. Excursion passengers from Philadelphia to New York, and back, 317. Excursion passengers from New York to Philadelphia and back, 893. Freight on the same line between New York and Philadelphia, including express chests and messengers, 44,509 tons, 17 cwt., 7 lb; freight paid, $271,711·52.—Way freight on the same line subject to duty, 10,-321 tons, 17 cwt., 3 qrs., 1 lb. Way freight not dutiable, 11,149 tons, 9 cwt., 4 lb. On the Main Pilot line, and the United States Mail via Trenton and New Brunswick, there has been transported 193,661½ passengers; passage money, $198,782·78; transit duties, $19,366·15. Received by the companies from the Philadelphia and Trenton railroad for the use of railroad cars, locomotives and steamboats, $120,000. Received from steamboats Washington and Joseph Belknap, tables and bars of steamers, $50,744·87. In the morning accommodation line between New York and Philadelphia, via Camden and Jersey, 33,159½ passengers; passage money, $78,969·34.

Funded Debt of the State of Maryland.

The late Treasurer of the State, D. Claude, Esq., on the 21st ult., in compliance with an order of the House of Delegates, submitted a tabular statement of the funded debt of the State, showing its amount, the periods at which the debts will respectively fall due, the purpose for which each debt was contracted, and the rate of interest thereon. The whole amount of the State debt and the several kinds of stock by which it is represented are thus stated:—

3 per cent stock			$500,000 00
4½	"	"	100,000 00
5	"	Currency	1,900,122 04
6	"	"	3,933,321 38
5	"	Sterling	8,857,222 22
			15,290,668 64

The periods at which the principal portions of this debt will fall due are as follows:—

After 1890	10,230,731 30
After 1888	35,000 00
After 1870	300,000 00
After 1859	500,000 00
After 1857	20,000 00
After 1857, '53, and '52	77,947 30
Due in 1842, '46, '47, '48 and '49	1,249,000 00
Due at pleasure	177,990 04

The following table shows the items which constitute this debt, the objects for which they were contracted, and the successive order in which they have been authorized:—

The Baltimore and Susq. railroad	$500 000 00
" " "	100,000 00
University of Maryland	30,000 00
Maryland Penitentiary	27,947 30
" "	30,000 00
Baltimore and Ohio railroad	256,189 00
Chesapeake and Ohio canal	262,500 00
Washington Monument in Balt	3,000 00
Balt. and Ohio railroad, and Ches. and Ohio canal	350,311 00
Baltimore and Ohio Railroad	125,000 00
Maryland Penitentiary	20,000 00
Balt. and Susquehanna railroad	88,710 97
Washington Branch road	500,000 00
Chesapeake and Ohio canal	125,000 00
Eastern Shore railroad	81,463 77
Ches. and O. canal, and B. and Susq. railroad	300,000 00
Chesapeake and Ohio canal	35,000 00
Aunapolis and Elkridge railroad	160,000 00
Balt. and Susq. railroad	543,334 34
Maryland Penitentiary	20,000 00
Eastern Shore railroad	11,300 47
Tobacco warehouses in Baltimore	30,000 00
" " "	30,000 00
" " "	81,981 15
" " "	21,705 52
Baltimore and Ohio railroad	3,200,000 00
Chesapeake and Ohio canal	3,163,222 22
Annapolis and Elkridge railroad	120,000 00
Chesapeake and Ohio canal	1,375,000 00
Susquehanna and Tide Water canal	1,000,000 00

Kentucky.

Covington and Lexington Railroad.—In advance of the printed report of the company, we give from the Covington Journal the following financial statement of the affairs of the company.

Estimated cost of grading and masonry between Covington and Paris, 78 miles, and wood superstructure of bridges	$819,000
Supposed amount to be paid by Covingington company between Paris and Lexington	80,000
Estimated cost of ballasting, cross-ties and laying track between Covington and Paris	249,999
Supposed cost of ballasting, cross-ties and laying track between Paris and Lexington, to be paid by Covington company	30,447
Iron chairs and spikes	47,168
For right of way	20,000
Cost of depot ground in Covington, (price of 3 lots not ascertained,) about	25,000
Ten acres of land for machine shops, stock depot, etc	18,000
Ground for depots at other points	10,000
Loss on bonds, and stock not collected.	80,000
Engineering and contingent expenses	100,000
	$1479,514

RESOURCES.

Individual subscriptions	433,000
Stock taken by contractors	200,000
Cincinnati bonds, (loan)	100,000
Covington subscription	300,000
Fayette county "	200,000
Bourbon " "	100,000
We calculate on paying one fourth in stock for cross-ties, ballasting, damages for right of way, laying tracks, and depot ground	97,000
	$1,430,000

The same paper also states, that a further contract for iron has been made by A. L. Greer, Esq., for the balance of the road, forty three miles; a contract having been formerly made for a sufficient quantity to lay 53 miles. The last purchase was made with the bonds of the company on advantageous terms. The affairs of the company have been well managed, and are in a most flourishing condition. The prospective extension of the line, from Lexington to Clarksville, Tennessee, by other companies, adds very much to the encouraging prospects of the farmer.

Illinois.

The Line of the Great Central Railroad and Branches.—The surveys of this road have been completed and filed according to law, as we have been informed, though we have not yet seen any of the plots or reports. We are informed that the lines are not yet precisely located throughout, but a very near approximation is ascertained.

Commencing at Cairo, the line runs due north, a little east of the parallel with the third principal meridian, till it reaches town two north, and one east of Marion county, where the Chicago branch commences; thence the main trunk bears northeast through the town of Decatur, in Marion county, and then takes a due north direction through DeWitt county, to Bloomington, in McLean county; thence a little west of north, near the east line of Woodford county, and the west line of Marshall county; thence, continuing in nearly a straight line to the southern termination of the canal; thence it continues north west of Dixon: thence north to Freeport, in Stephenson county where it intersects the Chicago and Galena Union railroad, now in the course of construction.

The Chicago branch, as we have already stated, joins the main trunk in Marion county, and runs northeasterly through Clay and Effingham, leaving Ewington, in the latter county, about five miles on the west; thence it runs a little east of north thro' Cumberland county, near its western boundary, and nearly through the centre of Coles county; thence the northeast corner of Champaign; thence

bearing slightly to the corner, continuing in nearly a straight line through the counties of Iroquois and Will, to Chicago.—*State Register.*

American Railroad Journal.

Saturday, February 7, 1852.

How Railroad Reports should be Made Up.

Railroad bonds as well as stock, have now become a regular article of commerce. An undoubted bond of a road in the United States is current wherever there is *money*, no matter whether in Europe or America. The *bonds* rest for their security upon the value of the *stock;* and the value of the stock, all other things being equal, upon the *cost* of the road. In ascertaing this cost, the purchase must of necessity depend upon the statements of the directors. These statements are always taken as *prima facie* evidence, to be credited, unless disproved. The purchaser of a bond turns for information to the report of the directors of the company.

He wishes to find in the report, 1st. A statement of the amount of capital stock subscribed. 2d. Amount paid up, and value unpaid. 3d. Amount of debts, and for what purpose incurred. 4th. Estimated and actual amount expended, and for what objects; with explanations as to the cause of any discrepancy that may exist. 5th. Amount required to complete the road, and to make further improvements. 6th. The state and condition of road and equipment. 7th. Actual amount of receipts and expenditures, and for what purposes the latter were made. 8th. Number of miles run by trains. 9th. Amount received per passenger, and per ton of freight carried each mile. We give these as items which should always be found in every report, but by no means embracing *all* that should appear. What we have enumerated furnish sufficient data to enable a person to form a pretty correct estimate of the value of the property he may wish to purchase. The presentation of all these items shows a thorough knowledge on the part of the directors of a road, of its affairs, for their preparation implies investigation. Such a report inspires confidence in the correctness of the statements made, for only a good concern will bear the scrutiny that a full and lucid report invites; neither will directors make detailed statements that can be easily disproved.

Very few of the exhibits issued by railroad companies, come up to the requirements which we have given as essential. From a great many of them, no distinct idea whatever can be formed of the condition of companies. Everything is stated in general terms. We cannot tell how much a road has cost, how much will be necessary to complete it, nor whether the money expended has been well laid out, or wasted. So with its operations. Receipts and expenses are stated in gross, and nothing given by which a person at a distance can form a correct estimate of the actual result. In looking at a report, after getting the general results, one of the first things that a railroad man looks for, is the number of miles run by trains. to realize a given result. He knows how much is the cost of running trains per mile on well managed roads, and by comparing this with the receipts, the whole story of profits is at once told. A company may boast of its profits as much as it will, but unless the earnings are two dollars for every mile run, the road is making but little if any money.

We make these remarks, because we have so often inquiries made of us that we cannot answer.—A person comes to us and says—"I can make nothing out of this report. It states that the work is going rapidly ahead, and will be completed at such a time; that so much money has been raised, and that so much more will be wanted. It does not say whether the subscription is good or bad, whether the money received has been properly expended, nor whether there is any real security for the am't sought to be borrowed." The same uncertainty of feeling exists with regard to the general statements of the working of a road. They may cover up a state of rottenness which may suddenly swamp the whole concern, which could not be the case, should proper exhibits be annually made, as this could only be based upon a correct knowledge of the company's affairs; and this knowledge would secure the exposition and correction of errors.

If companies desire our commendation, they must follow out the suggestions we have given them.

Kentucky.

Louisville and Frankfort Railroad.—The Louisville papers publish the semi-annual report of Jas. Guthrie, President of the company, to the stockholders. The report is accompanied by tables showing the receipts and expenditures for the past six months, which foot up as follows:—

Total receipts for six months.....	85,935 35
Total expenditures.....	43,025 12
Profits.....	$42,910 23

The superintendent estimates the necessary expenses for equipping the road fully, fencing, etc., at 100,000 dollars, of which 43,000 dollars are to be expended for locomotives and 20,000 dollars for fences.

The total cost of the road up to the first ult. was $1,285,224 56. When fully equipped, it will cost about 1,400,000 dollars, of which about 900,000 dollars will be in stock, and 500,000 dollars debt. The future annual receipts of the road are estimated at not less than 200 000 dollars, of which not less than 100,000 dollars will be net profits, and will pay interest on the 500,000 dollars debt, and about eight per cent on the 900,000 dollars of stock; and should the business of the road increase in proportion to the business of other roads not more favorably situated, the surplus might be applied to the payment of the debt, and when the debt shall be discharged, the stock would be more than a ten per cent stock.

Rhode Island.

Providence and Worcester Railroad.—We learn from the 7th annual report of the directors of this road, that its receipts during the past year have been $222,836 30. The expenses have been $96,746 64, leaving a balance of $126,089 66. Deduct interest paid on bonds, etc., during the year, $21,442 92, and there is left for a net income $104,646 74. This amount the board have directed to be transferred to the credit of construction, to reduce the amount of that account; nearly all of it having been applied during the year, in discharging the indebtedness of the company.

After deducting the net income for the year 1851 from the construction account, the following is the present financial condition of the company.

Total amount of capital stock and indebtedness 31st December, 1851.....	$1,763,500
Total cost of road and equipment to 31st December, 1851, inclusive.....	1,720,609
Property on hand.....	42,891
Total amount of cost of road, equipment and property 31st December, 1851...	1,763,500

During the past year there has been a connection made at Worcester, with the Nashua and Worcester railroad, which will bring to Providence a share of the business of the northern railroads, now seeking an outlet at Boston.

The Providence and Worcester railroad is well managed. The trains run with great regularity, and with such a degree of safety, that, as yet, no accident of any importance has occurred.

The net income of the year 1851 exceeds that of the previous year by $22, 853 47; in consideration of which, it is the intention of the board to pay a dividend to the stockholders in July next.

Halifax and Quebec Railroad.

Telegraphic despatches from the Provinces state that the home government has disavowed Mr. Howe's statement, in regard to the aid promised to the North American and European railroad, and that consequently the whole project is likely to fall to the ground. We do not credit the report to the fullest extent. We believe the railroad schemes of the Provinces must result in something besides failure. The result, in our opinion, will be, that the line of the St. John river will be adopted, and that the Province of New Brunswick will construct a branch from the city of St. John to the boundary of Maine, on her own account, though at present it is impossible to form any reliable conjecture as to what will turn up.

Canada.

Champlain and St. Lawrence Railroad.—At the recent annual meeting of the stockholders of the Champlain and St. Lawrence railroad company, the following gentlemen were elected directors for the ensuing year, viz:—Hon. John Molson, Hon. Charles Paine, Benj. Brewster, W. Workman, A. M. Delisle, W. Lyman, John Carter, Chas. Phillips, and Wm. Macdonald.

At a subsequent meeting of the directors, Benj. Brewster, Esq., was chosen chairman of the company for the ensuing year.

Georgia.

Muscogee Railroad.—The following gentlemen were chosen directors of this road for the current year:—Maj. John H. Howard, Col. Hines Holt, Gen. S. A. Bailey, Dr. R. A. Ware, Harvey Hall, Daniel Griffin and Seaborn Jones, Esqrs. Maj. John H. Howard and Dr. R A. Ware, were re-elected President and Treasurer.

Stock and Money Market.

Money is plenty in Wall street, and there is a general tendency to advance among *fancies.*—They are however much lower than at a corresponding period last year. There is considerable demand for bonds of new works that have a good reputation; while at the same time, there is a vast amount upon the market that are sold with difficulty. The last issue of the Erie bonds, are the great obstruction in the way of selling country securities. As these were sold at 85, and are generally considered good, they are taken in preference to distant securities at the same rates. The insatiable maw of this monster concern requires from $3 to $4,000,000 to supply its necessities, independent of its earnings, a sum that would build a great many hundred miles of road in the West. Until the bonds of this shall be absorbed, or driven out of the market, bonds of distant roads must remain in abeyance.

We can state in general terms, that the prospect of negotiating, sound securities are good. Money is now plenty in New York; but it has not been

abundant a sufficient length of time to give much activity to the market. In the securities of the Ohio counties, there is some pause, owing to the questions that are being raised as to their constitutionality. That it will be decided in their favor we have no doubt. Opinions sustaining their legality have been expressed by Judges Hitchcock, Burchard and Batrley; by the Gov. of the State.—Hon. Reuben Wood, by Hon. Henry Stansberry, Hon. Thos. Ewing, Hon. S. F. Vinton, and John Woods, Esq., of Dayton, late Auditor of the State. We learn that a bill is now before the Legislature of the State of Ohio, authorizing an extra session of the Supreme Court on the first of March next, at which the question of constitutionality will be properly presented, and definitely settled.

The same question involved in the Ohio issues, has just been determined in Kentucky, in the matter of the Mason county bonds. Their legality has been fully sustained by the Supreme Court of that State.

The recent report of the Cleveland and Columbus railroad shows the whole cost of construction to be, $3,025,888·27. The company have declared a dividend of 8 per cent. the past six months, from the earnings of that period.

The earnings of the road for six months, ending

Dec. 1, were	$341,680 96
From which deduct running and other expenses	110,711 68
Balance, net earnings	$230,669 28

Appropriated as follows:

Six months interest on debts of the company	$56,315 00	
Dividend on stock (8 per cent)	102,012 29	
Balance to reserve or surplus fund	72,641 29	
		230,669 28

The amount of capital stock of the company, $1,302,812·09; debt $1,723,076·18.

The receipts of the Erie railroad for the month of January, were as follows:

ERIE RAILROAD RECEIPTS, JANUARRY, 1852.

Passengers and mail	$73,236 65
Freight	98,204 82
Total	$171,441 47
Same month 1851	144,909 30
Excess	$26,532 17

The following are the receipts of the Hudson River railroad for the past four months, durifig which the road has been opened to Albany.

October	$69,000
November	60,000
December	112,000
January	107,000
	348,000

The Harlem having just been opened, will now divide the through business with the Hudson River, so that the receipts of the latter for February and March cannot exceed $100,000 for each.—month. This will give $548,000 as the gross receipts for the six fall and winter months, the best of its business season. If we estimate the receipts for the eight months of navigation to average $70,000, and the four winter months at $100,000,we have $990,000 as the gross earnings. To realize this amount the trains of the company will probably run at least 750,000 miles, which, at a cost of 90 cents per mile will give 675,000 the net earnings. Should the company lay down an additional track the receipts would be increased, and the expenses per mile slightly diminished. The cost of the road would, however, be largely increased.

The following are the receipts at the office of the Collector of the Philadelphia and Columbia railway, for the month of January:

Amount as per last report	$15,002 91
Do., month ending Jan. 31, 1852	15,389 32
Whole amount since Nov. 30, 1851	30,392 23
Same time last year	25,108 42
Increase	$5,283 81

The statement of the coinage of the Philadelphia Mint for January, is as follows:

GOLD.

173 930 Double Eagles	$3,478,600 00
13,020 Eagles	130,200 00
31,320 Half Eagles	156,600 00
112,884 Quarter Eagles	282,210 00
174,505 Gold Dollars,	174 505 00
535,659 Pieces	4,222,115 00

SILVER.

125,000 Dimes	12 500 00
100,000 Half Dimes	5,000 00
730,659 Pieces	4,239,615 00

COPPER.

274,149 Cents	2,741 46
Total	4,242.356 49

Gold Bullion deposited in January:

From California	4,041,000 00
Other sources	119,500 00
Total	4,160.500 00
Silver Bullion deposited in same time	17,650 00

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK FEBRUARY 7, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101
U. S. 6's, 1856	105¼
U. S. 6's, 1862	111
U. S. 6's, 1862—coupon	112¼
U. S. 6's, 1867	116¼
U. S. 6's, 1868	116¼
U. S. 6's, 1868—coupon	121
Indiana 5's	83
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	68
Illinois 6's—interest	42
Kentucky 6's, 1871	106¼
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	98
Maine 6's, 1855	103
Maryland 6's	102¼
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110¼
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	—
New York 5½'s, 1860-'61	—
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	105
Ohio 6's, 1860	109
Ohio 6's, 1870	115
Onio 6's, 1875	115
Ohio 5's, 1865	103
Ohio 7's, 1851	100
Pennsylvania 5's	89
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	100
Virginia 6's, 1886	106

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	106¼
Cincinnati 6's	106¼
St. Louis	93¼
Louisville 6's 1880	93¼
Pittsburg 6's, 1869-1871	95
New York 7's, 1857	107
New York 5's, 1858-'60	100¼
New York 5's, 1870-'75	102
New York 5's, 1890	102¼
Fire loan 5's, 1886	101¼
Philadelphia 6's, 1876-'90	100¼
Baltimore 1870-'90	104
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	109¼
Erie 2d mortgage, 7's, 1859	104¼
Erie income 7's, 1855	92¾
Erie convertible bonds, 7's, 1871	87½
Hudson River 1st mort., 7's, 1869	101½
Hudson River 2d mort., 7's, 1860	90¾
New York and New Haven 7's, 1861	102
Reading 6's, 1870	74
Reading mortgage, 6's, 1860	80
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	103
Cleveland and Pittsburg 7's, 1860	95
Ohio and Pennsylvania 7's, 1865	94½
Ohio Central 7's, 1861	92

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Feb. 4.	Jan. 28.
Albany and Schenectady	96	97
Boston and Maine	105½	104
Boston and Lowell	108	107¾
Boston and Worcester	100½	99¾
Boston and Providence	86½	85½
Baltimore and Ohio	64	65
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	110	107½
Eastern	95	94½
Erie	79¾	79
Fall River	98½	98½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	67½	68
" preferred	110	108½
Hartford and New Haven	125	115
Housatonic (preferred)	38	—
Hudson River	65	63
Little Miami	—	—
Long Island	19	18
Mad River	—	—
Madison and Indianapolis	90	98½
Michigan Central	98	93½
Michigan Southern	103	102½
New York and New Haven	113	113
New Jersey	130	112½
Nashua and Lowell	104	104
New Bedford and Taunton	115	114
Norwich and Worcester	51½	52
Ogdensburgh	28	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	66	63½
Rochester and Syracuse	109½	110
Stonington	50½	50
South Carolina	—	—
Syracuse and Utica	130	127
Taunton Branch	111	109
Utica and Schenectady	125	127½
Vermont Central	25½	24½
Vermont and Massachusetts	25½	26½
Virginia Central	—	—
Western	101½	101½
Wilmington and Raleigh	56	—

☞ BRIDGE BUILDERS will do well to examine the advertisement for the construction of a bridge over the cape Fear river in North Carolina.

Winslow's Compound Rail.

We commend the following testimonials in favor of the compound rail to the consideration of our railroad companies. The names of the signers are too well known as prominent and leading railroad men, to require any remarks from us.

—

New York, January 26th, 1852.

J. F. WINSLOW Esq., Troy.

DEAR SIR: You ask my opinion of the compound rail, now in use on the Hudson River railroad and furnished by you. I reply with great cheerfulness and say that it very far surpasses my preconceived opinions of it.

Before having tried it, I was apprehensive that it would not realize all that was desired, or all that was claimed for it, but I do not hesitate to say, that so far it has disappointed me—and agreeably so, and although I have always maintained that any improvement that would remedy the very serious defect in railroad tracks, occasioned by the settling at the joints of ordinary rails, [and which is the cause of most of the expense for repairs of permanent way, as well as the wear of machinery,] would confer great benefits upon railroads, and essentially reduce the cost of maintaining and running them—still I had doubts of the efficiency of any of the many plans submitted to me for accomplishing this desideratum, and which extended to yours—and not until my experience with your rail on the Hudson River road were those doubts removed, but it affords me pleasure to say that I no longer entertain any apprehension as to the success of your rail. It has been thoroughly tried during the time it has been in use, and the result has demonstrated that it possesses many and valuable advantages over the ordinary forms, and which, in my judgment, abundantly compensate for all its extra first cost, and must lead to its rapid and very general use upon all roads, at all distinguished for perfect construction, or economy of management.

Some change in the pattern and proportion of the rail upon the Hudson River road would, I think, increase its usefulness, which, together with rigid attention to the details of its manufacture, must commend it to very general adoption.

I hear that the Great Western railroad company of Canada, have concluded to use your rail upon their entire line. I am free to give it as my opinion that, in thus deciding, the company have evinced great wisdom, and if proper attention is given to its manufacture, and care is had in placing it on the track, they will have a road equal to the best on this continent.

I wish you all success in the introduction of your rail, and believe, that whatever opposition there may be to it at present, will disappear in practical acquaintance with it, or examination wherever in use, and that ere long it will be admitted by all to be the safest, the smoothest riding and most economical rail in use.

Respectfully yours,

[Signed] WM. C. YOUNG.

—

J. F. WINSLOW Esq.,

SIR: As superintendent of the Hudson River railroad, I have of course watched the working of the compound rail on the road, and hesitate not to say that I fully and entirely concur in the opinions expressed by Mr. W. C. Young, late chief engineer of the company. Yours truly,

ROBT. HIGHAM,
Superintendent.

New York February 3*d*, 1852.

OFFICE OF SYRACUSE AND UTICA R. R. COMPANY.
Syracuse, January 30, 1852

J. F. WINSLOW Esq.,

DEAR SIR: I am advised that you are about to sail for Europe to introduce your compound rail.—I have looked carefully at this rail for two years past on the Utica and Schenectady railroad which adjoins this road.

Last year you know we procured of you sufficient iron to lay one mile, in the north track of the road of this company. It was laid in the Rome swamp, at a place where its capacity would be well tested, and where its advantages would be readily perceived. We have used it through heat and cold, the extremes of which are very great, and through wet and dry weather. I think an average of 12 trains per day has been its service since it was laid. These trains have been run in one general business, some at high speeds, and some heavily laden, the result has been highly satisfactory, and I now only wish that both tracks upon this road were laid with it. I wish you success, for I regard the compound rail as a very great improvement. Yours respectfully,

[Signed.] JOHN WILKISON, Pres't.

—

UTICA AND SCHENECTADY R. R. OFFICE.
Schenectady, Jan. 26, 1852.

J. F. WINSLOW, Esq.

Sir,—I have yours of the 24th inst., making further inquiries relative to your "Patent Compound Rail for Railways." Several months' additional experience since my communication to you upon the subject have served fully to confirm, in every particular, the opinions then expressed. Upon the introduction of this rail, great doubt was entertained as to the effect of contraction and expansion, strain, wear, and breakage of rivets, &c.; but nearly ten years' experience upon ten continuous miles on this road has entirely dissipated all such fears: and I do not hesitate to say that, in my judgment, it constitutes one of the greatest improvements yet made in railway construction, and cannot fail to be generally introduced in place of the T rail, now in use upon most of our roads. Very respectfully your obedient servant,

[Signed,] C. VIBBARD, Sup.

I concur, fully, in the foregoing.

[Signed,] ERASTUS CORNING, Pres't
U. and S. R. R. Co.

—

DEP'T OF WAYS AND STRUCTURES, N. Y. AND ERIE R. R. *Engineer's Office, New York, Jan.* 31st, 1852.

J. F. WINSLOW, Esq.

Sir,—In reply to yours of the 27th inst., just received, I will state that your "Patent Compound Rail," which was put down upon a portion of the main line of this railroad in September, 1849, continues in use and in good condition. No repairs of these rails, and very little adjustment of the ordinary cross ties upon which they are supported, have been necessary.

When first laid, it was feared that the rivets were too small and too far (4 feet) apart: yet their apprehended failure has not occurred. Still it will do no harm to increase the number and size of the rivets, which I am told has been done for the rails more recently manufactured.

My confidence in this form of rail, for economy, safety, adaptation to curves, and maintenance of an even surface, has led me to recommend its adoption for the contemplated second branch of this railroad. Very respectfully yours, &c. &c.,

[Signed,] S. S. POST, Engineer, &c.

OFFICE OF BUFFALO AND ROCHESTER R. R. Co.
Buffalo February 3, 1852.

J. F. WINSLOW Esq.

DEAR SIR: Yours of the 31st of July, was duly received, enquiring about the compound rail purchased of you last season. I put some of the one hundred tons on one main track, have examined it very often, and am much pleased with it. In my opinion it is very far superior to any other pattern or form in use and I only regret that our road was not all laid with your rail.

Yours Respectfully,

[Signed.] HENRY MARTIN, Sup't.

Hudson River Railroad.

Having taken pains to authenticate the statements of the subjoined communication, so far as it relates to the business of the Hudson River railroad, by an application in the right quarter, we have no hesitation in giving it a place in our column usually devoted to the discussion of such subjects:

"The gross earnings of the Hudson River road, for the past year, have been $403,952 32. Expenses for the same period, $338,277 97, leaving for net profit $65,674 35, which is only about 15¼ per cent. of the gross receipts, certainly a very discouraging result."

"The Hudson River road will cost at least $12,000,000. The amount of stock paid in is $3,310,552 17, leaving $8,689,447 83 to be raised on its bonds. It will take $608,261 34 to pay the interest on this amount. We estimate running expenses at 66⅔ per cent of the receipts. The road must earn $1,824,784, or $152,000 per month to pay interest on its indebtedness. Our belief is that the Hudson River road, after it shall be completed, with its double track, cannot exceed $125,000 per month." "*The Harlem railroad has the advantage of the Hudson.*"

The above is from a paper printed in New York, called the Railroad Journal, and presents certainly "a very discouraging result." With the motives of the writer I have no concern, except so far as they protrude themselves in the words italicised. In the facts and conclusions, the whole community are interested. (1)

During the past year, up to October 1, the Hudson River road was completed and in operation half the distance from New York to Albany, running along side the best navigation in the world; and terminating at a comparatively insignificant place, with no means of access except the river, and the ordinary land conveyances. Under these circumstances, the great cause for wonder is, that so much as $400,000 should have been received. (2)

The expenses of every road terminating at a great city, must necessarily be large. In this case the extraordinary expenses are—1st, horse-power from Thirty-second to Chambers street, and 2d, the precautionary guard. These are confined to the New York end of the road, and with the whole annual cost of machine shop and general offices, are included in this year's expenses. The extension to Albany will add a trifling amount, if anything, to these charges, which certainly comprise a considerable portion of the $338,000 expenses of the last year. (3)

If there is any cause for a larger expense per mile, for running trains from Poughkeepsie to Albany, than that of our western lines from Albany to Buffalo, it is not apparent. The road is better made, has heavier iron, is straight and far better in its grades. (4)

I have not seen the report of the western roads for the present year; but the last year's reports showed the proportion of expenses to receipt of the

	Miles.	Per cent.
Albany and Schenectady	17	44
Utica and Schenectady	78	33¼
Syracuse and Utica	59	43
Auburn and Syracuse	No report.	
Auburn and Rochester, 11 months	78	32
Rochester and Syracuse, 2 months	104	30
Tonawanda	44	26
Attica and Buffalo	31¼	29

The average of all of which is 34 per ct. These short roads have each their machine shops and of-

ficers of the company, and with the exception of the horse power and guard, (which other roads have not), it would be difficult for any one to give a reason why the expenses of the whole road from Albany to New York, when in full operation, should exceed the average per centage of the short road from Albany to Buffalo. It has the advantage of a level road, and heavier iron than any other in the State, and can, of course, carry heavier loads, and at less cost. (5)

The Hudson River road has been subject to the necessity of running through the year trains enough from New York and Poughkeepsie, to do all or nearly all, the business of a through travel yielding $1,500,000. So that the additional expense will be confined chiefly (except for freight) to the running of the same trains through to Albany, instead of stopping at Poughkeepsie. As the heavy expenses have already been incurred at the New York end of the line, and will continue there, these additional expenses of running through can hardly come up to 50 per cent of the lower half of the road, while the writer for the Railroad Journal has put them at 200 per cent. (6)

He assumes the whole cost of the road to be $12,000,000, with a double track. But he allows gross receipts only to $125,000 per month. If $125,000 per month is the maximum of receipts, then a double track is not needed; the road as it is can do all that business, and the present cost is less than $10,000,000, and doubtless the directors will postpone the laying another track until the business shall warrant it. He says:

The amount of stock paid in is.....	$3,310,552 17
The report of the directors says it is.	3,703,229 23

Why this palpable deception? He states the debt on which interest must be paid, at $8,689,447 83, while the whole debt, funded and unfunded, as reported to the legislature, is but $5,806,312 50. (7)

Assuming then that the principles I have stated, and proved by comparison with other roads, be correct, and that the gross income will not exceed the amount conceded in the Journal, and this will be the position of the road.

Gross income.....		$1,500,000
Transportation expenses 34 per cent, or to cover all extra charges—40 per cent.....	$600,000	
Interest on $5,806,312 50.....	406,446	
		1,006,446
Leaving for profit.....		493,554

Being 13 per cent on the capital paid in. (8)

The very palpable aim of the writer for the Journal might be diverted by an exposition of some facts relating to the Harlem road, its circuitous course, its 800 feet of elevation, etc., but any effort to depreciate that road to the prejudice of the stockholders, would be just as inexcusable in me, as the false statements and perversion of facts of that writer, are in him. (9)

I have made this plain statement of facts, and conclusions, only with the view of saving holders of stock in the Hudson road, now submitting to ruinous sacrifices, under a belief of such interested and fallacious tables as those contained in the Railroad Journal. (10) A COUNTRYMAN.

We copy the above from a paper published in this city called the Commercial Advertiser. We cannot suit our purposes better than to copy it entire.

1. The insinuation contained in this paragraph is without a shadow of foundation. It only proves, and it does prove this, that the venality exists in the heart of the writer, which he falsely charges upon us.

2. We said nothing about the receipts being large or small. We stated that the gross receipts were $403,952 32, and that the expenses were $338,277 97, showing a net profit of about $65,000, or 15½ per cent of the gross earnings, and merely iterated the natural conclusion, this was a very discouraging result.

3. It is *not true* that the horse power, and the precautionary guards, make a "considerable portion" of the $338,000, the expenses of the past year. The whole amount charged the past year for horse power, and for porters, watchmen and switch tenders was $72,029 02. If it were true, it would prove the worthlessness of the stock of the road, as it would show an amount of extra expenses borne by no other road, and which could not be sustained by the Hudson River.

4. It is a sufficient reply to this assertion, to say that the expenses of a road are always very nearly in proportion to the number of miles run.

5. The *cost* of operating a road, as before stated, is in proportion to the number of miles run; *net receipts*, to the amount of business transacted. The following table shows the amount received from passenger trains per mile for the year 1850, upon the roads referred to:—

	Cents.
Albany and Schenectady.....	256
Utica and Schenectady.....	251
Syracuse and Utica.....	244
Auburn and Rochester.....	215
Rochester and Syracuse.....	316
Tonawanda.....	220
Attica and Buffalo.....	235
	7) 1737
	248

Showing an average receipt of 248 cts. per mile against 153 on the Hudson River!

The cost of running passenger trains per mile upon the above roads for the year 1850 was as follows:—

Albany and Schenectady.....	94
Utica and Schenectady.....	76
Syracuse and Utica.....	99
Auburn and Rochester.....	64
Rochester and Syracuse.....	84
Tonawanda	64
Attica and Buffalo.....	63
	7) 544

Showing an average of 77 cents per mile against 91 upon the Hudson River!

6. There is no truth whatever in this statement. The whole number of miles run the past year was 277,164, making an average of 885 miles daily, Sundays excepted. The average number of miles run daily at the present time is stated in the company's time tables at 2430, and with the extra freight trains, probably far exceeds this amount.—Already the service, and consequently the cost, necessary to carry on the through business, is nearly treble the amount of service and cost of the past year! In reply to the latter part of the paragraph, we will state, that we made no estimate whatever of the cost of operating the road from Poughkeepsie to Albany.

7. We estimated the cost of the road at $12,000,000. This estimate is not controverted. A double track is needed to do a business of $125,000 per month. Mr. Boorman, in his speech at the opening of the road, stated the company would lay down a double track this season, *if they could get the money.* Such is still their intention. We have the same authority for saying that the present cost of the road is not less than $10,000,000. The alleged mis-statement as to the amount of capital stock paid in amounts to nothing. We were estimating the final cost of the road, and it matters little whether this is made up of stock or debts. Our mistake arose from copying from the returns of 1850 instead of 1851. Since the above article was written, we have sent to Albany for the last returns, and find the amount of capital a little larger than stated by us. We gave $8,689,447 83 as the amount upon which interest would have to be paid, *provided* the road should cost $12,000,000, which is substantially correct.

The following are the items that made up the cost of the road Sept. 30, 1851:—

Graduation and masonry.....	$4,449,990 91
Bridges.....	174,345 11
Superstructure, including iron.....	1,777,524 66
Station houses, buildings, engine houses, machine shops, etc.....	444,433 45
Land, land damages and fences.....	796,216 51
Locomotives and snow plows.....	163,926 06
Passenger and baggage cars.....	146,681 14
Freight and other cars.....	77,811 09
Engineering.....	416,021 34
Interest on stock, and accounts and contingencies.....	1,058,630 83
	$9,305,581 10

The equipment of the road at the above date was as follows: 25 engines, 64 passenger cars, 14 baggage cars, 75 freight cars, and 103 dirt cars. The aggregate cost of which is put down $388,418 29, about one-third of what is necessary to equip the road. From an inspection of the above table, we have no hesitation in saying, that the road cannot be fully completed, with a double track, for $12,000,000.

8. The principles assumed by "A Countryman" are directly disproved by a proper application of the results of the other roads cited. The proportion of expenses to receipts on these is small, because the receipts per mile are very large. On the contrary, on the Hudson River, the proportion of expenses to receipts is very large, from the meagreness of the latter. As already stated, the per centage of expenses to gross earnings in 1851 was about 84 per cent!!!

9. The statement that we conceded, the receipts of the road would be $1,250,000 with a single track only, is a direct perversion of the truth. We based our estimate upon the fact of the construction of a double track, which would vastly increase the capacity of the road for business. To attempt to make it appear that we estimated upon a single track, shows both the disposition of the writer, and the straights to which he is driven.—Without a double track, the earnings will fall far short of $1,250,000 per annum, while the expenses, at the low cost at which freight and passengers must be carried, will be much greater than we estimated.

We said nothing in commendation of the Harlem road. We merely stated a fact which every body admits, that it accommodates the up town travel better than the Hudson River. The insinuation that we had any interested motive to puff the former, is entirely gratuitous.

With regard to the "false statements and pervertion of facts," with which we are charged, we are willing to submit to the reader. The only incorrectness attempted to be shown, is one that is entirely immaterial. We estimated the cost of the road at $12,000,000. The correctness of this is not called in question. We made up the aggregate as follows, [copying by mistake] the amount of the first item, from the report of the past year, viz:—

Capital stock.....	$3,310,552 17
Debt.....	8,689,447 83
	12,000,000 00

The statement, copying from the last report, should have been thus:

Capital stock.....	$3,703,220 23
Estimated debt.....	8,296,770 77
	12,000,000 00

It will turn out, that we were at fault in not stating either of the above items sufficiently high.

10. "A Countryman" is very free in making

charges of false statement and perversion of truth, without a shadow of an apology for them. Whether we have disposed of them or not, we leave for the reader to judge. Having gone through with his article, we beg leave in turn to pay our brief respects to the writer.

In the first place, the article was written either by a person who knew nothing of the matter about which he was writing, and consequently is as inexcusable in making statements without first ascertaining their truth, as he would be in uttering a known falsehood; or what is more probable, it was written by a person connected with the company, and one who had the means of knowing the true condition of its affairs. If by such a person, the eighth paragraph must have been written with a view to mislead. This is the statement:

Stock	$3,703,229 23
Debt	5,806,312 50
	9,509,541 73

He estimates the gross revenue at..... $1.500,000
" " net " 600,000

leaving for interest on debt and dividends on stock, $900,000; equal to 7 per cent on the former, and 13 on the latter. Now all the directors on the Hudson River road must know this estimate of *final* cost to be a false one, and if so, it could not be made for any other purpose than to deceive.

Before censuring us for depreciating the stock of the company, "A Countryman" will be much better employed in turning his attention to the real cause of its recent disastrous decline, which is to be found in the mismanagement of the company's affairs, and the dissentions in the Board of Directors, which have resulted in the withdrawal, within a short period, of two Presidents, one Chief Engineer and two Superintendents. When the abuses at home are corrected, he may then turn his attention abroad. The dismissal of the officers named, clearly proves incompetency somewhere. It is not to be expected that these public admissions can be made without injuring the company's credit. It is still to be proved whether the company or their retiring officers were at fault. If the former, as is very likely, how is it possible that confidence can be restored, unless further changes are made? The public voice will be more likely to sustain an engineer in the performance of his legitimate duties, than the directors of a road, when they assume authority which clearly does not come within the scope of their duty or capacity. Whose fault has it been that the stock has gone down? Those who have the management of affairs, not those who have no control over them. The directors have only to thank themselves for the condition in which they find matters. To place this before the public in its true light is not only our right, but our duty as a public journalist.

It is one of the great misfortunes of the company that they have lost their hold upon the public sympathy and support. The *directors build* the road, the *public support* it. To lose the general good will, is to lose patronage. If the company wish to succeed, let them substitute in the place of insolence, of indifference to popular right, of an obstinate pursuit of their own selfish objects, a proper consideration for the rights and convenience of others, and they will find that a new aspect will be placed upon the condition of their affairs. They have too much invested to consult anything else than a true and wise economy.

On a future occasion we shall have something to say upon the estimates and cost of the above road.

Ohio.

Bucyrus, Jan. 30, 1852.

EDITOR RAILROAD JOURNAL:—

On the 27th inst. the Ohio and Indiana railroad was let by contract to Messrs Hanna, Hoagland & Mitchell, of Fort Wayne.

These gentlemen are well known along the line for their wealth and energy. The work is to be begun immediately, and completed in two years.

This road is the third link in the chain of roads from Philadelphia district to Chicago being 131½ miles long, from Crestline, the terminus of the Ohio and Pennsylvania road, to Fort Wayne. It has no grade over 26 4-10 feet per mile, no curve less than half a mile. One straight line over 40 miles long, another over 30 miles. Total straight lines 127½ miles, and all the curvature, 182°, is at the stations, or places of stopping. 63 miles of the profile is level, and the cost of grading very light.

The fertile country through which it passes, together with the important connections made, will render this a most profitable and important road. The local stock subscription is now over 40 per cent of the cost of completion and equipment.

It is believed no road has yet been reported that will near equal this in engineering characteristics.

J. R. S.

Ohio.

Hillsboro', January 26, 1852.

H. V. POOR, ESQ.,

Dear Sir—In the Railroad Journal of 3d January, you put down the *Hillsborough road, 37 miles.* You will please correct it by saying: Hillsborough and Cincinnati railroad, extending from Cincinnati to Parkersburg, 185 miles. The Baltimore and Ohio railroad company, in their last annual report, *adopt* our road, and place it on their map as their extension to Cincinnati. Twenty miles of road east of Hillsborough are under contract, and surveys and locations will be made, and are now being made, of the whole line to Parkersburg, as soon as the weather will permit.

Ohio.

H. V. POOR, ESQ.,

Dear Sir—Will you be good enough to allow me a small space in your essentially valuable Journal, to contradict the rumor of a supposed decision of the Court in Bank in Ohio, to the effect, that the law, authorising the subscription to the stock of railway companies by some of the political and municipal corporations in Ohio, is unconstitutional, and therefore the stock thus subscribed is void.

The Court in Bank is our highest judicial State tribunal, and as such it has never made any such a decision, nor has any other inferior court having jurisdiction over constitutional questions, ever made any such decision; nor will any court in Ohio declare that such laws contravene the provisions of the old constitution. The Court in Bank, however, did decide that a local statute regulating the practice in chancery in the counties of Wyandot and Crawford, in Ohio, that was not common to the whole State, was unconstitutional—and that one of the four Judges entrusted to declare this decision, ventured, after he had delivered it, to trouble the judicial world with his own *obiter dictum*, without any examination or consultation with the other judges, (three of whom must concur) to the effect that the law authorising subscriptions "after vote" by counties or towns, unconstitutional as against the minority, and constitutional as against the majority, voting for such a law. Now it is quite apparent, and must, I think, seem so to the eminent jurist delivering the opinion, that it would be a matter of no small embarrassment to find even with a search warrant those who voted Yea, though you might find many who would claim to have voted Nay. Indeed it would be well in this age of invention and progress, to point out the way in which this decision could be practically carried out. No one yet has found out this secret. It is a well-known fact that the office of this distinguished judge was about to expire at the time he delivered himself of this his private opinion, and many of his friends had gathered in to hear his valedictory—which, to make it seasonable, he interlarded occasionally with some constitutional law. Perfectly right; a grave subject for a grave occasion is in good taste always.

The courts of Kentucky have declared these kind of bonds constitutional; and a general legal opinion prevails, that this question is not now seriously agitated in Ohio—and if so, there can be no question as to the constituticnality of those laws.

Yours very truly, OHIO.

Tennessee.

East Tennessee and Georgia Railroad.—We learn from a late report of the directors that 60 miles of this road are now completed, on which portion the locomotives and cars are being daily run. The remainder of the road to the Tennessee river is under contract and is steadily progressing.

The track laying commenced at Dalton, 1st January, 1851. The first 10 miles were opened for business about the 1st of March. In April the cars commenced running to the State line, 15 miles—in June to Cleveland, 29 miles—in August to Charleston, 40 miles—in November to Athens, 55 miles.

The aggregate amount of earnings of the road from all sources, up to Jan, 5, 1851, was $12,700,-50. The expenses were $9,138.41; leaving a balance of $3,562,09. As $4,646.14 were for extraordinary expenses, the proper balance would be $8,-208,23.

That portion of the road between Loudon and Knoxville, it is expected, will soon be put under contract. The first three miles of this road present great difficulties of construction, and will probably require 18 months to complete the grading and masonry. It will at least take that length of time to build the proposed bridge over the Tennessee river. On the remainder of the route the work is light, and can be easily completed in one year.

The total cost of the road when completed to Loudon will be $1,431,000; and when completed to Knoxville, $1,993,000.

The alignment of the road is very favorable; 80 per cent of the whole being straight line. Of the curved lines, three-quarters are of radii ranging from 2,865 to 10,000 feet; the remainder are 1,910 feet, except one curve at Athens depot, the radius of which is 1,400 feet.

The valley of East Tennessee, through the centre of which the railroad runs, contains an area of 7,500 square miles, and a population of 200,000.—The resources of the valley are very great, and will afford a large amount of local business to the East Tennessee and Georgia railroad, when completed. The total estimated receipts per annum are $201,-000, and the net profits $120,600, which is more than eight per cent on the cost of the road.

This road possesses another advantage, that of being nearly upon the air line between New York and New Orleans. When the remaining links in the great chain between these two cities are com-

pleted, the East Tennessee and Georgia railroad will command the southwestern travel and the transportation of the mails, and must necessarily prove a profitable road.

Massachusetts.

Boston and Worcester Railroad.—The Boston Courier states, that efforts are being made by the friends of the two corporations to unite the Western and Worcester railroads, so that the control of the whole line from Boston to Albany shall be under one head, and management. To complete and equip the second track of the Western, an additional outlay of two millions of dollars will be required, and this will make the cost of the entire line about $17,000,000, There is a talk also of uniting the Cheshire and Rutland roads, under one corporation.

The Courier also advises the Vermont Central and the Ogdensburgh to form a similar union.

It might be well also, for the great northern line from Winsor to Ogdensburg to form a similar union. This line complete and fully equipped will cost about $13,500,000, viz:—

Ogdensburg road 30,000 shares at $50..	1,500,000
Mortgage bonds 7 per cent.....	1,500,000
Convertible bonds 7 per cent.....	750,000
Equipment and completion.....	750,000
	$4,500,000
Vermont and Canada, 12,500 shares at $100.....	1,250,000
Vermont Central, 100,000 shares at $50.	5,000,000
Mortgage bonds, 7 per cent.....	2,000,000
Interest bonds, 6 per ct.....	280,000
Equipment and completion.....	470,000
Total cost of line, in 1852.....	$13,500,000

North Carolina.

Raleigh and Gaston Railroad.—We copy from the Wilmington Herald the following summary of the proceedings of the recent meeting of the stockholders of the Raleigh and Gaston railroad, held on the 13th ult., at Henderson.

Welton N. Edwards, appeared as the representative of the board of internal improvement.

Jno. S. Eaton, Jno. G. King, and W. W. Vass, were appointed directors on the part of the State, by Gov. Reid.

The reports of the President and directors, and superintendent of the company were read and referred.

There were 927 shares represented, entitled to 515 votes represented in person, and 2104 shares entitled to 1514 votes represented by proxy, amounting in all to 3034 shares entitled to 2026 votes, being a majority of the stock.

The subject of the connection between the Raleigh and Gaston railroad and the Seaboard and Roanoke railroad was referred to a committee of three to confer with the delegates from Norfolk.—This committee subsequently made a report, which was unanimously adopted. The terms of it have not yet been given to the public; on its adoption, however, Dr. Wm. Collins, President of the Seaboard and Roanoke railroad company, appeared and subscribed on behalf of said company, to the stock of the Raleigh and Gaston railroad company, the sum of fifty thousand dollars, which subscription was accepted by the stockholders.

On motion of Geo. W. Mordecai, the following resolutions were unanimously adopted:

Resolved, That the stockholders of the Raleigh and Gaston railroad company, have been highly gratified to learn, that there is a prospect of the speedy construction of the Roanoke Valley railroad; that they feel a deep interest in that work, and will afford all the facilities in their power to expedite it.

Resolved, That it is the opinion of this meeting, that a connection with the Raleigh and Gaston railroad, at Ridgeway, or at any point within five or six miles, south of that place will be a substantial compliance with the requisitions of the charter of that company, authorizing them to connect with this road in the vicinity of Ridgeway.

The Junction road, between Gaston and Weldon, about twelve miles, will be put at once under contract.

Geo. W. Mordecai, Thos. Miller, N. T. Green, and Thos. White, were elected directors by the stockholders.

Seven miles of the road have been re-laid at a cost of $5,000 per mile.

The next annual meeting of the stockholders will be held in Raleigh on the second Thursday of November.

The proceedings were ordered to be published in pamphlet form, and after voting thanks, etc., adjourned.

Railroad from Philadelphia to Allentown.

The Pottsville Mining Register states that "a direct railroad from Allentown to Philadelphia, is seriously discussed by the merchants and capitalists of the latter city. Parties interested who have lately visited Allentown, have broached two plans for accomplishing the design—one proposing a connection with the Germantown and Norristown road, and the other, a connection with the Reading road at Pottstown. The last mentioned route requires only 28 miles of road to be made, to enter the Lehigh coal region. Last year, the coal trade of the Lehigh amounted to nearly a million of tons—and allowing that the increase of tonnage, compared with the previous years, would pass over this road, it would bring a handsome accession to the coal transportation of the Reading railway."

The Evansville and Illinois Railroad.

The work on this road is progressing rapidly.—The finished portion, (nearly 27 miles,) is in successful operation. The business done upon it, goes far beyond the expectation of its warmest friends. And when it shall be finished to Vincennes, connecting the banks of the Ohio river with the Valley of the Wabash, the business will be greatly increased.

The distance from Vincennes to Terre Haute is 63 miles—this portion of the road has not yet been located—but the road will pass over a surface almost a dead level from one end to the other. The citizens along the line will raise the means to grade the road, and all the aid that will be asked from abroad will be the funds to purchase the iron and stock the road.

Terre Haute will soon be placed in railroad connection with the Atlantic cities; which renders it still more important, to complete in the shortest possible time, the gap between Vincennes and that place.

Additional importance is given to this portion of road, on account of the recent lettings of the Ohio and Mississippi road. The Illinois division of that road, will probably be completed in two years—much sooner than the eastern portion of it can be done. If, in the mean time, the road from Vincennes to Terre Haute shall be finished, it will bring the Illinois division into immediate use, and afford a continuous railroad communication from St. Louis to New York. This view cannot fail to be taken—and it demonstrates the deep interest the Ohio and Mississippi company must feel in the early completion of the road from Vincennes to Terre Haute. With proper, and well directed efforts, this may all be accomplished in less than two years.

Wabash and Erie Canal.

We learn from the 9th annual report of the trustees, that the navigation of this canal was opened on the 20th of March, and was continued up to the 1st December.

The trustees have received during the year ending 1st Nov., 1851, the sum of $179,282 76 for tolls—showing a gain of $22,124 38 over the tolls of the previous year. This gain would have been larger had it not been for the serious interruptions to the navigation of the canal, caused by the heavy rains which fell during the months of May, June, July and August last, in the valley of the Wabash.

The line of canal finished and in operation during the year has extended to the crossing of the west fork of White river, 55 miles below Terre Haute, and 281 miles from the State-line.

The unfinished divisions of the canal at the date of the last report were:—1st. The Newberry division, from Point Commerce to Newberry, 17 miles. 2d. The Maysville division, from Newberry to Maysville, 28¼ miles. 3d. The Petersburg division, from Maysville to Petersburg, 16¼ miles. 4th. The Evansville division from Petersburg to Evansville, 54¼ miles.

The Newberry division is nearly finished, requiring a further outlay of only $2,500.

The Maysville division is also nearly finished, requiring a further outlay of less than $8,000 to complete it. It is expected that this division will be finished in the early part of next season, which will extend the navigation of the canal to Maysville, in Davies county.

The Petersburg division is in a forward state, an additional amount of $68,904 being required to finish it.

The Evansville division, embracing the remainder of the line, is estimated to cost $561,341. The amount of work done, up to 1st November, 1851, was $237,651, requiring an amount of $323,690 to finish it.

At the meeting of the board, held at Evansville, in the month of May last, they re-organized the superintending divisions of the canal, in order to secure its completion at an early day. They divided the main line of the canal, from the State-line to Evansville, which is 380 miles in length, exclusive of feeders, into 9 divisions, and appointed a superintendent for each of the 6 upper divisions, embracing the finished portion of the canal. They also decided upon enlarging that portion of the canal, lying within the corporate limits of Evansville, to the width of from 55 to 60 feet at the water-line—the citizens agreeing to furnish the right of way, free of charge, to the Trust, thus forming a very fine and spacious basin for the accommodation of the business of the canal.

The receipts of the canal, from Dec. 1, 1850, to Dec. 1, 1851, were $391,984 69. Balance on hand Dec. 1, 1850, $169,108 65. Total, $561,093 34.—The disbursements for the year were $390,552 92; leaving a balance in favor of the company of $170,540 42 Dec. 1, 1851. The payments for construction during the past year were $135,412 61. There remains to be paid of the Newberry, Maysville, and Petersburg divisions, the sum of $72,239 00; and on the Evansville division $346,341 59, showing a total payment yet to be made of $425,580 59.

South Carolina.

South Carolina Railroad.—The Charleston papers of Tuesday contain the reports of President Conner and the Superintendent of the South Carolina railroad. They exhibit the road and its branches in a highly prosperous condition, as will be seen by the subjoined figures:

The gross receipts amount to.....	$1,000,717 98
And the expenses of management to.	391,006 89
Equal to 39 7-100 per cent. leaving as the net profit for the year.....	609,711 09
And after deducting interest paid on foreign and other debt, etc.....	154,328 24
Leaves the net income of.....	$455,382 85
From this amount two Semi-annual dividends of 3½ per cent each, have been declared, amounting to.....	271,600 00
Leaving a surplus of.....	$183,782 85
Which, added to the reserved fund of last year, makes the amount to the credit of that fund.....	350,039 36

The increase of the business of the last year upon the year previous, appears to have been in passage $14,958,23; up freights $74,255 11; minor sources $2,212 25, while the decrease in down freights has been $3,427 81-100, leaving an aggregate increase of $87,997 73.

The comparative statement of the income of the road from 1844 to 1851 inclusive, shows a steady increase. Thus:

1844.....	$533,869 95
1845.....	558,697 71
1846.....	589,081 52
1847.....	655,275 30
1848.....	800,073 54
1849.....	892,403 16
1850.....	912,720 25
1851.....	1,000,717 98

There seems to have been considerable fluctuation in the dividends declared during this period. The dividend in 1844 was 5 per cent; in 1845, 5½ per cent; in 1846, 5½ per cent; in 1847, 5 83 100 per cent; in 1848, 2½ per cent; in 1849, 4 per cent; in 1850, 6 per cent; and in 1851, the last, 7 per cent.

The road and its appurtenances are valued at 7,002,396 62, Additional capital was paid in during the year to the amount of $955,150 00. The permanent indebtedness of the road is somewhere about $3,000,000.

The above figures include the operations of the Columbia and Camden roads, branches of the main trunk from Charleston to Hamburg. The main road is 136 miles in length; the Columbia road 68 miles; and the Camdem 38—making the road and its branches 242 miles in length. The line of the road at Aiken has been changed, and the company are now constructing a road around the hill at that place, so as to avoid the inclined plane. It will probably be completed by the first of April.

Memphis and Charleston Railroad.

We learn that the conditional subscription of the city of Charleston to the above road has been made absolute, so that the requisite amount of capital stock, $2,500,000 has been fully secured. As a large portion of the stock subscription can be readily realised, we presume that the directors will push forward the construction of this great work with all possible dispatch.

Already a considerable portion of the western part of the line is well advanced. By an advertisement in our paper of to-day, it will be seen that the eastern division from Huntsville to the proposed junction with the Nashville and Chattanooga railroad, is immediately to be placed under contract.

New Railroad Projects in Kentucky.

At the recent session of the Legislature of Kentucky, charters were granted for the construction of railroads as follows:—

1. From Covington to Louisville.
2. From Cincinnati (Covington) to Nashville.
3. From Danville to Knoxville.
4. From Paris to Mt. Sterling.
5. From Lexington to the Tennessee line in the direction of Knoxville.
6. From Lexington to the Virginia line, point indefinite.
7. From the Covington road via Georgetown, to a point on the Frankfort road.

Ohio.

*Gallipolis Railroad.*The line of the Marietta and Cincinnati railroad, for 24 miles east of Chillicothe, now under contract, is on the most practicable route from this city to Gallipolis. The Gallipolis connexion with the Chillicothe road will probably strike our line near the eastern point to which the latter is under contract, to wit: Byers's, in Vinton (late Jackson) county. In fact, the Gallipolis connexion, between the Marietta and Central Virginia roads, is of first-rate consequence to the people of this vicinity.

We call attention, again, therefore, to the fact—that books for subscription to the stock of the Gallipolis railroad, will be opened, in two places in Ross county, Chillicothe and Richmondale, on the first Monday of February, being the 2d day of the month. A subscription of $50,000 is necessary, in order to secure the charter of the above company;—and we cannot doubt that the requisite amount will be subscribed.—*Scioto Gazette.*

Canada.

Great Western Railroad.—The most important fact connected with western railroads, recently brought to public notice, is the announcement contained in the last foreign news, that the proposed loan of £200,000 for the Great Western railroad, through Canada, on six per cent bonds, has been completed in London. The importance of this road to Canada, as well as to various interests on this side of the line, has not escaped the notice of sagacious capitalists. The several railroad companies between this city and Albany, all of them managed by enterprising men, have for some time given the matter considerable attention. At the last session of the Legislature, a law was passed authorizing them to subscribe to the capital stock of the Canada road, and quite recently this subscription was made, to the amount, we understand, of half a million of dollars. This, with the loan just negotiated in London, will put it in the power of the company to press the work forward with great rapidity.

Home Trade in England by Railroad.

Sidney, in his "Rides on Railways," gives the following illustrations of the effects of railways on home trade:—

"A regular trade is now carried on between London and the most remote parts of the kingdom in every conceivable thing that will bear moving. Sheep have been sent from Perth to London, and Covent Garden has supplied tons of the finer description of vegetables to the citizens of Glasgow; every Sunday, five tons of the best fish in season are despatched from Billingsgate to Birmingham, and milk is conveyed in padlocked tins, from and beyond Harrow, at the rate of about one penny a gallon. In articles which are imported into both Liverpool and London, there is a constant interchange, according to the state of the market; thus, a penny per pound difference may bring a hundred chests of Congou up, or send as many of Hyson down the line. All graziers within a day of the rail are able to compete in the London market; the probability of any extraordinary demand increases the number of beasts arriving weekly at Camden Station from the average of 500 to 2000, and the sheep from 2000 to 6000; and these animals can be brought from the furthest grazing ground in the kingdom, without any loss of weight, and in much better condition than the fat oxen were formerly driven to Smithfield from the rich pastures around Aylesbury, or the valley of the Thames."

Tennessee.

Louisville and Nashville Railroad.—We are glad to see by the following, which we copy from the Nashville Banner, that the Louisville and Nashville railroad charter has passed the Tennessee Legislature in an unobjectionable shape:

We are gratified to announce that the bill repealing the obnoxious restrictions in the charter of this road, passed the house on Saturday and become a law. This is in every way just and proper. The different road companies are now, as they certainly should be, upon a footing of equality, and the true interests of the public works and of the country, may be consulted without trammel. We cannot withhold the expression of our opinion, that the Louisville and Chattanooga roads should connect at Nashville, and that while the main depot of the Louisville road should be upon this side of the river, a smaller depot should be located in Edgefield for the reception of the freight of that side of the river.

Cherokee Railroad.

At a meeting of the corporators of the Cherokee railroad company, held in Rome on the 21st inst., it was resolved to accept the charter granted by the Legislature at its late session, for the purpose of building a railroad from Rome through Cedar valley, to the State line, in the direction of Jacksonville, Ala. A committee of ten persons was also appointed to open the books and obtain subscriptions to the stock of the company. Whenever a sufficient amount of stock is subscribed to authorise the organization of the company, it was made the duty of the committee to call a meeting of stockholders for that purpose. The Secretary was directed to correspond with the President of the Selma railroad company, and the citizens of Jacksonville and Benton county, Ala., upon the subject of building the road from the State line to Jacksonville.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Boston, November 29th. 1m

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tuscumbia and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, *including* all the materials. And also for the mechanical work, *excluding* timber *only*.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boated down) 3 miles above the bridge site, and Clay of a good quality is found convenient, Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. McKETHAN,
J. D. WILLIAMS,
D. G. McRAE,
} Committee.

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply, at the Company's Terminus at Longueuil, of the following description of RAILWAY CARRIAGES, viz:

One hundred and twenty Baggage Carriages, enclosed, on Iron Trucks with lateral motion.
Ninety Platform Carriages, on Iron Trucks.

To be correspondent in other respects to pattern Carriages of the respective kinds, to be seen on the Road.

The Tenders may apply to the whole or any part of the supply, and the delivery must be made at the following dates: one-third at 1st May, 1853—the remainder 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed, "Tenders for Passenger Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply at Longueuil, of the following RAILWAY CARRIAGES, viz:

Six First Class Passenger Carriages.
Five Second Class " "
Three Post Office and Express Carriages.
Five Covered Luggage Vans.

To be correspondent to Carriages of the respective descriptions now on the road.

One-third to be delivered by the 1st May, 1853; the remainder by the 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.

November 1. 3m

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next. for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq. ,near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee

of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,

Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.

J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,

Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,

Sup't Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,

President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.

By his Attorney, G. M. KNEVITT.

New York, 1851.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,

Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,

Broadway

September 1, 1851.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 7.] SATURDAY, FEBRUARY 14, 1852 [WHOLE No. 826, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Corporate Subscriptions to Railroads..... 97
Western Railroad..... 98
Ohio and Mississippi Railroad..... 98
South Carolina Railroad..... 98
Railroad Law in Kentucky 98
Greenville and Miami Railroad.....103
India-rubber Springs.....104
Stock and Money Market.....104
Railroads in Indiana.....104
Indiana Central Railroad.....106
Coal for Locomotives.....106
Circular of Gen. Greene.....106
Schuylkill Nav. Co.....107
Fitchburg Railroad.....107
Collin ' Line of Steamers.....107
Trial of Locomotives.....108
Lawrenceburg and Indianapolis Road.....108
Quebec and Richmond Railroad.....109
Pennsylvania Railroad.....109
Commerce of Buffalo.....109
Public Works of Ohio.....110

American Railroad Journal.

Saturday, February 14, 1852.

Corporate Subscriptions to Railroad Companies.

We publish this week the opinion of the Supreme Court of Kentucky, sustaining the subscription of Mason county, in that State, to the Maysville and Lexington railroad. We give the opinion entire, that our readers may see all the grounds upon which it is based. The decision is an important one, as applicable not only to the numerous issues of the Kentucky county bonds, but from the influence that it will be likely to exert upon the courts of other States, where similar questions may be raised.

The result in the above case has established no new principle in the law of the country, but is nearly a re-affirmation of the discussions of other States where the question has come up for adjudication. In the older States, the competency of cities and counties to subscribe in their corporate capacity to works of general improvement has long been acquiesced in; this acquiescence being based upon repeated decisions sustaining this power.—The right of a city to execute works which have for their object the general good and convenience, is one of the necessary results of all social organizations. Take the case of the New York Water Works. The water furnished by them, is not, strictly speaking, an indispensable necessity, but a great luxury and convenience. Private enterprise was not equal to the task of bringing water from the Croton river into the city. It was necessary for the city, in its corporate capacity, to assume the work, though the project was opposed by a very large body of our citizens, on the ground that they were well supplied with water already, and were unwilling to assume a burden which benefitted others alone. The majority decided in favor of water, and the opponents of the measure were compelled to contribute their proportion to secure its success. By our organic laws, the will of the majority stands for the will of the whole. If there is any hardship in this, it is one inherent in the principle upon which *all* our institutions are founded.

This principle, as already stated, is of universal appreciation. Upon it are based nearly all our works of a public character, such as railroads, canals, water works, public highways, etc., etc.—There is not a town in the United States of any considerable importance that has not made large appropriations to one or the other of these works, which could never have been executed without such aid. The competency of the majority to bind the minority, and force contributions from them towards the construction of works of a declared public utility, has been questioned over and over again; but the decisions have been unanimous in confirmation of this right. We must expect that in all the new States, as well as in the old, the question will continue to be raised till it is finally settled by the highest legal tribunal of each State.

In the eastern States, the case most commonly referred to as settling this question is that of *Rose vs. Inhabitants of Bridgeport*, in Connecticut. That city borrowed money in its *corporate* capacity, to aid the construction of the Housatonic railroad.—The inducement to this, was the expected advantage to be derived by the city from being made the terminus of the road. The enterprise, instead of coming up to public expectation, proved disastrous, and the city, in consequence, refused to pay the liability assumed for the above purpose. The creditor, thereupon, commenced a suit and recovered judgment for the amount due him, against the city in its *corporate* capacity. There being no *public* property of the city that could be reached, the creditor proceeded to levy his execution upon the *private* property of individual citizens, and to accomplish this object, was compelled, under direction of the sheriff, to break into a number of stores, and take therefrom large quantities of personal property. The citizens, whose property was taken, bro't actions of *Replevin* against the sheriff, and in this manner the whole matter was brought before the Supreme Court in the State. The court decided the law to be not only constitutional, but that the private property of *each individual* was held for the corporate debts of a city or county of which he might be a member. Such is now the recognised law of the land. Upon recovering judgment against a city or a county, the creditor may seize the property of an individual member, who in turn has his remedy by an action, either against the corporation, or against the different members of it, to compel them to contribute *their* proportion of the amount paid.

The same question was recently raised in the State of Maine, in the matter of the subscription of the city of Gardiner to the Portland and Kennebec railroad, and Judge Ware of the U. States District Court, sustained the subscription upon the grounds already stated.

Of the reasonableness of the proposition in the abstract, that a majority may bind the minority to works of manifest public improvement, we believe there can be no doubt. In its application, it is the very corner stone upon which our institutions and laws are based Its practicable application is seen on every side. All our cities, from the largest to the smallest, have affirmed it by their acts, over and over again. The city of Albany subscribed a large sum to the Western railroad. The city of Baltimore now owns nearly $4,000,000 of stock in the Baltimore and Ohio railroad. Philadelphia, in its corporate capacity, has contributed a large sum to the Pennsylvania Central railroad. So has Pittsburg to the same object. We merely instance these cities as prominent illustrations of the principle stated. The securities issued by them are now, and have ever been, regarded, as the very best ever offered in this market.

Our friends, purchasing county securities, must expect that the question of their validity will be raised in every State where it has not been definitely settled. At home, these questions create no apprehension, nor detract from the value of the se-

curity; as the law upon the subject is too well established to raise a doubt as to their legality, and we merely make the above remarks to relieve any anxiety that may be excited abroad by our publishing articles having reference to county subscriptions. In the older States, all these questions have been forever laid at rest, by repeated adjudications of the proper tribunals. The decision of the Supreme Court of Kentucky is but an affirmation of the law there.

As a general rule, it may be stated that the authority of a majority to bind the minority of a city or county, is in exact harmony with our whole system. With us, all power rests in the *majority*. In Europe, for instance, the power of the State has either been assumed by, or has been permanently delegated to the few individuals that constitute the government. With us, the power of the majority to carry out works of public improvement has only been used for beneficent objects, and our friends everywhere may rest assured that as far as the *validity* of the securities named are concerned, they are beyond a doubt. Of their intrinsic value, and we believe them to be superior to most offered in our market, we shall take occasion to speak in our next.

Western Railroad.

The directors of the Western railroad corporation have issued the report of their acts and doings, receipts and expenditures, for the year ending November, 1851. We subjoin the following table, exhibiting the aggregates of receipts and expenditures for the time specified.

The income of the road for the year was as follows:

From passengers	$603,207 05
From freight	714 362 92
From other sources	36,324 66
Total	1,353,894 63
EXPENSES.	
Repairs of road	$122,719 32
" engines	36,949 96
" freight and passenger cars	70,070 04
" buildings	11,318 03
Transportation expenses	328,815 27
General expenses	27,883 58
	$597,756 20
Net earnings for the year	756,138 43

From this deduct the following payments, viz:

Balance of interest	$282,548 93
Two dividends, 4 per cent each	412,000 00
Payment to sinking funds	50,000 00
Loss on Pittsfield and North Adams road	5,497 68
	$750,046 61
Surplus carried to contingent fund, 1851	6,091 82
Add balance to credit of do., Nov. 30, 1850	122,029 69
Total amount of contingent fund November 30, 1851	$128,121 51

The general result of the year's work, as compared with the work of the preceding year, will appear thus:

	Passengers.	Freight.	Other sources.	Total.
1850	$590,743	$740,493	$35,015	$1,366,252
1851	603,207	714,362	36,321	1,353,894
Increase	12,464	.....	1,309	.....
Decrease	.....	26,131	.....	12,358

The receipts of the Pittsfield and North Adams railroad, a branch of the Western, were, for passengers, $17,131 81; freight, $19,483 51; other sources, $900. The aggregate expenses were $16,012; net income, $21,502 32. The payment of 6 per cent on the stock, which is guaranteed, in two dividends of 3 per cent, amount to $27,000, leaving a deficiency to be charged to the guarantee fund account of $5,497 68. The business yielded $4,909 gross revenue more than it did in 1850, but the increased expenses left the net revenue only $2,553 larger than in that year.

The value of the Massachusetts sinking fund at the close of the year 1850 was $614,090 48; increase in 1851, $77,507 09; total value at the end of last year, $691,597 57. The increase of the Albany sinking fund was $24,816 27, making its total value $318,368 82; aggregate value of both funds, $1,009,966 39. The total increase of the sinking funds was $104,805 79.

The floating debt of the corporation, which, on the 1st December, 1850, amounted to $101,500, was entirely extinguished prior to 30th November, 1851; and on the 17th December, when the dividend statement was made up, the cash and cash assets in the hands of the treasurer amounted to $313,621.

Arrangements have been made with the Harlem railroad company for doing their work between Chatham Four Corners and Albany. Twelve and a half miles of track, between Middlefield and Pittsfield, have been relaid with 70 lb. rail.

The total cost of the Western and Albany, and West Stockbridge railroads, to November 30, 1851, was $9,953,758 81. The total number of shares issued by the corporation is 51,500.

Railroad to Mt. Carmel and Albion.

We are glad to see that the Mt. Carmel Register is earnestly advocating a railroad from that place to Albion, and a branch to Princeton, to tap the Evansville and Illinois railroad. It correctly concludes, we think, that such a road would pay a handsome dividend. Certainly a road which would, by connecting with the Evansville and Illinois railroad, unite the rich and populous country in the neighborhoods of Mt. Carmel and Albion, with the Ohio river at Evansville, and with the upper Wabash at Vincennes and Terre Haute, and thus eventually with the railroads of Indianapolis, must pay a good dividend, and prove highly beneficial to that region of country. It appears that inquiries have been made of the directors of our road, in reference to the Mt. Carmel and Princeton road.—Mr. Ingle thus writes in reply:

"In behalf of our directors, I will venture to say, that I have no doubt but the completion and equipping of a railroad from Mt. Carmel to Albion would insure the almost immediate construction of the branch road in question."—(Alluding to the road between Mt. Carmel and Princeton.)

"In answer to the question whether our railroad would aid in constructing the branch road, I would say that our railroad would be so deeply interested in the matter, that it would doubtless aid to the extent of its ability in constructing the branch."

Such a branch of our railroad, connecting us with the rich and highly productive country about Albion and Mt. Carmel, should certainly be a great object to the Evansville and Illinois railroad company. A vast quantity of the wholesale business of Evansville depends upon that very region, more than upon any other. A railroad connection with it would be more than merely desirable. It should be sought, and sacrifices made or assistance offered to obtain it. Not only would our own railroad be greatly benefitted by it, but the business interests of Evansville would be directly and wonderfully advanced by such an improvement. And certainly the business men of Mt. Carmel and Albion, and the farmers of that region, could do nothing better for themselves, than to urge forward such an enterprise with their whole strength. By common energy and enterprise, they may build such a road, which would be actually more beneficial to them and their interests, than a railroad to Alton, costing vastly more, and which they unassisted cannot build, although we should like to see that road pushed ahead. This road is within their capabilities, and may be built in a short time, and soon be working its useful purposes. Let the Mt. Carmel folks go to work, either to build a road to Princeton or to Albion—to Albion if they will, which must soon establish a branch to Princeton, or to Princeton direct, which will secure the full enterprise of Albion to secure a portion of its benefits.—*Illinois paper.*

Ohio and Mississippi Railroad Commenced.

Yesterday Judge A. T. Ellis and Professor O. M. Mitchell, directors of this company, and Mr. Seymour, the contractor for the construction of the road, reached the city, and are sojourning at the Planter's House. They are accompanied by Mr. Trousdale, himself an eminent contractor, and who will probably sub-contract under Messrs. Seymour & Co. for the grading and bridging of the entire line from Illinoistown to Vincennes. The party came through by the stage. The trip furnished Mr. Seymour with an opportunity to comprehend more directly the character of the route. We are informed that across Illinois he regards the road as of easy construction; so much so that it is contemplated, although his contract with the company does not require such alacrity to complete the work from the Mississippi to the Wabash, in twelve or at most eighteen months. We hope this expectation may be realized.

By the charter of Messrs. Seymour & Co., with the President and directors of the company, it is stipulated that the construction of the road shall be commenced on or before the first day of February inst. On Saturday last, Mr. Morris, the Engineer for the contractors, accordingly commenced the construction by breaking ground in Illinoistown. This was necessary on the part of the contractors to save the contract. The road has, therefore, been *commenced.*

By the charter, the company are compelled to commence the construction at two points, viz:—Illinoistown and a point contiguous to the line of the Central railroad, on or before the 12th inst. The board of directors hold a regular meeting on the 4th inst., in this city, at which it is expected, there will be a full attendance of the directors.

For our favored and cherished city, we regard the commencement of this road with extreme pleasure. It will prove the means of establishing us on the great highway of the world, and will make St. Louis the central point for the Pacific route.—We are gratified in another aspect. The beginning of the work by the contractors, gives assurance that they intend to carry out their contract and complete the road as they have stipulated.—*St. Louis Republican.*

South Carolina.

South Carolina Railroad.—It appears from the annual report of the President and board of directors of the South Carolina railroad company, published in the Charleston papers, that the gross receipts of the road for the last year, from all sources, are $1,000,000—being an increase of $200,000.—Expense of working the road about 35 per centum of the earnings. After paying the interest on the debts due by the company, and reserving a fund of $180,000, a dividend of 7 per cent has been declared.

Ohio and Mississippi Railroad.

The sum of $600,000 voted by the city of Cincinnati to the above company has been accepted by it and the bonds of the city to that amount have been placed at the disposal of the directors of the company.

Kentucky.

Railroad Law.—The following is the opinion of the Court of Appeals, delivered by Judge Marshall, in the case of *Slack, etc., vs. Maysville and Lexington Railroad Company:*

The 28th section of the act of March, 1850, incorporating the Maysville and Lexington railroad company, enacts "that the cities of Maysville and Lexington, and the counties of Mason, Nicholas, Bourbon and Fayette, and any other city, county or corporation, be and they are hereby permitted to hold stock in the corporation created by this act, upon the same terms, on the same conditions, and subject to the same restrictions, with other stockholders." It then fixes the maximum of stock which may be subscribed under this authority, as follows, viz: by Maysville, $150,000; by Lexington, $150,000; by Maysville and Mason county, jointly, $150,000; by Nicholas county, $100,000; by Fayette county, $200,000; and by any other city, county or corporation any sum not exceeding the largest of these amounts; and the President and directors of the company are authorised, after giving six weeks' notice by advertisement, in the manner prescribed, "upon a day named in said advertisement, to take the sense of the qualified voters of said cities or counties, or of any one or more of them, as to the policy of said cities and counties, or any one of them becoming subscribers to the stock in said railroad company to any amount which may have been proposed in said printed notice, not exceeding the respective sums above specified." It is then made the duty of the mayor and council of each of the cities of Maysville and Lexington, and the duty of the county court in each of the counties above named, to open columns in the various precincts, etc., and take all necessary measures to ascertain the sense of the qualified voters of their respective cities and counties at the polls thereof, as aforesaid, "and provided a majority of all the qualified voters of any of said cities or counties, who shall have cast their votes at said election shall be in favor of said several subscriptions of stock as proposed to such city or county, it shall be the duty of the mayor and council of every such city to pass an ordinance directing the mayor to subscribe for any amount of stock provided for in the ordinance, not exceeding the amounts in said printed notice, and it shall be the duty of the county court of every such county in like manner to empower and direct their clerk to subscribe for the amount of stock authorised by the voters of the county, not exceeding the sum specified in said printed notice; and it shall be lawful for said cities and counties, so authorising subscriptions, etc., to raise the amount of their separate subscriptions as the same shall be called by the president and directors of said road, by a tax on the real and personal estate of the said several cities and counties subscribing, or by borrowing the amount thereof, payable in the way, and on the terms, the said several mayors and councils, and the said several county courts may deem most advisable, and the interest on all such sums borrowed may be provided for in such manner as to them seems best; and provided that all sums paid by any citizen on account of such subscription, or of the interest thereon, shall entitle him to a certificate therefor, and when such certificates amount to fifty dollars, shall entitle him to one share in the stock subscribed by said city or county, for every fifty dollars so held by him, (the shares in the capital stock being fifty dollars each.)

Towards the close of the year 1850, the president and directors of the railroad company gave notice, by advertisement as required, for taking the sense of the voters of Mason county, including the city of Maysville, on the fourth Monday in January following, as to the policy of a subscription of stock by that county to the amount of $150,000, under the foregoing provisions of the charter. The county court of Mason, at its December and January terms, made provision for taking and returning the vote. And at its February term, 1851, being on the 10th day of February, the votes from the several precincts being returned, and it being ascertained that the whole number of votes cast was 2,113, of which 1,328 were given for, and 785 against the subscription, making a majority of 543 in favor of it, the court made an order directing its clerk to subscribe on behalf of the county $150,000 in stock in said company, and to issue the bonds of the county for that sum, payable in thirty years, in bonds not exceeding $1,000 each, bearing six per cent. interest per annum, payable annually, and to be delivered to the president and directors as called for, not exceeding $50,000 per year.

On the 17th of February, 1851, the Legislature by amendment to the charter of the company, authorised the county court of any county or the council of any city who shall subscribe stock in said company under the provisions of the original act, to execute bonds of the county or city to the president and directors for the amounts severally subscribed, payable at such times as the county court and city councils may deem best, and authorised and required them severally to levy and collect upon the real and personal property of said counties and cities assessed for State taxation, an amount in money sufficient annually to pay off the interest on said bonds. This act also provides for the mode of levying and accounting for the tax, also for the negotiability and transfer of the bonds by endorsement of the president, countersigned by the secretary, and for the transfer of certificates given to tax payers, and that the stock issued on such certificates shall not be deducted from the county or city stock. Other minor provisions need not be stated.

Prior to this enactment no bonds had been issued by the county court of Mason. And although a general order had passed for their being issued by the clerk, yet as the mode of executing them had not been prescribed, we suppose he had no authority without the further order of the court. At the May term, 1851, however, an order was made that the senior justice should sign bonds to the amount of $20,000 to be countersigned and sealed by the clerk, and delivered to the company in payment of so much of the stock subscribed. At the same term an order was made for the levy and collection of a tax of 3½ cents on the $100 worth of real and personal property in the county assessed for State taxation, for the purpose of paying interest on the bonds. And at the same time the court recommended that the bonds should be made payable in New York, and should bear interest, payable semi-annually, in the same city.

This was the last session of the old county court. In August, 1851, the presiding judge of the county court, acting under the present constitution, adopted the recommendation of the former court, revoked and cancelled the bonds for $20,000 before referred to, and provided that bonds to the amount of $50,000, payable in the city of New York, with coupons for interest, payable semi-annually in the same city, should be issued to the company by the presiding judge, to be countersigned and sealed by the clerk—the coupons to be signed by the clerk.

On the 29th of September, 1851—the tax levied in May of that year being in course of collection—Jacob Slack and 150 other citizens and tax payers of Mason county, owning taxable property to the value of more than $900,000, and more than one-tenth of the entire tazable property of the county, and who had been opposed to the subscription, filed their petition complaining of the tax as oppressive, illegal and unconstitutional, and praying for an injunction against the sheriff, the railroad company and the county court of Mason, to prevent its collection from such of them as had not already paid it. The railroad company, by its president, answered the bill, maintaining the validity of the charter and of the proceedings under it, and the legality and constitutionality of the tax. And it having been agreed that the case should be finally disposed of upon the motion of the complainants for an injunction, the court, on the hearing, overruled that motion and dismissed the bill. From this decree the complainants have appealed to this court.

1. It is objected in the bill, and has been urged in argument, that the proceedings of the county court were not conformable to the prescriptions of the statutes which have been referred to, and were therefore unauthorised by them. But we perceive no material discrepancy, nor in fact any discrepancy at all in the performance of the acts required to be done in order to authorise the subscription, which, if valid and obligatory, imposed necessarily a debt of serious magnitude upon the county. The subscription itself, and the duties of the court preparatory to its being made, were ministerial acts, prescribed particularly by the original statute, without leaving any discretion to the court. In providing for taking the vote, in ascertaining the result, and in making the subscription in obedience to it, the court followed the plain mandates of the statute. If that is authoritative, the subscription is valid and binding; and if the court, in any matter not affecting these preliminary steps, made orders in anticipation of the result, or in any manner exceeded their authority, such excess is simply void, and can have no effect upon the validity of the subscription, or upon the subsequent rights or powers of the court. The orders, therefore, by which before the subscription was voted for or made, the court laid down the form or mode in which the bonds should or ought to be executed or disposed of, are of no consequence. They effected nothing and authorised nothing. Even the orders with respect to the bonds made after the subscription, were, so far as they were unexecuted, unobligatory upon the court. And as the bonds for $20,000, executed under the order of May, 1851, were afterwards cancelled, the whole subject of the bonds was at the August term completely in the power of the court, unaffected by the former orders, except so far as it then impliedly or expressly adopted them. And although no bonds had actually been executed when the tax for payment of the interest was levied at the May term, 1851, yet, as the subscription creating the debt had been made some months before, and the bonds might be required at any time, the tax was properly levied at the May term, if the court had power to levy it. If a majority of justices in commission was requisite for the purpose, there was a decided majority at that term. And in fact there seems to have been a majority on the bench at each of the previous terms at which orders were made in reference to taking the vote or making the subscription or issuing bonds. Nor do we suppose, that under the existing constitution and laws, the presence of the justices of the peace in the county, or of a majority of them, was requisite to authorise the court, at its August term, to prescribe the form and terms of the bonds, and the mode of execution and delivery. And even if it were conceded that this execution of bonds directly to the company, in payment of the subscription of stock, was not authorised by the original act of 1850, it was expressly authorised by the amendatory act of 1851. And there seems to have been a precise conformity with the original act in the mode of calling for and taking the sense of the voters on the question of subscribing the stock, which was done under the original act alone.

Whatever reasons there may be, in point of propriety and justice, for not taking the joint vote of Maysville and the rest of the county upon the question whether the whole county, including Maysville, should subscribe $150,000 in the road, it is entirely clear, that while the statute authorises a separate vote of the citizens of Maysville for determining whether she would take $150,000 of the stock, which she has done, it also authorised her to vote jointly with the rest of the county upon the question of the county subscription, of which she is to bear her proportional burthen, in addition to that which she had imposed upon herself. There was therefore no departure from the statute in this respect. So, however ungraceful and disrespectful it may have been to the county court, or to the people, that the call for the vote should have been made by the president and directors of a road company, this too was prescribed by the statute; which, although it might, and perhaps should, have required the vote to be taken at a general election, when a fuller expression of the popular will or judgment might have been expected, yet left it to the president and directors to determine the time.—It may be assumed too, that they fixed the day with a view to their own condition or necessities, and especially as it has not been shown that they did it for the purpose or with the effect of obtaining an unfair advantage. It might have been more discreet, too, for the legislature to have required the concurrence by vote of all the qualified voters of the county, to authorise the subscription. But if the election or vote was properly conducted, under valid legal authority, the presumption of law is, that those who did not actually vote concur, or at least acquiesce, in the decision of the majority of those who did vote. It does not appear that the op-

ponents of the road were less able to get to the polls than its friends, or that more of them staid away.

II. In approaching the question of the constitutional validity of the legislative acts under which this tax has been levied, we are met by the preliminary question made in argument, whether they are to be compared with the old constitution, or with the present one adopted on the 11th day of June, 1850. The general principles and provisions of the two instruments, so far as they bear upon this subject, are substantially the same. But the 36th section of the second article of the present constitution contains a prohibition with respect to the contracting of a public debt, which, it is contended, is violated in its spirit and substance, if not in its letter, by one or both of the acts now in question.

The section referred to is as follows, viz:—"No act of the General Assembly shall authorise any debt to be contracted on behalf of the commonwealth, except for the purposes mentioned in the 35th section of this article, unless provision be made therein to lay and collect an annual tax sufficient to pay the interest stipulated, and to discharge the debt within thirty years; nor shall such act take effect until it shall have been submitted to the people at a general election, and shall have received a majority of all the votes cast for and against it;" with a proviso that money may be borrowed to pay part of the public debt, without such submission or provision. It is argued with great force that this prohibition was founded on the fact that the State had incurred a large debt for internal improvements, under the delusive expectation that the works erected would reimburse the expenditure, and might produce a large annual revenue; and that this clause of the constitution was intended to protect against similar delusions in future, and the extravagances and disasters to which they would lead—not the commonwealth, as a mere ideal abstraction, unconnected with her citizens and her soil, but the commonwealth as composed of her people and their territorial organisations of towns, cities and counties, which make up the State; that it intended to furnish this protection by commanding that every legislative act which authorises the incurring of a public debt of the character described, shall contain the stern requisition of a tax which will extinguish the debt and interest in thirty years, so that the people to whom it is to be submitted at a general election, may and must see the full extent of the burthen they are called on to assume; and that although in terms the mandate applies only to such legislative acts as authorise a debt on behalf of the commonwealth as an entirety, it embraces in principle every legislative act which authorises a debt to be contracted by any of the local organisations of which the commonwealth is composed.

It is contended that the object of the constitution is not merely to guard the commonwealth from the name of a debt unnecessarily created, but to protect the property and citizens of the commonwealth from the burthen of such a debt contracted under legislative authority, unless sanctioned by the consent of a majority of those who are to bear it given at a general election and under circumstances which must apprise them of the consequences; and the burthen is the same to the citizen, whether imposed by a debt contracted on behalf of the whole State of which he is a citizen, or by a debt contracted on behalf of the local organisation of which he is a member; that there is at least equal necessity for guarding him from the imposition of such a burthen, by legislative authority and without his consent, in this last relation as in the first, and indeed that it is much greater. since the representative principle, which of itself affords a most valuable guaranty against the unnecessary imposition by the legislature of a burthen which is to fall upon the whole State, affords practically none, or none that is appreciable, against a legislative act authorising the imposition of a local burthen upon the local community; that all the dangers to be apprehended from the imposition of unnecessary and extravagant local burthens are immeasurably enhanced, if the legislature, following in part only the spirit of this clause of the constitution, may relieve itself from the responsibility of direct and peremptory action, by devolving upon the majority of the local community, acting merely as individuals and under no responsibility, the power of determining whether the burthen shall be imposed upon all, and of thus, by their will, giving effect to the legislative act; and that if, in partial conformity with this clause, the minority of the local community is thus to be subjected to an extraordinary and onerous taxation by the will of the local majority, that minority, and every individual composing it, is entitled to the full application of the entire provision, as furnishing some check to the unwise and precipitate action of the majority itself, and as affording to the minority this single shadow of security against the oppressive abuse of irresponsible power.

It is therefore claimed that whatever protection this provision of the constitution intended to provide against the imposition by legislative authority of a general burthen upon the citizens of the whole State, the same protection must, according to the spirit and object of the provision, be extended to the citizens of each and every local community, to the majority of whose citizens, the power of imposing a local burthen is committed by legislative act; that the protection of the whole, implies necessarily the protection of all of its organised parts, and that the whole cannot be safe while all or any of its parts are exposed to danger; that it is in vain to say that the legislature shall not authorise a debt on behalf of the State, except under certain restrictions intended as a security against imprudence and extravagance, involving necessarily oppressive taxation, if it may authorise a debt on behalf of every county in the State, without regard to this restriction; that when every county shall under such authority become indebted, the whole State, not in its corporate capacity, but in its real and substantial body as composed of citizens and their local communities, will in substance and in fact be indebted, and that the power to involve a single county, and each in succession, in debt, being a power to involve every county, and therefore the whole State in debt, the restriction upon the power to authorise a debt on behalf of the State wholly fails of its purpose of protecting the State and its citizens from unnecessary and oppressive burthens, and becomes utterly vain and nugatory, unless it be applied to the power of authorising a debt on behalf of the local communities as well as on behalf of the whole State; that the facility with which a legislative act deferring to the majority of the local community the question of imposing a local debt may be obtained, the great number of such acts recently passed, the strong feeling already extensively manifested, and every day increasing, to extend this species of legislation to every county, any portion of whose citizens may expect advantage from its exercise, and the powerful motives and obvious opportunities which are necessarily offered for deluding, or at least misleading a portion of those who are to pass upon the question, evidence a rapid progress towards the involvement of a large portion if not the whole of the state in a debt more extensive, and in taxation more burthensome and oppressive than any which, even without this restriction, would probably be imposed by direct legislation upon the whole State, and certainly more so than could be expected to be sanctioned by a majority of the voters either of the whole State or of the several counties, under a certain prospect of immediate and continued taxation by which the debt should be discharged in thirty years: that this progress cannot be checked, nor its ruinous consequences avoided, unless the constitution can be interposed to protect the commonwealth and her citizens, and their property, against these species of legislation. And it is claimed that in order to protect the rights of the citizen from this power of local taxation, authorised by the legislature without actual responsibility, and exercised in fact by an irresponsible local majority, every provision and principle of the constitution which can reasonably be brought to bear upon the subject, should, instead of being strictly construed, be construed liberally, according to its true spirit, and for the effectuation of its real objects; that every citizen has a right to such a construction of the constitution under which he lives, and may demand such a construction from this court as the ultimate expounders of the constitution and the final arbiter and guardian of the rights which it secures; and that as the provision in question, if confined, according to its letter, to a debt to be contracted in the name of the State, would fail to effectuate its manifest and substantial objects, and would be subject to evasions which reduce it to a mere shadow, this court is bound to give it a substantial operation by applying it to such legislative acts as authorise the creation of a debt to be contracted on behalf of the State itself. And it is urged in behalf of this construction, that if the legislature may, under the specious form of referring the question to a majority of the voters of a county, authorise a county debt for a work of internal improvement, as in this case, there is nothing to prevent the exercise of such a power for the promotion of every object which a majority of the county may be persuaded is advantageous to them, and the property of the minority may be thus subjected, without restriction or control, to the will and the interests of an irresponsible party.

We have thus stated this argument, and, indeed, in some respects, amplified it, because all of us consider it as entitled to the highest consideration in a case coming properly within the operation of the present constitution, and because some members of the court are of opinion that if the authority to create the debt and burthen now in question, had been derived from a legislative act passed since the adoption of the present constitution, the reasoning and conclusion of the argument would be irresistible in their application to such an act; not because they assume that the members of the convention who framed, or the majority of that body which adopted this particular provision, actually looked to such an application of it, which from its structure is not probable, but because they are of opinion that, in its spirit and principle it embraces every legislative act, authorizing a debt to be contracted by any of our local communities, and especially by counties which cover the whole territory and include all the inhabitants of the State; and because all of us perceiving that the power of local taxation is more likely to abuse, and more likely to be oppressively exercised than any other legitimate legislative power, we are therefore the more ready to apply to its reasonable restraint any clause of the constitution which by fair and rational construction may have that operation, and because the citizens who voted for the constitution may not only have regarded it as containing provisions and principles sufficient to secure their essential interests, but may have regarded this particular provision as protecting them against all legislation authorizing a public debt which might ultimately involve taxation for its payment unless sanctioned by a majority of those upon whom it was to be imposed at a general election, and with a full view of the burthen of taxation which was to accompany it. But a majority of the court is of opinion that this provision of the present constitution, if constructed, as contended for in the argument which has been stated, does not apply to the 28th section of the act incorporating this railroad company, because the act was passed before the adoption of the constitution. And if the provision might under any circumstances, be applied to the creation, after the adoption of the constitution, of a debt authorized by a legislative act of prior date, it ought not to be so applied in a case in which there were vested rights under the previous law, which it could not be supposed the constitution intended to abrogate. And although it is not expressly shown, not having been denied, that in the case private subscriptions, without which the company could not have been organized, had been made on the faith of the charter and of the right to have the subscription of such counties as might choose to subscribe under the 28th section of the charter; yet as it seems probable that this was the case, and because it may have been the case, it should not in the absence of allegation and proof be assumed that it was not so, if the validity of the act, and of the authority conferred by it, were to be thereby subjected to a test which did not exist when it was enacted, and to be defeated because the act did not contain a provision not essential to its validity at its date. There is no such urgent reason for giving to the provision a construction which shall make it overreach and repeal acts previously passed, or invalidate rights acquired under them, as there may be for constructing it to apply to all future acts which come within its principle tho' not within its letter. And as the constitutional provision plainly refers to future and not to past legislation, and as the subscription for the county of Mason, which imposed the debt on the county, was

made under a prior law and in pursuance of it, the validity of the debt is not to be tested by the constitutional provision referred to, but by the principles and provisions of the former constitution, under which the act authorizing it was passed.

The amendatory act of February, 1851, though passed after the adoption of the new constitution, does not come within the provision which has been noticed, because the debt had already been created and was obligatory upon the county, if the first act was valid, and it was too late to put the question to the vote by a new law. Moreover the first act under which the debt was created, gave full power to the county court to provide for its payment either by taxation or by borrowing the money, which, of course, implied the power as it did the necessity of furnishing some evidence of indebtedness, and the court might doubtless have issued the bonds of the county in some form to the lender. If without the amendatory act, the court instead of borrowing the money upon those bonds in order to pay the subscription to the company, had with the consent of the company transferred them to it at once in payment, we do not perceive that the original power would have been thereby materially, if at all, departed from, or that the proceeding would have furnished any just ground of complaint to the citizens of the county, and much less ground of constitutional objection. It is difficult to see that the amendatory act confers any new substantive power, and its passage seems rather to have been necessary to authorise the company to receive the bonds in payment, than to authorize the court to make payment of the subscription in that way. It seems to us, that instead of being injured, the county and its citizens are obviously benefitted by the arrangement, which enables them to pay off the county subscription at par in bonds payable in 30 years, leaving them in the meantime subject to the payment of the interest by such taxation as may be necessary; whereas, without such arrangement the county must have met the current calls upon the stock by heavy taxation, or the money must have been raised upon the bonds on whatever terms it could be done. In that case too any loss upon the bonds must have fallen upon the county, which must have made up the payment of the stock subscribed, whereas now the loss falls on the company alone, and the county and its citizens will only feel it as stockholders in the retardation of the work or in the ultimate profit to be derived from the stock, which, however, seems to be counted as nothing by the complainants. It is to be observed too, that if there is no guarantee against the sale of the bonds at a sacrifice by the company, neither was there any case of a sale by the court—that it cannot be assumed that the company having an actual interest to the whole extent of the bonds, will be more willing to sacrifice them unnecessarily than the county court would have been, and that the bonds will probably be more vendable with the endorsement of the company rendering liable all their means, than they would be of standing on the credit of the county alone. And whatever repugnance the complainants may feel to becoming stockholders in the corporation, we suppose the certificates for payment of the tax will not prove actually injurious, and they may at some time, if not now, command a value in the market, which will aid in making future payments, or in reimbursing those previously made. There is no complaint with respect to the slight difference between the original and amendatory act with regard to the stock acquired by tax payers, being or not being taken from that subscribed by the county. And upon the whole, we are satisfied that if the original act is valid, and the subscription of stock by the county court obligatory, no substantial objection can be made to the amendatory act. And being of opinion, that even if the 28th section of the original charter might have been deemed a violation of the 36th section of the present constitution, if it had been enacted since its adoption, it was not as a pre-existing law, abrogated by that instrument, we proceed to consider the question whether the 28th section of the charter violates the constitution existing at its date, either in the nature and extent of the power assumed or granted by it, or in the manner in which it was directed to be exercised.

III. It would be difficult, perhaps impossible, to define the extent of the legislative power of the State, unless by saying that so far as it is not restricted by the higher law of the State and Federal constitutions, it may do every thing which can be effected by means of a law. It is the great supervising, controlling, creative and active power of the State. Subject to the fundamental restrictions just referred to, whatever legislative power the whole commonwealth has, is by the constitution vested in the legislative department, which, representing the popular majorities in the several local divisions of the State, and under no other restraint but such as is imposed by the fundamental law, by its own wisdom, and its own responsibilities, may regulate the conduct and command the resources of all, for the safety, convenience and happiness of all, to be promoted in such manner as its own direction may determine. The legislative department performs and finishes its office by the mere enactment of a law. It does not of itself carry the law into operation.—This is necessarily done by extrinsic agencies.—The law being made known, may be universally observed and obeyed. It may be carried into operation by the exclusive alone. It may be enforced by the judiciary, or by the co-operation of the judiciary and the executive. These are the regular agencies provided by the constitution for the execution of the laws. But the legislature is not restricted to these agencies. It may select or appoint others, as is often done when the object of the law is to accomplish local or individual purposes. The agency generally employed for applying the legislative will and the power of the government to purposes merely local, has been that of county courts for counties and of the trustees of towns or the municipal authorities of cities for towns or cities, which, to the extent of the powers permanently or temporarily vested in them, and whether allowed a discretion or not, do but carry into effect the legislative will or power. But these local agencies are selected, and some of them created by the Legislature itself, for the purpose of carrying its power into all parts of the commonwealth, or into such parts as require its application for their benefit or coercion. And the legislature may select other agencies for particular purposes, having in view, as it must be presumed to have, the nature of the object to be accomplished and the fitness of the agency selected.

It is not essential to the character and force of a law, that the legislative enactment should itself command to be done every thing for which it provides. The legislative power to command a particular thing to be done, includes the power to authorize it to be done. The act done under authority conferred by the legislature, is precisely as legal and valid as if done in obedience for a legislative command. Each is entitled to the same force and efficacy, and each must be followed by all the consequences which either by the general laws or by the particular statute, are annexed to the particular act, because each if done in effectuation of the legislative will, and each, when done according to that will, has all the sanction which the legislative power can give. Each is therefore entitled to the aid of the whole power of the government to uphold it, and to maintain the rights flowing from it. A peremptory statute is at once mandatory, and requires obedience, and this is at once a perfect law in all respects. A statute giving authority and discretion to do or not to do; and prescribing the consequences of the act when done, has not, until the act is done, any mandatory effect, requiring immediate obedience, except so far as it regulates the time and manner of doing the act, and expressly or impliedly commands that the agent shall not be prevented from doing it according to the discretion allowed. Beyond this it has not a mandatory effect until the act is done, and therefore is not until then a perfect law, as to all the purposes provided for. In other words, it does not take its final effect as a mandatory law, until the discretionary act is done, upon which it is to have its final and peremptory operation. So far as such a statute confers authority and discretion, it is as obligatory from the first as the legislative power can make it; and although its further practical efficiency may depend upon the discretionary act of some other body or individual, it is not derived from that discretion, but from the will of the legislature, which authorized the act, and prescribed its consequences. The constitutional validity of a statute, whether peremptory or otherwise, does not depend upon the form of the enactment, nor, as we suppose, upon the particular agency to which authority is given, but altogether upon the nature of the act, authorized to be done, and upon the mode in which it is to be done, and upon the effect which the act itself, or the manner of doing it, and its prescribed consequences, may have upon the rights of individuals or corporations.

In enacting a statute which merely authorizes a particular thing to be done, in a particular manner, and prescribes the consequences, the legislature determines, peremptorily, the manner of doing the act, and its consequences when done. It determines conditionally, and upon such information as it possesses, that the act is in its nature proper and convenient, and the prescribed consequences such as ought to attend it. But, as there may be circumstances known to those concerned which would render the act and its consequences oppressive, or otherwise unacceptable, the legislature defers to them, or to their agents, or to such agency as it may select, the right of determining, in view of all the facts, whether the act shall not be done. Instances of legislation of this character, which as it is not altogether peremptory, may be called conditional, are too numerous in our legislative history, and as we suppose in that of every other government, to require or admit of particular enumeration.

The legislature of this state has habitually passed statutes, either requiring the county courts of all the counties, or of some designated county or counties, to do a particular act, as to levy a limited tax for a certain purpose, authorizing them to do it; and the validity of the statute has never been supposed to depend, in any degree, upon the question whether it was mandatory, or merely gave authority. The same may be said of the legislation with respect to the municipal corporations of towns and cities. With respect to private corporations, also, there may be and has been permissive legislation, to become peremptory upon acceptance of the statute by the corporation, or upon its performance of some act, as to which it has a discretion. And the same may be, and has been done, in cases of authority given to individuals by legislative act. It is no objection to the constitutional validity of such statutes, that they depend for their final effect upon the discretionary acts of individuals or others. The legislative power is not exercised in doing the act, but in authorizing it, and in prescribing its effect and consequences. The case of an ordinary act incorporating a private company fully exemplifies these positions. The legislature determines that a corporation for the accomplishment of a particular object, or the performance of particular operations or business, would be beneficial or expedient. It provides for the manner in which such a corporation may be brought into existence, prescribes the terms on which there may be a corporation, its mode of organization, and its rights, powers and duties when organized. But whether the corporation shall ever actually exist, and whether the statute, so far as it prescribes its rights, powers and duties, shall have any practical operation according to its terms, depend wholly upon voluntary acts of individuals in subscribing stock, or performing such other acts as may be necessary to bring the corporation into existence. And yet, when the requisite acts are done, the statute is absolutely obligatory, not only upon those who have complied with its terms and thus formed the corporation, but upon all others. And it is even more obligatory upon the legislature than ordinary statutes, because when subscriptions are made under it, or other requisites performed, whereby it becomes a corporation, the charter becomes a contract, the obligations of which the legislature cannot impair. Then a statute is not the less a law, emanating from the legislative power, and clothed with all the sanction which legislative authority can give, because its final effect or efficiency may depend upon the discretionary act of an individual or individuals. And so far as the legislative power extends to the imposition of local burthens, we do not perceive that the mere form in which it is executed in the particular case, as being peremptory, or in part permissive only, can affect the validity of the statute, unless the legislative power be in fact exceeded, or the rights of individuals be violated in its exercise.

That the legislative power of the commonwealth

is competent to the imposition of local burthens or taxation, for the accomplishment of local purposes, has not been and cannot now be denied. There is and must be a power in the state competent to coerce the contribution of local means to objects of local necessity and convenience, or the local community must do without them, or must depend upon individuals for them, or they must be provided for by the general resources of the whole state. The power to coerce local contributions for such objects, being established by general usage, and by the apparent justice and propriety of the thing, and being deducible from the general powers and duties of the government, it belongs primarily to the commonwealth, as a legislative power inherent in it, and which cannot be exercised by any portion of the people, whether in an organized or unorganized form, without the consent of all who are to be subjected to it, except so far as such portion of the people may be authorized by the legislative power of the commonwealth to act upon the subject with obligatory effect. The majority of the local community having no inherent right to blind the minority with respect to those local impositions, can communicate no power on the subject to the legislature. But the legislative power might in any particular case be invoked and actually exerted upon the statement of the representatives from the particular county, or upon the petition of any number of the citizens of the county, an enactment peremptorily ordering the contribution or tax, and providing for its application, would not depend for its constitutional validity upon the question whether it had been passed upon the petition of a majority, or of less than a majority of the citizens to be affected by it, or without a petition from any, and upon the statements and solicitation of the county representative, or merely upon the general knowledge and judgment of the legislature. It is indeed scarcely to be apprehended that the legislature, unless in some case of most obvious necessity and propriety, would ever upon its own mere will and judgment, against the consent of the local representative, and without petition from the community to be affected, impose an onerous tax for new and extraordinary purposes. When the object to be accomplished by a local tax is one of mere convenience, or which, though obviously promotive of the general advantage and prosperity of the local public, is not one of absolute necessity or of pressing importance, there is an obvious fitness in providing, before the legislative act should become imperative and the imposition be irrevocable, some means by which the general judgment of the legislature as to its importance and as to the propriety of accomplishing it by a local tax, should be confirmed by that of the local community which is to receive the advantage and to bear the burthen. But if the legislative power be competent of itself to impose the local burthen, such reference to the local will or judgment, though a fit measure of precaution in point of expediency and discretion, cannot be essential to the constitutional validity of the legislative act by which it is done. And therefore, it can be no valid objection to an act making such reference, that it has not adopted the very best means of ascertaining the will and judgment of those who are interested in the subject.

If because, in such a case the final efficacy of the legislative act, and the actual levy of the tax, depend upon the result of this local reference, it may be said that the tax is in fact levied by those who make the decision in favor of it, and that in this instance it should have been determined by a majority of all the qualified voters, and not merely by a majority of those who voted; it is answered that when the question is submitted to the majority of those who vote, and full opportunity of voting upon it is given to all, it is in fact submitted to all, and if the reference be otherwise valid, the decision of a majority of those who vote in the decision of a majority of all who are entitled to vote. This is the governing principle in all popular elections, under both the old and the new constitutions, and would govern this question in the case, even if the 36th section of the new constitution were applicable to it. And although that section requires that the vote to which it refers shall be taken at a general election, there is nothing in the former constitution which can be construed as making a similar requisition. We have already said that it is not shown that there was any unfairness in taking the vote, or any advantage sought or obtained in fixing the time for it. The length of time for which notices were required and given and their publicity, the small size of the county of Mason, the density of its population, the number of its towns and roads, and the convenience of voting afforded by its precincts, leave no room to doubt; and especially in the absence of all evidence to the contrary, that full opportunity was intended to be given, and was in fact given to every voter to know of the time of the election, and to go to it if he chose. The fact that there was a large opposition to the tax, on the ground that it was oppressive and unconstitutional, strengthens the presumption that all were apprised of the intended vote, who felt or could be made to feel any interest in it, and that all voted who desired to do so. We may add that the new constitution itself, in providing for its own adoption or rejection by the people, did not require either that the vote should be taken at the time of the usual elections, or that a majority of all the qualified voters in the state must vote for it in order to secure its adoption. But it assumed, as we do in this case, that the majority of the actual votors expressed the will of the majority of all entitled to vote, and was therefore sufficient to determine the question for the entire state.

The considerations which have been mentioned, bear also upon the objection that the call for the vote was made by the president and directors of the railroad company, and the day fixed and the notices advertised by them, and not by the county court, or some other body or officer, whose duty it was to guard the interests of the county. We remark further, that the notices, being authorized by the statute and advertised as directed, must have been as effectual for the purpose of diffusing a knowledge of the time and subject of the vote, and of its consequences, as it made by the clerk or court of the county; that it was not the intention of the legislature to subject the county of Mason to the burthen proposed, or to authorize the majority of the voters to subject it, unless it should be necessary for the construction of the road; of which the officers of the company would be the best judges; and that there is no substantial difference between requiring the county court to fix and advertise the time of the vote upon application of the company, and authorizing the company to do it themselves, unless it may be in regard to fixing the time, and that it is not shown that any injury accrued to the complainants, or to any others, by allowing the company to fix the time, or by the time being fixed as it actually was. It may be that the vote would have been larger than it was, if it had been taken in May or August. But we cannot assume that the result would have been different or more satisfactory to the complainants. And we do not understand that any of those who did not vote, complain that they had no opportunity of voting. With regard to the mode in which this contribution is to be made, viz: by the subscription of stock in a private corporation, the question of legislative power and of the validity of such subscription, and of the tax levied for its payment, are settled by numerous legislative precedents under which many counties have, through their county courts, subscribed and paid for stock in turnpike companies making roads through their counties, and which were sanctioned directly by the opinions of this court in the case of the Justices of Clarke county against the Paris and Winchester Turnpike Road Company—14 B. Mon. 143—and substantially in the case of Talbot against Deat—9 B. Mon. 526; which last case also meets the objection that the complainants are made stockholders individually against their will. If the legislature could direct or authorize a coercive contribution from the county of Mason for making the railroad which runs from Maysville to the opposite limits of the county and thence to Lexington, there must of necessity be agents to receive and disburse the money, lay out the road, make contracts for its construction, and superintend the work. And the principle of this feature of the act, and of the precedents of a similar character, is, that the legislature adopts for this purpose the agency of a corporation created by itself for the very purpose of making the road, under such guards as were deemed necessary for the safety of its funds and the due execution of the work, and which, by having invested its own funds in it, has an interest as well as a duty which entitles it to a reasonable degree of confidence. Though the corporation is technically a private one, the work in which it is engaged may be one of public utility and importance. It is upon this ground that turnpike and railroad companies are authorized to take, upon making compensation, the land of individuals for the use of the road, as for a public use. And we do not doubt that the legislature may use their instrumentality for the application of such local contributions as may be properly coerced for the construction of the works in which they are engaged. And although there is no express provision in the original or amended charter requiring the $150,000 subscribed by the county of Mason be expended within her limits, it appears that it is not nearly enough to complete the road to that extent and there is a sufficient guaranty in the interest and influence of Maysville, which seems to be the principal seat of the company, and in the interest of the company itself, that a sum more than equal to the county subscription will be expended within the county. If it be essential that the same, or an equal sum, be there expended, it cannot be essential that it be the identical money drawn from the people of Mason.

Whether this road is an object of such a character as that the legislature may constitutionally require a tax or contribution in aid of its constuction from the counties through which it passes, or from the county of Mason, at whose county seat it commences, is a question on which, as on every question involving the exercise of the taxing power, undoubtedly belonging to the legislature, and scarcely capable of definite limitation, a judicial tribunal must, as this ever has done on similar questions, feel great embarrassment. It is essentially a question of fact and opinion referring itself, in a peculiar manner, to the discretion and judgment of the legislative department, to which alone the power of taxation belongs, and by whose will alone its coercive exercise can be authorized. We avow, as this court has heretofore done, that we regard the power of local taxation, and especially when exercised or controlled by the local majority, as one eminently subject to abuses, involving injustice and oppression. But now, as heretofore, we find no clause or principle in the constitution which can be brought to bear directly in restraint of this power, but that which declares that no man's property shall be taken for public use without his consent, unless just compensation be first made. This principle of the constitution may be violated under the pretence of levying a tax, and under color of the taxing power. But it is not every inequality which may occur in the operation of a tax apparently equal, nor every difference of opinion upon the question, whether a particular tax should be local or general, or whether it has been confined to too small, or extended over too large a portion of people and territory, or whether the object to be accomplished by the tax, is one of local or general importance, or whether the tax will fall upon individuals in the proportion in which they are actually interested in its object; it is not every difference, nor where there can be an honest diversity, is it any mere difference of opinion upon these points, that will justify the interposition of the judiciary to arrest the operation of a legislative tax on the ground of this principle of the constitution. If it would, the discretion and substantial power of taxation, properly inherent in the legislature, would, in effect, be transferred to the judicial department; or be so subject to its control as to change the character of the power itself, and defeat the ends for which it was invested in the representatives of the people. Perfect equality of taxation is unattainable, and could not be secured even if the judiciary were to take part in framing the laws which impose it; and the other points above referred to are so emphatically and exclusively the subjects of legislative judgment and discretion, that when it may be assumed that these have been fairly or actually exercised in the imposition of a tax, there can scarcely be a possible ground for judicial interposition.

For a fuller statement and illustration of our views upon this subject of local taxation, and of the application to it of the constitutional principle which has been stated, that can be made in this

opinion, already greatly protracted, we refer to the case of Cheaney vs. Hooser, 9 B. Mon. 330, and especially to that part of the opinion extending from page 341 to page 346 in that opinion, the court, referring to the wide range of legislative judgment and discretion on the whole subject, say, that with respect to the objects for which the tax, local or general, may be enforced, it would seem to be conclusive, p. 344. And on page 345, it is said that the limit imposed by this clause of the constitution "can only consist in the discrimination to be made between what may with reasonable plausibility be called a tax, and for which it may be assumed that the objects of taxation are regarded by the Legislature as forming a just compensation, and that which is palpably not a tax, but is under the form of a tax, or in some other form, the taking of private property for the use of the public, or of others, without compensation." That "there must be a palpable and flagrant departure from equality in the burthen, as imposed upon the persons or property bound to contribute, or it must be apparent that persons or their property are subjected to a local burthen for the benefit of others, or for purposes in which they have no interest, and to which they are therefore not justly bound to contribute;" and that "the case must be one in which the operation of the power will, at first blush, be pronounced to be the taking of private property without compensation and in which it is apparent that the burthen is imposed without any view to the interest of the individual in the object to be accomplished by it."

These positions rest upon the assumption that the Legislature, in imposing or authorizing local taxation, exercises its own judgment and discretion, and expresses its own will under its own proper responsibilities, and, resting upon that basis, we are still of opinion that they should not be departed from; indeed, that they may be said to have been sanctioned by the convention which framed the new constitution, if not by that instrument itself, since, although they were announced before that body met, or was elected, and under an avowal of the dangerous tendency of the power of local taxation, the new constitution contains no new restriction upon it unless it be contained in the 36th section of the 2d article, to which reference has already been made.

But other principles of the constitution are invoked, and especially the great principle upon which the whole fabric of our government and laws is based. That our government is a regularly organized representative republic, of which every department has its own proper functions which it is bound to perform upon its own proper responsibility; that the great security which the people, and especially the minority, have against the oppressive abuse of power, consists in the regular action of each department in its own sphere, and under its own appropriate responsibilities; that under this constitution and frame of government, a majority of the whole people cannot act upon a single individual, but through the regular organs appointed for the exercise of the governmental power that a majority even of the whole, and consequently and more certainly a majority of any of its organized parts, have no power, except through a legislative enactment, to impose a tax or any burthen upon the minority or any individual without their consent; that every individual in the State has a right to look to this principle, and to the regular action of the government for the protection and security of his rights; and it is contended that in the act in question, in referring the imposition of the tax to the will of a majority of the county, the legislature has violated this principle, has surrendered its own discretion and judgment, and thrown off or evaded its own responsibility, and has invaded and destroyed the rights of individuals and of the local minority, by subjecting them to the will of a local majority, acting under no responsibility but such as their own interest may impose; and that the obvious and necessary tendency of such legislation is to change and pervert the whole character of our government, to destroy its unity, to overthrow its guaranties and barriers against oppression, to erect the several counties into absolute and unrestricted democracies, and thus to subject the citizens to an arbitrary power unknown to the constitution, at war with its principles, and utterly destructive of the rights which it intended to secure.

We admit the general correctness of the principles thus stated as applicable to the assumed character and spirit of this legislative act, and none can deprecate more than we do the character and consequences of such legislation. But were it admitted that in case of such reckless legislation as is supposed; this court could apply the corrective to a wanton disregard of duty and responsibility, and thus check an evil the permanent existence of which to any great extent in the representative body would demonstrate a fatal degeneracy in the constituency by which it is chosen, still we could not assume upon the face of this statute that the legislature did not exercise its own discretion and judgment under a proper sense of responsibility, and that it did not determine for itself, and upon due deliberation, so far as such determination was necessary to justify the authority given by the act, both as to the character and importance of the road, as justifying the local burthen imposed, and as to the just extent to which the burthen might be imposed. And under the principles settled in the cases above referred to, and adopted in this opinion, we cannot say that there is such a flagrant abuse of legislative discretion on these questions, or such a flagrant departure from equality or justice, as would authorize the court on these grounds to pronounce the act unconstitutional. The reference of the question as to the execution of the authority given and the consequent imposition of the tax to the popular majority of the county, may have been, and as we should in reference to the Legislature assume, in fact was resorted to as a means of ascertaining, with great certainty, and in a more satisfactory manner, the expediency in point of time and circumstances of giving final effect to the legislative act, and although such legislation may be resorted to as a means of evading the responsibility of direct and peremptory action, and of surrendering, or avoiding any exercise of the legislative judgment and discretion with respect to the objects to be accomplished and the manner of accomplishing them, we are not authorised to assume it, that it was so in this case, as the ground of judicial action. Nor do we perceive that there is any greater abandonment of the legislative will and discretion necessarily to be implied in referring this question as to the execution of the authority and the final imposition of the tax to the majority of those who are to bear it, than in referring it to the county court or the trustees or council of a town or city. In the case of the justices of Clark county *supra* the objection was that the authority to impose the tax was given to a body which was not elected and did not represent the people of the county. In this case it is contended that the reference should have been made to the county court, and that the discretion as to the execution of the law should have been confided to that body. And it is contended that this case is materially different from that, and also from the case of Talbot v. Dent, in which the charter of the Louisville and Frankfort railroad and the authority therein conferred to levy a tax, came in question in the fact that in each of those cases a discretion was vested in the regularly constituted local authorities to execute or not to execute the law. To this we answer in the first place, that it was by virtue of legislative enactments that these local tribunals had any authority on the subject, and the question to what body such authority may best be committed is primarily and chiefly a legislative question. And in the second place, that although in the charter of the Louisville and Frankfort railroad, there is an apparent discretion in the council of Louisville, to submit or not to submit the question of the subscription, and consequent tax, to the voters of the city, yet as the city council was in fact a body annually elected by the same voters, and must in a short time have been coerced into an exercise of discretion comfortable to the will of their constituents, there is scarcely a shade of distinction between that case and this, on the ground of the discretion vested in the city council. And further, we may again refer to the 36th section of the 2d article of the present constitution, as sanctioning the principle that the effect of a law imposing a public debt and consequent taxation may be referred to the qualified voters who are to bear the burthen, without violating the principles of the government, and it is to be remarked that it does not secure those who may be opposed to the imposition either from the votes of those who have greater or less interest in the object to be accomplished than themselves, or of those who having no property may be supposed to have no interest in the question of taxation; nor does it secure any from the delusive expectation that the profits of the proposed undertaking will soon equal or exceed the tax, or make the burthen insignificant in comparison with the advantage to be expected in the enhancement of their property and business.

In addition to this, there are numerous examples of legislative acts, by which the power of determining upon local taxation has been communicated substantially to portions of the local community, to be exercised by a certain majority of those who are interested, and to become compulsory upon others. We refer to the cases in which a certain portion of the owners of lots in any square are authorized, through the agency of the town or city authorities, to have the adjacent streets or sidewalks graded and paved, which has been sanctioned by this court. The powers originally given to the inhabitants of school districts to vote a tax, is another example; to which we might add, though bearing more remotely on the subject, the various acts which have referred to the popular vote questions as to the boundary or creation of counties, and the removal of seats of justice, involving more or less directly a increase or diminution of taxation. The objection, that the city of Maysville having a peculiar interest in the subject, and a controlling influence by the magnitude of her vote in the determination of the question submitted, ought not to have been united with the rest of the county in submitting the question of the county subscription, is, as we think, covered and met, so far as it is intended to be a constitutional objection, by the views already taken in this opinion. And although in this and some other respects we greatly doubt the propriety and justice of the act in question, and of the proceedings which it authorizes, yet in view of the precedents to which we have referred, of the indefinite character of the taxing power, of the right legislature to change and regulate the local organizations of which the State is composed and to judge of and provide for their local interests and necessities; and in view of the respect necessarily due to the legislative department, forbidding the assumption that it has acted without a proper consideration of its own duties and responsibilities, we are not prepared to decide that this act is unconstitutional.

Decree of the lower court sustaining the subscription affirmed.

For Slack, etc.—Ben Hardin, T. F. Marshall, J. W. Menzies, and Harrison Taylor.

For the company---Geo. Robertson, James Harlan, Henry Waller, F. T. Hord, and T. Y. Payne.

Greenville and Miami Railway.

We have, says the Cincinnati Gazette, the brief and plain report of Mr. Taylor, president of the Greenville and Miami railway company.

But for the delay in the receipt of the iron as soon as expected the road would, ere this, have been completed. It has been for some time ready for the superstructure. A sufficient amount of heavy T rail, to lay the track from Dayton to Greenville, is now in Sandusky and Dayton, weighing 56 lbs to the yard, of superior quality, the rails mostly 21 feet long, and beveled to avoid the necessity of cutting away the ties to give the rail a proper bearing. The track will be laid as fast as possible.

Three locomotives were contracted for, one to be delivered in August, and the other two in October last. One of these was a small one, for use in construction. This was received in August, and has been used, but is found of insufficient capacity to answer a good purpose, and its place will be supplied from Cincinnati, in a short time. Unfortunately the two large ones have been lost on Lake Erie on their way out. These cost $7,250 each, and were insured for $7,500 each, which will cover loss and charges. These funds will be employed in replacing the engines.

Contracts have been made for the necessary passenger and other cars at Dayton, and they will be in readiness as soon as the track is laid. As will the water and other stations and freight houses.—The road will be completed as soon as De Graff

can lay down the rail—11 miles from Dayton west being already down. The line will now be very soon completed and in operation.

American Railroad Journal.

Saturday, February 14, 1852.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India rubber Springs.

NEW ENGLAND CAR SPRING CO,
101 Broadway.

☞ J. F. WINSLOW, Esq., of Troy, proprietor of the compound rail for railroads, sailed for England on the 7th inst., for the purpose of making arrangements for the manufacture of the rail in that country, both for its introduction into the U. S. and for the purpose of bringing it into notice in Europe. The form of the rail is regarded with great favor by engineers and railroad men, and is fast coming into use; hence the necessity of more perfect arrangements for its rapid manufacture.

While in England, we take it for granted, that Mr. Winslow will call the attention of capitalists to our railroad projects and securities, with which, no man is better acquainted, nor better fitted, to place them before the public in their true light. In this country, Mr. Winslow stands deservedly high as an active, energetic, and successful business man. He has a thorough acquaintance with all our great interests, particularly with those connected with our railroads, and we commend him to our friends across the water who are seeking information in reference to our projects, and to the value of the various securities which we are putting forth to carry our works forward. We need the right kind of a man in England for this purpose, and we shall have one there in Mr. Winslow, so long as he shall remain.

Alabama.

Alabama and Tennessee Railroad.—A bill has been introduced into the Legislature of Alabama to authorize the State to guarantee the bonds of that company to the amount of $750,000.

Tennessee.

The Legislature of Tennessee has appropriated $300,000 to the East Tennessee and Virginia railroad, for the construction of bridges on the line of the road.

Georgia.

Superintendent of State.—It affords us pleasure to state that Gov. Cobb has tended the appointment of Chief Engineer, on the State railroad, to Wm. M. Wadlay, Esq., late superintendent of the Central road, and the appointment has been accepted. Gen. John W. A. Sandford, we learn, has been appointed to the office of Treasurer, and William Rutherford, Auditor. The appointment for the important and responsible office of Chief Engineer, is one which, we doubt not, will give universal satisfaction. The Georgia Telegraph, speaking of this selection, says:

"There are few men in the State who could bring to the performance of the arduous duties connected with this appointment, a greater amount of practical ability, a more energetic and determined character, or a more single-minded devotion to the interest of the great work entrusted to his management, than Mr. Wadlay. Under his administration of the affairs of this road, we predict a speedy change in its condition, and while we congratulate him upon his appointment, we also congratulate the Governor, and the State, upon getting the services of so valuable an officer.

Indiana.

Northern Indiana Railroad.—This road is now open to Laporte, thirteen miles from Michigan city, and forming, with the Michigan Southern railroad Co., a continuous line from Lake Erie of 190 miles. Next month the road will be completed from Michigan city to Chicago, leaving only the link between Laporte and Michigan city unfinished, on which the plank road will be used until March next, when it is expected the whole work will be completed.

Indiana Central Railroad.—An election of new officers of the company took place on the 14th ult., resulting in the choice of the following gentlemen:—

John S. Newman, Esq., President; John M. Commons, Secretary; John Crum, Treasurer; H. C. Moore, Engineer; and J. R. Mendenhall, of Richmond, J. S. Newman, Norris Jones, and David Commons, of Centreville, Thos. Tyner, W. Petty and S. Meredith, of Cambridge, Wm. Butler of Dublin, J. T. White, of Raysville, J. P. Foley, of Charlottesville, N. Crawford, and J. B. Sandusky, of Greenfield, and Wm. Sullivan, of Indianapolis, directors.

Lowmoor Iron.

We desire to call the attention of our readers to the advertisement of W. B. Lang in this week's paper. The *Lowmoor iron* is particularly adapted to the manufacture of locomotive tires, fire boxes, boiler plates, and rivets; and for these purposes we believe it stands without a rival. Tires have generally been made of two or three bars welded together; but by experience, that process of making tires has proved most objectionable. Bars being forged at different heats, cannot be of equal hardness, and tires made from two or three different bars, are harder in some parts than in others, causing an inequality in the wear, besides great liability to break in the welding parts. To prevent this difficulty, the Lowmoor Iron Company have lately, at great expense, erected large works for binding, welding and blocking tires from one single bar; and they are prepared to furnish tires in that improved style at as low a cost as consumers have before been compelled to pay for those made from short pieces of iron. A friend who has lately visited the Lowmoor works, informs us that he has seen two men forge the short bars, while it has required ten men to forge a bar sufficiently long for the one-weld tires.

India Rubber Car Springs.

We would call the attention of railroad companies and car manufacturers, to the advertisement of the New England Car Spring company, which contains the decision of the American Institute, awarding to F. M. Ray, Esq., a diploma for the BEST India Rubber Car Spring exhibited at the late fair of the Institute at Castle Garden. It will be seen that Mr. Ray's Spring has not only taken the prize at the fair, but what is of still greater importance, it has stood a much more severe test, the intense cold weather of the present winter, with triumphant success. As far as we have been able to learn there has not been a single instance where it has failed. It is an easy matter to make a Spring that will show well before the Institute at a period of the year most favorable to its actions; but it is a most difficult task to cure them in such a manner that shall secure *perfect elasticity* with the thermometer below zero. All the Springs of the Car Spring company are manufactured under Mr. Ray's own supervision, and we can assure the public that the company has acquired too valuable a reputation for making a good Spring, to afford to lose it by manufacturing an inferior article.

Massachusetts.

Stony Brook Railroad.—The following are the officers of this company:—Tappan Wentworth, President; John Wright, Sewall G. Mack, William A. Burke, of Lowell, Ziba Gay, of Nashua, J. W. P. Abbott, of Westford, and Samuel Lawrence, of Boston, the last in the place of John Clark, Esq., deceased.

Stock and Money Market.

Money has not been so easy in Wall street the present, as during the past week. The receipts of Gold have been light, while the shipments by the two last steamers have been equal to about $2,000,000. This export, in connection with the extraordinary efforts among speculators, to carry up the price of stocks, has caused an unusual fluctuation among the fancies. The tendency with these is downward; but still the market cannot be said to have any settled character as far as they are concerned.

In well known securities there is a good deal doing on foreign account. We see nothing to change our opinion expressed last week that there will be a fair demand for securities of new works. From the amount offering, prices must rule low.—We believe that on the whole the prospect for the future is encouraging, and that our roads will be able to make good progress the present year.

The following statements are copied from an official document from the Treasury department which was laid before Congress on Wednesday.

At the Mint in Philadelphia.

	Number of pieces.	Value.
GOLD.		
Double Eagles	2,087,155	$41,743,100
Eagles	176,328	1,763,280
Half Eagles	377 505	1,887,525
Quarter Eagles	1,372,748	3,431,870
Dollars	3,317,671	3,317,571
Total in Gold	7,331,407	$52,143,446
SILVER.		
Dollars	1,300	$1,300
Half Dollars	200,750	100,375
Quarter Dollars	160,000	40,000
Dimes	1,026,500	102,650
Half Dimes	781,000	39,050
Three Cent Pieces	5,447,400	163,422
Total in silver	7,616,950	$446,797

COPPER.

Cents	9,889,707	$98,897 07
Half Cents	147,672	738 36
Total in copper	10,037,379	$99,635 43

RECAPITULATION.

Gold	7,331,407	$52,143,446 00
Silver	7 616.950	416,797 60
Copper	10,037,379	99.635 43
Total	21,985,736	$52,689,878 03

At the Branch Mint at New Orleans.

GOLD.

	No. of pieces.	Value.
Double Eagles	315 000	$6,300,000
Eagles	263 000	2,630,000
Half Eagles	41,000	205,000
Quarter Eagles	148,000	370,000
Dollars	290,000	290,000
Total in Gold	1,057,050	$9,795,000

SILVER.

Half Dollars	402 000	$201.000
Quarter Dollars	88,000	22·000
Dimes	400,000	40,000
Half Dimes	860 000	43,000
Three Cent Pieces	720,000	21,600
Total in silver	2,470,000	$327,500

RECAPITULATION.

Gold	1,059,000	$9,795,000
Silver	2,470,000	327,600
	3,529,000	$10,122,600

At the Branch Mint at Charlotte, North Carolina.

	No. of pieces.	Value.
Half Eagles	49,176	$245.880 00
Quarter Eagles	14,923	37,307 50
Dollars	41,267	41,267 00
Total in Gold	105,366	$324,454 50

At the Branch Mint at Dahlonega, Georgia.

	No. of pieces.	Value.
Half Eagles	62,710	$313,550
Quarter Eagles	11,264	28,160
Dollars	9,882	9,882
Total Gold	83,856	$351,592

General Recapitulation.

	No. of pieces.	Value.
Philadelphia	24,985,736	$52,689,878 43
New Orleans	3,529,000	10,122,600 00
Charlotte, N. Carolina	105.366	324 454 50
Dahlonega, Georgia	83,856	351,592 00
Total	28,703,958	$63.488,524 93

The expense of coinage at Philadelphia is forty-two hundredths per cent.; at New Orleans one and eight hundredths per cent.; at Charlotte three and fifty-five hundredths per cent.; and at Dahlonega three and thirteen-hundredths per cent.

The Boston Post publishes a table of the monthly fluctuations in the railroad bonds and shares of New England, and in which New England holds an important interest. We give the extreme figures of January, 1851 and January, '52.

Railroad bonds.	Jan. 1st. 1851.	Jan. 1st. 1852.	Interest. Semi-an'l
Cheshire, 1852	94	98½	2 3
Cheshire, 1854	93½	90	3 3
Cheshire, 1860	90	86	3 3
Michigan Central, 1860	105¼	104	4 4
Norfolk county	64	56½	0 0
Ogdensburg 7's	98½	92½	3½ 3½
Old Colony	98	97½	3 3
Rutland, 1855	89	85	3 3
Vermont Central, 1852	94½	93½	3 4
Vermont Central, 1855	92	84	3 3
Vermont and Mass	89	82½	3 3
Reading, 1860	82	77½	3 3
Reading, 1870	78½	72½	3 3
Sullivan mortgage	80	72	3 3

Railroads.	Par.	Jan. 1. 1851.	Jan. 1. 1852.	Div'nds. Ju'e 1851.	Dec.
Boston, Concord and Montreal	100	41	35½	—	3
Boston and Lowell	500	563½	530	4	4
Boston and Maine	100	103½	102	3½	3½
Boston & Providence	100	84	84	3	3
Boston & Worcester	100	101⅝	98	3½	3½
Connecticut River	100	81	60	0	3
Eastern	100	100½	95½	4	4
Fall River	100	92	98⅝	3	4½
Fitchburg	100	108⅝	103¼	4	3
Michigan Central	100	96	95⅛	0	14
Nashua and Lowell	100	107½	104	5	4
New Bedford and Taunton	100	110	114	4	4
Norfolk county	100	45	13¾	0	0
Northern	100	71¾	61⅛	2	2½
Norwich and Worcester	100	66½	52½	1½	2½
Ogdensburg	50	39¾	26¼	0	0
Old Colony	100	66	64	2	0
Passumpsic	100	84	63	3	0
Philadelphia, Wilmington and Balt.	50	31½	29⅛	2	1½
Reading	50	37⅛	29⅛	0	3½
Rochester and Syracuse	100	115	112	5	5
Rutland	100	50	35⅛	0	0
Taunton branch	100	106	109	4	4
Vermont Central, (average)	50	37⅛	25½	0	0
Vermont & Canada	100	105	98½	4	4
Vermont and Massachusetts	100	30⅞	24⅞	0	0
Western	100	702⅛	99½	4	4
Worcester & Nashua	100	51⅛	51	2½	2⅛

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK FEBRUARY 14, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101
U. S. 6's, 1856	106
U. S. 6's, 1862	111¾
U. S. 6's, 1862—coupon	112½
U. S. 6's, 1867	116¾
U. S. 6's, 1868	116¾
U. S. 6's, 1868—coupon	121
Indiana 5's	85½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	68
Illinois 6's—interest	42
Kentucky 6's, 1871	107
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	98
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	—
New York 5½'s, 1860-'61	—
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100¾
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	105
Ohio 6's, 1860	108½
Ohio 6's, 1870	115
Ohio 6's, 1875	115
Ohio 5's, 1865	104⅛
Ohio 7's, 1851	100
Pennsylvania 5's	89
Pennsylvania 6's, 1847-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	100
Virginia 6's, 1886	106

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	106¾
Cincinnati 6's	106½
St. Louis	93½
Louisville 6's 1880	93½
Pittsburg 6's, 1869-1871	95
New York 7's, 1857	107
New York 5's, 1858-'60	101
New York 5's, 1870-'75	102
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1870-'90	100½
Baltimore 1870-'90	104
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	109
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	92½
Erie convertible bonds, 7's, 1871	88½
Hudson River 1st mort., 7's, 1869	102
Hudson River 2d mort., 7's, 1860	94
New York and New Haven 7's, 1861	102
Reading 6's, 1870	76½
Reading mortgage, 6's, 1860	80
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	103
Cleveland and Pittsburg 7's, 1860	95
Ohio and Pennsylvania 7's, 1865	95
Ohio Central 7's, 1861	92

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Feb. 4.	Feb. 11.
Albany and Schenectady	96	96
Boston and Maine	105½	105
Boston and Lowell	108	109
Boston and Worcester	100½	99½
Boston and Providence	86½	87
Baltimore and Ohio	64	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	110	113
Eastern	95	94½
Erie	79½	78½
Fall River	98½	98½
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	67½	67½
" preferred	110	109
Hartford and New Haven	125	124
Housatonic (preferred)	38	38
Hudson River	65	64
Little Miami	—	—
Long Island	19	18½
Mad River	—	—
Madison and Indianapolis	90	92
Michigan Central	98	96
Michigan Southern	103	100
New York and New Haven	113	112½
New Jersey	130	130
Nashua and Lowell	104	104
New Bedford and Taunton	115	116
Norwich and Worcester	51½	50½
Ogdensburgh	28	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	66	67½
Rochester and Syracuse	109½	119
Stonington	50½	51½
South Carolina	—	—
Syracuse and Utica	130	128
Taunton Branch	111	113
Utica and Schenectady	125	127
Vermont Central	25½	24½
Vermont and Massachusetts	25½	23½
Virginia Central	—	—
Western	101½	100½
Wilmington and Raleigh	56	58

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Indiana Central Railroad.

The Indiana Central railway company was organised in March, 1850 to construct a railway from the line dividing Indiana and Ohio at the termination of the Dayton and Western railway, to Indianapolis, 72·67 miles. The company has caused the entire line to be surveyed and located by H. C. Moore, a most scientific engineer, following the line of the National road, and most of the way not more than 40 to 60 rods from it. The railway line is shorter than the National road, and 67·84 miles of it perfectly straight, and only 3·83 miles easy curves; the least radius being 1,547 feet, and the maximum grade at the rate of 58 feet per mile, which occurs only four times for short distances. This line was originally a part of the Terre Haute and Richmond railroad line, and was separated for the purpose of construction, with power to reunite, and to consolidate with any other railway company making or having made a railway, within or without Indiana, running in the same general direction. The Terre Haute road is now about finished, and when the Dayton and Western railway shall be finished, which will be done early next summer, the line of the Indiana Central railway will be necessary to make the connection between them, and will pass through from Dayton, in the valley of the Great Miami, to Terre Haute, on the Wabash, 185 miles, through the most fertile, best improved and wealthiest portion of the great west, and near the line of the great National road, projected and opened by the United States, on the great line of travel, emigration and mail transportation, through Maryland, northern Virginia, southern Pennsylvania, central Ohio, Indiana and Illinois. It was only selected by the United States government for its great importance as a national thoroughfare, and by compact with the new States of the northwest, two per cent of the net products of sales of public lands in those States was set apart to construct it. The government, however, has failed to complete the road through western Ohio, Indiana and Illinois, and the energetic population attracted to the line, are engaged in constructing railways from Washington city to the Mississippi, opposite St. Louis, running the whole distance near the line projected by the United States. The people are emphatically distancing the government in enterprise, and their line must be the great travelled line from the great central valleys of the Mississippi and its tributaries, for all those going to the seat of government—congressmen, office-holders, office-seekers, and persons who from curiosity or business may desire to take Washington city in the line of travel. It also passes through the capitals of Indiana and Ohio, and there are numerous railways leading into and diverging from this great line to every portion of the west in one direction, and the eastern cities in the other.

The Indiana Central railway forms one of the most important links in this immense chain of railways. The charter of the company is of the most liberal kind, and the capital and profits unlimited. The stock taken and that greed to be received by contractors, exceeds $400,000, whilst the grubbing, grading and bridging preparatory to laying down the iron is estimated at $292,725. The whole line, except about nine miles, is under contract for the preparing of the road for laying the rails at prices on the average below the estimates; and without some unforeseen drawback the part under contract, 63 miles, will be ready for the iron within this year.

The valuation and assessments of real and personal property, church, college, seminary and common school property in the counties in Indiana that this railway passes through and touches, as taken from the last census, and assessment return is $37,954,331.

Number of bushels of wheat produced...	738,583
Indian corn and other grains.....	6,801,415
Tons of hay.....	37,921
Number of horses.....	32,811
" cattle.....	73,674
" sheep.....	110,882
" hogs.....	263,320

The wheat crop for the year the census returns were made was almost a failure, and no doubt is felt by those well informed but that the product of wheat for 1851 was two millions of bushels. This estimate only includes the returns of six counties immediately on the line of the railway. The contiguous counties are equally productive, and in some things would show an increased production. There are no less than 8 railways centering at and diverging from Indianapolis, the western terminus of this line, which crosses the Whitewater Valley canal, and the Knightstown and Shelbyville railroad.

Coal for Locomotives.

H. V. Poor, Esq.,

Dear Sir: As the subject of burning coal as fuel on our railroads is at present engaging the attention of those interested, I would like to make your valuable paper a medium of communication with the public on that important subject.

The economy of coal over wood as fuel for steam purposes, is demonstrated beyond a question, as applicable to steamboats and stationary engines, and there is no good reason why there may not be the same economy when applied to our railroads. It has been demonstrated by actual experiment that one ton of coal of 2240 lbs., is equal in steam generating power to 2½ or 3 cords of wood. Now it is only necessary to compare the price of one with the other, to ascertain which is the most economical. In any locality where coal can be delivered at $5, or less, per ton, it is a cheaper fuel than wood over $2 per cord; but the average price of wood, in all sections of the country where coal could be had at the above price, is probably over $4 per cord, which for 2½ cords would be $10, just double the cost of one ton of coal capable of generating the same amount of steam. Now estimating the am't of cost of the present fuel on railroads to be $50,000 a year for every 100 miles, the saving of one-half, $25,000 per 100 miles a year, would amount to the enormous sum of one million five hundred thousand dollars a year to the railroads which could be supplied with coal at the above price. Now it will be asked why do not our railroads use coal if it is so much cheaper? I answer, some difficulties have been discovered in adapting the ordinary boiler of a locomotive to burn coal, and many modifications have been tried to overcome them, but all have been so complicated, that the liability to get out of order, and consequent loss of time to repair, have counterbalanced the economy in fuel. The only difficulty of any importance is the burning out of the fire box sides, and ends of the flues, which are exposed to the intense heat of the fire. Now a boiler that can be constructed so that the fire box shall be relieved from this intensity of heat, and at the same time shall not be more liable to get out of order than the present boiler, and have the same facility of repair, is what is wanted. And one object in my calling attention to this subject, is to say that I have the plans for constructing a boiler applicable to the locomotive for burning coal, which avoids the difficulty, and is so simple in its construction, and all its parts so easy of access when necessary for repair, that it commends itself to the judgment of every engineer and practical machinist who has seen it. They all say there is no reason why it will not answer the purpose when put into practical operation. Wishing to have an opportunity to do so, I propose to give any railroad company the benefit of the improvement, if they will have it applied to an engine. The cost of altering a boiler already built would be less than $1,000; but to have it applied to a new one building, would not be over $300; and a saving of fuel of twice the amount of expense of altering an engine would be realised in one year.

Your obedient servant,

Richard E. Dibble,
Mechanical Engineer,
74 Franklin st., N.Y.

Circular.

House of Representatives of the U. S.
Committee Room Post Office and Post Roads,
Washington City, January 15, 1852.

Sir: The House of Representatives having referred to the committee on the Post Office and Post Roads the memorial of Messrs. Duff Green and Ben. E. Green, relative to the issuing of United States coupon bonds to certain railroad companies having mail contracts, that committee has Instructed me to address a circular to the several railroad companies in the United States, enclosing with the same the memorial of the Messrs. Green. In accordance with the instruction of said committee, I have the honor herewith to transmit a copy of said memorial. Allow me, sir, to ask that it may receive the consideration of your board of directors, and that, at your earliest convenience, their opinions and suggestions on the subject-matter of said memorial may be communicated to said committee.

Should your company desire to send delegates to the railroad convention to be held in this city on the 1st of March next, as suggested in the circular attached to the memorial of the Messrs. Green, it will enable you to communicate personally, through your delegate much valuable information, as to the details necessarily connected with the subject-matter of said memorial, should any action thereon be advised.

Very respectfully,

Edson B. Olds, *Chairman R. R. Co.*

To —— ——, *Esq., President.*

The following is the memorial referred to.

To the Senate and House of Representatives of the United States:

The memorial of Duff Green and Ben. E. Green respectfully represents, that a modification of the laws regulating mail contracts with railroad companies, so as to authorize the Post Office Department to deliver to railroad companies, on perpetual contracts for carrying the mails, an amount of five per cent. coupon bonds, chargeable on the revenues of the Post Office Department, the interest on which, at six per cent., would be equal to the payments authorized by existing laws, would save to the Government on the present rate of expenditure through the Post Office Department, within one hundred years, many hundred millions of dollars, and at the same time furnish a permanent and solid basis for an accumulation of capital under the control of citizens of the United States, which will greatly contribute to the development of the resources, and augment the prosperity, of the people and Government of the United States: That the views of your memorialists are more fully explained in the printed circular of the committee,

and in the letters addressed to Governor Floyd, which are hereto annexed and made part of this memorial. And your memorialists respectfully pray for a modification of the laws regulating mail contracts, as therein suggested.

DUFF GREEN.
BEN. E. GREEN.

Pennsylvania.

Schuylkill Navigation Company.—We learn from the report of the President of this company, that boats first passed through the entire length of the canal on the 1st of April last. Since that period there has been no interruption of the navigation, (with the exception of a delay of four days, caused by an injury done to two of the locks,) although the summer and autumn have been attended with an extreme and almost unprecedented drought.

The business of the year has been as follows:—

Anthracite coal carried, tons	579,156
Miscellaneous articles descending	174,399
Miscellaneous articles ascending	87,542
Total tonnage	841,097

This is the greatest tonnage ever passed over the work, and exceeds that of any previous year by 104,580 tons; the quantity carried in 1841, being 737,517 tons, of which 584,692 tons were anthracite coal; the coal tonnage of 1851 being only 5,536 less than that year.

Of the coal carried in 1851, there were 112,697 tons delivered at points along the line short of the city of Philadelphia. The greatest tonnage of any week, was 27,796 tons, and the largest load of any boat 188 tons.

The toll on coal amounted to $218,660 17, and on other articles to $66,961 07, making a total of $285,621 24.

The amount received for rents of real estate and water power, was $23,480 38.

The tools and materials on hand at the close of the year 1850, in the car repair shop of the company, were sold to the contracts for repairing the cars for the sum of $7,563 87. The sum of $15,202 95 has been credited on account of drawbacks allowed by the Delaware and Raritan canal company, on anthracite coal carried to the waters of New York bay, by way of the Schuylkill Navigation and their canal. These several items make an aggregate income for the year of $331,868 44.

The charges against this aggregate income have been as follows:—

Current expenses of canal and works, salaries of officers, lock-tenders' wages, and office expenses	$90,941 90
Car and landing expenses	45,002 13
Drawbacks allowed on tolls	9,771 46
Drawbacks paid to boatmen	20,172 10
Interest paid	21,953 29
Total	$187,840 88
And leaving a balance of	$144,027 56

The cost of the repairs of the works from the injuries caused by the floods of July and September was $357,390 19.

Of the amount required to pay for these repairs $151,615 89 were raised by the subscriptions of the stockholders and loanholders, and the balance by obtaining materials, etc., on credit, and by borrowing money on the notes of the company, with a stipulation that such notes should be receivable for tolls.

Of the obligations of all kinds contracted for the repair of the works, the sum of $222,099 72 remains unpaid, showing that out of the restricted income of the year, the sum of $135,290 47 of the repair debt has been paid off.

The repairs were thorough, and it is believed that the entire line is now in complete order, and well calculated to resist the effects of future casualties.

The cause of the restricted income just mentioned, was the low rate of toll that it was found necessary to adopt for the charge on anthracite coal, the average of which did not produce quite 38 cents per ton. Had the toll on anthracite coal remained as it was fixed at the commencement of the season, it is estimated that the income of the company, for the same tonnage, would have been $105,000 more than it actually reached.

The whole quantity of anthracite coal mined and sent to market during the past year exceeded 4,200,000 tons. The extensive use that is now being made of this kind of coal for locomotives and marine purposes, will probably require a supply of at least 4,800,000 tons for the year 1852.

Compared with the other channels for supplying this quantity, the Schuylkill Navigation has the largest capacity for an increase of tonnage, and it is the confident expectation of the managers, that business will be offered to them to the full extent to which they can supply boats for the transportation of coal.

From an investigation of the weekly returns of the coal tonnage, it appears that the coal boat capacity is 55,440 tons. According to the course of trade, and the ordinary average of the trips, in time and distance, each ton of the boat capacity is competent to carry about 14 tons.

This would accommodate a trade of 776,160 tons of coal; and counting other boats which have not been in use for a part of the past season, the whole amount of trade, which could be accommodated, would be about 800,000 tons.

The company have made arrangements for the purchase of a number of new boats of 140 tons and upwards, in order to meet the large trade which the coming season has in store.

The future prospects of the company are very encouraging, and there is reason to hope that they will soon be able to repair the damages sustained during the past year, and free themselves from all debts and incumbrances.

Massachusetts.

Fitchburg Railroad.—The annual meeting of the Fitchburg company will be held on Tuesday next, and the report of the directors has just been published. The following particulars are from the report:—

Capital stock	$3,510,000 00
Debt of the company	122,443 50
Assets of "	215,831 53
Earnings for 1851	558,545 91
Expenses—including for new cars, turnouts, etc., over $53,000	312,922 22
Surplus fund, in assets	43,234 92
Due from other companies	5,000 00
Total surplus	48,234 92
Increased income over 1850	21,652 73
" expenses and charged to reserved fund	84,467 68

The directors say—"It will be seen from the above statement, that the amount charged to expenses and reserved fund, the past year, exceeds that of the previous year $84,467 68; and that of this amount $53,005 00, was for new work, new cars and other extraordinary expenses not applicable to a single year. The directors thought it would be more for the interests of the corporation and more satisfactory to the stockholders, when they understood the matter, to charge this large amount at once to expense account and the reserved fund and reduce the dividend, than to make a debt by charging any part of it to construction account."

Collins' Line of Steamers.

The Washington Union gives the following figures of the results of the Collins line of steamers. They are said to be given under oath of the bookkeeper of the company. They show certainly but a Flemish account, and prove if the line is to be kept up, it must have further assistance from Congress.

The cash cost of the Collins line of steamers ready for sea was		$2,944,142 71
While the present condition of the company is as follows, viz:		
Of the whole amount of stock subscribed ($1,132,000) there was paid in	$1,099,900	
The Government loan was	385,000	
The company have borrowed and issued bonds for	700,000	
Their floating debt is now, exclusive of interest, say	1,000,000	
		3,184,900 00
The company, therefore, have sunk		350,000 00
And no dividends have been paid to stockholders.		
The actual average cost of each voyage to England and back is		65,215 64
The actual receipt of each voyage has been		48,286 85
Deficiency each voyage		16,928 7
Or for twenty voyages		338,574 4

The writer in the Union gives the following table, showing that the Post Office contract with the Cunard steamers is a source of revenue, instead of a charge to the British Government.

During the first six years of the establishment of the Cunard line of steamers, the British Government received from that line in the shape of postages	$7,836,800 00
While the compensation received by the line from the Government was only	2,550,000 00
The clear revenue derived by the British Government from those steamers was, therefore	5,286 800 00

During the first four months of the year 1851, when the Collins line was taking alternate trips with the Cunard line, our Government received all but seventeen hundred dollars in postages of what it paid to the line for carrying the mails. But the British line commenced making weekly trips, and the Collins line no longer alternating with the British, the American postages fell off, as might have been expected. The British line was considered the regular line, at least by the British General Post Office, and the American steamers were treated as transient vessels. It is for this reason that our Post Office Department has given notice to the British that we require a new postal arrangement with England which shall secure reciprocity, provided our steamers by alternating with the British, are able to perform half the service.

The effect of the establishment of the Collins line of steamers on the commercial interests of the country is thus sketched.

When the Cunard steamers first began to ply, they charged as high as £10 and £12 sterling per ton. As soon as the Collins line started these freights came down to £7 10s.; and now freights from England to the United States are reduced to £4, and from the United States to England to anything that may be obtained—from 6d. a bbl. of flour to 2s. 6d. a bbl. Considering that freights are the greatest obstacle to the free interchange of commodities, I would respectfully submit whether the Collins line of steamers from New York to Liverpool has not stimulated trade in general, and by shortening the passages, benefitted especially the

trade in Provisions and Breadstuffs. Apples, Lard, Cheese, Beef, etc., are now carried out to England at a mere nominal freight, and because steamers admit of a superior ventilation, arrive out in a state of perfect preservation. It is a great mistake, therefore, to suppose that it is merely the seacoast and the Atlantic States which are benefitted by a regular American steam communication with England. The West and the South are equally benefitted by it. Western Provisions have been carried in the Collins line from New York to Liverpool for less than they could be sent from Albany to the city of New York.

Trial of Locomotive Engines.

Some time since, we gave a brief notice of the trial instituted in October last, by the New England Association of Railway Superintendents, upon the disused track of the Boston and Maine railroad, for the purpose of testing the capacity of several locomotive engines for speed and draft. We have now received the report of the committee appointed to report upon the trial, and award the prizes to the successful engines. Below we give from the body of the report what is of chief interest to the reader:—

The trial of speed was made upon that part of the Boston and Lowell railroad which lies between the 15th and 24th mile posts, numbering from Boston.

The rules adopted were—

1st. That all engines upon this trial should carry the same load over the same distance.

2d. That the pressure of steam in the boilers should not exceed one hundred and twenty, nor be less than seventy pounds, per square inch.

3d. That the pressure at starting, should be taken as the pressure under which the engine worked over the whole distance; the safety valve balances remaining unaltered.

The constant load in the trial of speed, consisted (besides the tender) of six covered freight cars, each loaded with five tons, one long passenger car, and twenty-one passengers; the whole weighing eighty-five tons.

This constant load caused a displacement of 17,680 cubic feet of air; being in length two hundred and twenty-one feet, height ten feet, width eight feet.

Each engine with its train started from the fifteenth mile post, at a given signal, and made its best time to the twenty-fourth mile post, where the observations terminated.

To reduce the observed time of running to the time in which the distance should have been run, consistently with the published terms, (viz., to reduce in proportion to the *weight* of the engine and pressure of steam,) it became necessary to adopt some formula by which the reduction could be made. We have not the means of proposing an exact formula for this purpose, as we have not at our command experiments upon which to base the necessary computations. We have therefore used an empirical formula, which we believe to be sufficiently accurate for the purposes of comparison; as the errors cannot amount to enough to involve injustice to either of the parties interested in the result. This formula is based upon the assumption that an engine of 25 tons weight, under an effective pressure of 100 lbs to the square inch, would upon this track, without load other than the tender, run the observed distance, at the rate of eighty miles an hour, or in four hundred and five seconds.

The standard assumed, and the load and distance being constant, it is only requisite to apply the correction in time, due to the variable weights and pressures of the different engines.

For this purpose, the following proportion was used:—

$$1 : \left(\frac{2\,W\,P}{10.000.000}\right) - 1 :: t - 405'' : \text{correction},$$

[the correction being plus or minus, as $\frac{2\,W\,P}{10.000.000}$ is greater or less than unity.]

W representing the weight of engine in pounds; P the effective pressure of steam in boiler, in pounds per square inch; t the observed time in seconds.

It will be noticed upon comparison, that the reduced times follow generally in order with the observed times, after the proper corrections for differences of weight and pressure have been made.

We have confidence that equal justice has been done to all, with the exception of the Addison Gilmore, of the Connecticut and Passumpsic Rivers railroad.

This engine was worked at a much higher pressure than the others, and would, under equal circumstances, have had a decided advantage; but as she had just come from the shop, and never before been attached to a train, it is difficult, if not impossible, to arrive at a correct estimate of her power, as compared with the others; to which is to be added the consideration that she was worked at a pressure above that proposed by the published rules.

We have given the results of the trial of this engine, but have not included it as competing for a prize, since it did not come within the prescribed rules.

The Dedham, a small tank engine, built by G. S. Griggs, of the Boston and Providence railroad, was run over the same track, on the day after the trial of the other passenger engines, with a load of two passenger cars, and eighty-one passengers, making an entire weight of eighteen tons.

The time in which this engine passed over the nine miles, is given in detail with the others; but with such a disproportioned load, we think it inexpedient, with our present means of judging, to make any comparison.

We regret this, as we believe that on many of our roads, engines of this class must be introduced for economical reasons, before full accommodation can be given to the public, or remuneration to the stockholders.

The trial of the freight engines was made upon the branch track connecting the Boston and Lowell railroad and the Boston and Maine railroad at Wilmington, over a distance of nine thousand one hundred feet in length. The load consisted of one hundred and fourteen loaded cars, estimated to weigh, cars included, six hundred and fifty tons.

Each engine first backed this train down to the starting point, which was at the top of an inclined plane of fourteen feet to the mile; and from this point they started at a given signal, making their best time to the point at the other extremity of the branch.

For the reduction of these engines, we have used the same formula as in the preceding case; with the exceptions, that the standard time is taken at one hundred and forty-four seconds instead of four hundred and five seconds, and the pressure shown by the balances, instead of the effective pressure.

The limited time we had to prepare for these experiments, must be our excuse for their being so incomplete in detail and arrangement. And the want of direct experiment, to determine the basis upon which to ground absolute formulas, prevented us from making more than a comparative statement of the performances of the engines of both classes.

We take the liberty of expressing our regret, that so great a deficiency exists in our knowledge, in this department of railroad management.

The power applied for the purpose of transportation on railroads is very large, and upon its proper application depends, in a great degree, the success of this great interest in this section.

It is apparent, even to a casual observer, that the railroads have increased in a greater ratio than the amount of business they can have to do. It becomes, therefore, of vital importance, that the greatest possible saving should be made in all the details of working and maintenance; and in the case under consideration, that the weight of the engines should be reduced, and their power increased to the greatest limit consistent with the proper durability of the machines.

We trust that this experiment will be followed up by those interested, until a series of observations properly made, may enable railroad managers to judge with certainty, having actual, and not theoretical knowledge for their guide.

It was our intention to have prepared instruments for the purpose of measuring the power and draft directly; and also certain apparatus for testing the steadiness with which the machines run upon the track.

Some progress was made, but we were unable to get them completed in season for use. Should they be wanted in future experiments, it will take probably but a short time to perfect them.

In conclusion, we indulge in the hope, that these experiments may be the commencement of a series, which will ultimately lead to a more perfect knowledge of the capabilities of the locomotive engine; and in practice, to a greater economy of power in working this important machine.

The comparison of these experiments with those made in England in 1830–31, will show the great increase of speed already attained, as compared with the weight of the engine and the load carried; and will be an incentive to further improvement

The distance run by the Passenger Locomotives in the trial was a little over 9 miles. There were no grades exceeding 9·500 feet to the mile, nor curves with a less radius than 3,000 feet, and about three-quarters of the distance was a straight line.

The following is a statement of the comparative time made by the several competing passenger engines, viz:—

	Minutes.
Neponset	13·25
Nathan Hale	12·30
Addison Gilmore, W	11·29
Union	13·28
Addison Gilmore, M	14 25
Essex	14·33

The time made by the freight engines was as follows:—

	Minutes.
Milo	10·24
St. Clair	10·54
Highlander	12·38

The weight of passenger engines was as follows:—

	Tons.
Neponset	43,775
Nathan Hale	47,093
Addison Gilmore, W	50,885
Union	46,990
Addison Gilmore, M	46,320
Essex	48,470
Freight Engines.	
Milo	38,900
Highlander	40,015
St. Clair	48,650

A table showing the dimensions of the several engines will be given in our next.

Of the passenger engines, the first medal was awarded to the Addison Gilmore, from the Western road; the second to the Nathan Hale. Of the freight engines, the first medal was awarded to the Milo; the second to the St. Clair.

Indiana.

Lawrenceburgh and Cincinnati Railroad.—The board of directors of the above company have been in session at this place for several days past. The most important business transacted was the letting out the building of the road, including the furnishing cross-ties and laying the track from St. Omer to this city, a distance of 38 miles. The contract has been taken by our well-known fellow citizens, Andrew Wilson, Lawrence M. Vance, and Harvey Bates, whose energy and ability give full assurance that the work will be completed in contract time, which we learn is the 1st of July, 1853.

This completes the entire line to Lawrenceburgh, the portion between St. Omer and the river having for some time been under contract.

The terms of this contract are extremely favorable to the company, the contractors taking nearly all their pay in the stock and lands of the company thereby manifesting their faith in the importance of the undertaking and its paying ability.

To enable the company to press their work rapidly to a completion, the company desire to take up new subscriptions of stock, and propose to make them payable one-fourth when the first division of

17 miles is completed, and in running order, one-fourth when completed to Shelbyville, and the residue when completed to this place. Now is the time for our citizens to come forward and assist in this important undertaking. The terms of this subscription are liberal, and the money only to be paid as portions of the road are brought into actual use. Our farmers and traders are particularly interested in these matters, and as yet our city and county have not done for the cause one-third as much as the county of Decatur. Surely we are as able and we ought to be as willing.

In connection with this work, it is proper to notice the favorable indications for an early connection with St. Louis and Terre Haute. The road to Terre Haute lacks only four miles of completion, one week of fair weather will put it through, and we learn that the friends are active and have secured the right of way for the greater part of the distance to St. Louis, and a speedy prosecution of that end may be looked for.—*State Journal.*

Quebec and Richmond Railroad.

The necessity of a railroad to connect Quebec with western Canada has long been felt, but active steps were not taken upon the subject until the year 1849. The city of Quebec then passed resolutions to loan £100,000 to any company formed, or to be formed, for the purpose of constructing a railroad from Quebec to Melbourne, there to connect with the Atlantic and St. Lawrence railroad, running between Portland and Montreal. This loan was made on the condition that two lines should be surveyed between Quebec and Richmond—one by Portneuf and Point Platon, the other by Cap Rouge and St. Nicholas. The expense of these surveys was to be divided equally between the company and the City Council, and the selection of the line after survey was left to the council. The reconnoisance of the two routes was entrusted to Mr. A. C. Morton, who decided in favor of that by Cap Rouge and St. Nicholas to Richmond, which line was first adopted, but afterwards abandoned.

The total distance of the road from Richmond to the city of Quebec by this survey is 101¼ miles.—The estimated cost of construction is £520,000. A large portion of the road, equal to 60 per cent of the whole, will be either level, or of an inclination not exceeding 15 feet per mile. There are no grades to exceed 30 feet per mile, except the approach to the river St. Lawrence, and for a short distance at Richmond, where a grade of 50 feet per mile is required.

The ceremony of breaking ground on this road took place on the 7th of January last, immediately after which active operations were commenced.

The number of stockholders on the 31st December, 1851, was 396, who subscribed for 1,748 shares, amounting to £21,850. No instalments have been paid on 576 shares, and on the remaining 1172 shares, there has been received £1,002 11s. 3d. in cash, and £1,762 10s. in bills receivable, making £2,765 1s. 3d. received on account of instalments. From sundry individuals there has been received £86 10s., forming together the sum of £2,851 11s. 3d. The total expenditures of the company have been £1,844 0s. 4d., leaving a balance of £1,007 10s. 11d., of which £175 0s. 11d. are in cash, and £832 10s. in bills receivable.

After completing the reconnoissance already referred to, Mr. Morton resigned the further charge of the work, from the pressing nature of his duties as Chief Engineer of the Atlantic and St. Lawrence, and other roads in Maine, Mr. R. T. Bailey, well known in the United States as a skilful and accomplished Engineer placed at the head of the engineering department, a position which involved great responsibility, from the difficult nature of the duties imposed, and from the fact that the interests of the people of Quebec were supposed to be adverse to the best line to be adopted. They were opposed to making *Point Levi*, on the opposite side of the river, the terminus of the road, for fear that it would draw off the business from the Quebec side. Elaborate and critical surveys were therefore made for the purpose of ascertaining the practicability of crossing the river at some point above the city for the purpose of bringing the cars into it upon the north side. The result of the surveys, however, proved the great difficulty in accomplishing the object, owing partly to the great width and depth of the river, and the difficulty in descending to it from the table lands, which instead of sloping gradually, extend themselves almost to the river bank. The surveys showed that by taking advantage of the depressions caused by the Richelieu and Etchemin rivers, a comparatively easy grade could be obtained to Point Levi, which route, at the recommendation of Mr. Bailey was adopted. The reasons given by him for a change of line were most satisfactory, and received the full approval of the company.

The prospects of the road, in the opinion of Mr. Bailey, are very encouraging.

It forms a communication between Quebec and Montreal, and as it is but little longer than the distance by the river, it will be a speedier and more desirable route.

The position of Quebec as a great commercial city will ensure to this road a large amount of traffic; for nearly all the freight conveyed thither for exportation from western Canada will take this route. The same is true of imported articles seeking the interior.

A very large passenger traffic may be expected during the summer season, from the immense number of pleasure tourists who annually visit the St. Lawrence, and the cities of Montreal and Quebec. The inhabitants of the latter city, wishing to visit the United States, will find the Quebec and Richmond, in connection with the Portland and Montreal railroad, the shortest and best route.

When the Halifax and Quebec railroad is completed, this road will occupy a central position in the great trunk line through the provinces, and the larger portion of European or other travel which will be drawn from either direction will pass over it.

With such prospects for the future, the Quebec and Richmond railroad may be regarded as a profitable scheme.

Pennsylvania Railroad Company--Stockholders Annual Meeting.

Yesterday morning, the annual meeting of the stockholders of the Pennsylvania railroad company took place in Sansom street Hall.

On motion of C. Fallon, Esq., the Hon. Charles Gilpin, Mayor of the city, was called to the chair, and Charles Wood and Samuel Elkin were appointed secretaries.

The annual report was then submitted by the president of the board of directors, William C. Patterson, Esq., and read to the meeting. The document gave a valuable and highly interesting account of the affairs of the company, and of the transactions during the year which has closed.—From it we learn that the receipts from the stock in payment of instalments amounted to $8,103,465, and the disbursements to $7,978,089·82; leaving a balance of $125,375·18. The interest accounts, it is stated, exhibit results equally gratifying. Of unconditional subscriptions to the stock, the total amount is $8,326,050, and the contingent subscriptions amount to $750,000. The subscription by the corporation of the Northern Liberties is $250,000, and the stock payable to contractors amounts to the same, viz: $250,000. Thus the aggregate of all subscriptions to the stock is $9,576,000. To fill up the capital stock to the present limit, the report states that a further subscription of stock will be necessary to the amount of $423,950.

The cost of a single track from Harrisburg to Pittsburg is estimated at $12,000,000, and an additional track is estimated to cost $3,600,000. In August last, a section of the western division of the road, extending from Eatontown to Lockport, a distance of twenty-one miles, was opened, and the whole of that division is now in use throughout its entire length, except from Beatty's station to Turtle Creek, in Westmoreland county, a distance of twenty-eight miles.

The report states that the board confidently anticipate the completion of the whole of the road, to be ready for use before the close of navigation in the year 1853. To do this, however, the stock of the company, it is stated, must be increased, or a debt incurred to the amount of about $6,000,000; and as the whole policy of the board, since the commencement, has been, and is, in opposition to the incurring of debt, they recommend that an application be made to the State Legislature for authority to make such an increase of the stock of the company as may be necessary for this purpose. The report concludes with some forcible remarks upon the importance of securing to this city the trade of the West, to do which, it was urged, low fare and freights are absolutely necessary.—*Pennsylvanian of the 3d.*

There has been a change in the board of directors. Mr. John Edgar Thompson, the well known Civil Engineer, succeeds Col. W. C. Patterson, as President, and Messrs. George W. Carpenter, C. E. Spangler, John Yarrow, W. Butcher, David S. Brown, and Thomas T. Lea, are on the reformed ticket for directors.

Commerce of Buffalo.

The Buffalo Commercial Advertiser says:—On the 31st Dec. last, there were owned in the district of Buffalo Creek, 22 steamers and 22 propellers—making an aggregate of 44 steam vessels, of 22,438 87 tonnage, and carrying crews of 903 persons; and also, 104 brigs and schooners, of an aggregate tonnage of 23,818 52, and employing crews of 778 persons. There was also building at that date, in the different ship yards of this city, an aggregate of over 7,000 tons of steam and sail vessels.

The valuation of the commerce at this or any other point, is but guess work, at best, though a pretty near approximation may be reached. We take the custom-house estimates, which are made up from as reliable data as can be obtained.

Total value of imports by lake	$31,880,951
Total value of exports by lake	44,201,720
Aggregate western commerce	$76,082,671
To which, if we add the exports from Tonawanda, 5,337 tons, valued at	$1,792,423
Imports at Tonawanda, 113,211 tons	3,089,663—4,882,086
And Dunkirk say	8,000,000
We have the total commerce of the District of Buffalo Creek, amounting to	$88,964,757

The full returns from Dunkirk are not yet received, but as the merchandise and other freight transported west over the Erie Railroad alone amounts to $5 394,780, the aggregate cannot fall far short of $8,000,000. The total western exports of this district amount to $51,228,922, without taking into account the erroneous quantity of valuable goods transported by the different express companies, the tonnage of which does not appear on any other books than their own, and which is not kept there in such a manner as to admit of the estimation of its value. No doubt the full returns from the whole district, with the exact valuation, would allow a traffic of $90,000,000.

The value of the exports by canal, as made up at the collector's office, is $18,984,423, on which tolls were collected amounting to $777,106 86.

The value of the imports by canal, and made up at the same office, is $41,810,398, with an aggregate tonnage of 237,341 tons.

Annual Report of the Board of Public Works of Ohio.

The following table will show the total amount (omitting fractions,) collected on the canals for the last five years:

1847,	Gross sum col. on	all	the canals,	$805,019
1848,	"	"	"	785,882
1849,	"	"	"	739,377
1850,	"	"	"	759,852
1851,	"	"	"	856,352

The greatest amount of tolls collected in any one year previous to 1847, was $612,302. The excess of collections in 1851, over any preceding year, is more than $50,000, and that too at a lower scale of tolls than has ever before prevailed.

Of the general business of the canals, the report says:

When we take into view the fact that the business of that portion of the fiscal year between April 1st and November 15th, 1851, amounting in business to four-fifths of the year, was done under the operation of the low scale of tolls, adopted by the board in March last, being a reduction equivalent, upon all articles to at least 80 per cent., and the competition from railroads, for the carrying trade, the board feel that they are authorized to congratulate, and take pleasure in congratulating the people on the present condition and future prospects of the canals of this state.

Ohio Canal.—The northern division was opened for navigation on the 24th of March, the middle division on the 1st of April, and the southern was kept open for use from Columbus to Portsmouth during the winter and spring months, with but slight interruptions. The water was drawn off in the summer for repairs. The business of the southern end of the Ohio Canal has increased very little, on the southern end of Miami Canal more, but the business of the centre and northern portions of each has grown with a steady and rapid growth. At Cleveland in 1847 the tons arrived were 271,977; cleared 26,992. In 1851, tons arrived 355,652; cleared 86,717. At Portsmouth in 1847; tons arrived 38,993; cleared 12,177. In 1851, tons arrived 37,598; cleared 14,098.

The breaches in the Ohio Canal during the season were not serious. The rank growth of grass in the levels was a serious obstruction to the flow of water and to the operations of boatmen.

The amount of tolls, etc., collected on the Ohio Canal for 1851, was $436,009 31; an increase of £38,677 34 over 1850. The amount paid out for repairs was $128,218 86, of which $13,172 80 are properly chargeable to original construction. The number of superintendents on this canal was reduced from 16 to 13.

The following table gives a view of the business of Cleveland by canal for the fiscal years ending Nov. 15th, 1850—'51, in tons of 2,000 lbs. each.

Articles.	1850. Tons Arrived	1850. Tons Cleared	1851. Tons Arrived	1851. Tons Cleared
Wheat and flour,	75,860	111	146,177	1,132
Coal,	83,851	90	107,155	852
Corn,	23,287	659	27,945	1,104
Pork, Bacon and Lard,	4,785	10	3,317	26
Iron (all kinds) and nails,	8,927	8,495	8,464	5,856
Lumber,	1,063	11,944	1,120	14,366
Salt,		9,070		8,571
Merchandize,	898	4,855	1,031	5,419
All other articles,	34,054	16,216	60,443	49,391
Total tons,	232,725	50,051	355,652	86,717

This shows a very rapid increase of tonnage at Cleveland.

The sum of $13,172 80 was paid on account of the new Weigh Lock at Cleveland. The report says of it:

There was also built at Cleveland, during the season, a Weigh Lock, designed for and capable of weighing canal boats and full cargoes of freight. This is an appendage heretofore unknown upon our canals, though in use on most of the canals of other states. The Lock is a very superior piece of workmanship, and in all its parts is put together with the greatest care; reflecting credit on the special superintendent who had charge of, and the contractors who performed the work. The scale for the lock, which was built by Fairbanks & Co., of Vermont, was placed in the chamber about the close of navigation, but not in time to test its ability and accuracy; but from the known character of the manufacturers, no doubt is entertained as to its satisfactory performance, which performance is warranted by them.

Muskingum Improvement.—This improvement, until the past year has been a burthen upon the general canal fund. Last year the receipts on it amounted to $48,418 30, while the expenses amounted to only $13,361 85. In 1850 the expenses amounted to $39,925 29, while the receipts amounted to only $36,724 29. The last year the receipts over the expenditures were $35,057 45, which is two and a half per cent. upon the whole actual cost of the work.

Under good management this canal may in a few years cease to be a burthen on the State.

Hocking Canal.—The business on this canal is steadily increasing, having nearly doubled in two years. Last year there was no interruption of navigation from breaches.

The receipts for 1851 were	$11,814 87
" " 1850 "	8,078 67
Expenditures for 1851 were	7,991 13
" " 1850 "	11,819 06

Walhonding Canal.—A serious breach in this canal, in May last, affected seriously the revenue anticipated from this work.

The receipts for 1851 were	$2,615 42
" " 1850 "	2,055 09
Payments for 1851	4,251 62
" " 1850	1,966 61

A great many repairs of locks have been made, which has swollen the general expenditures.—With some repairs to a few other locks, the canal will be in most excellent order, and will need few repairs for years to come, unless some unlooked for casualty occurs to it.

Miami and Erie Canal.—The receipts of this work for

1851 were	$357,095 25
1850 "	315,162 60

The total payment for the year 1851, for old contracts, riparian claims, repairs, superintendence, etc., amounted to $160,558 44, to which must be added $9,428,50 paid on account of Lewiston Reservoir.

Western Reserve and Maumee Road.—The receipts from toll on this road were $12,745 68, being an increase over the previous year of $1,177 01.—It is suggested by the board that the excess of tolls over expenditures on this road be expended, in extending the road to the Miami and Erie canal, which would add much to its usefulness.

National Road.—Of this road the board say they cannot speak favorably. In many places the pavement is almost worn through, and a large portion of the masonry of the bridges is in a very bad condition. The grade of the road is in many places worn down, and in the fills washed away, until there is scacely two-thirds of the original width remaining. The wooden superstructures of some of the bridges are also in bad repair. The masonry and the grade of the road have been very much neglected for many years in succession, and many of the annual repairs made without judgment or economy.

The total receipts for the year 1851 were	$38,577 11
The amount in 1850 was	42,636 08
Excess in favor of 1850	4,058 97

The payments on the road for repairs and other expenses, for the year 1851, were much larger than the previous year.

It is hardly to be expected that this road will yield sufficient revenue to keep it in good repair.—This is the only portion of the public works whose condition does not look well, and from which not much is to be expected.

Railroad from Pittsburg to Cleveland.

The Ohio and Pennsylvania, and Cleveland and Pittsburg Railroads have formed a junction at Alliance, and passengers are now taken from one city to the other in twelve hours.

CAUTION.

India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India-rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE, President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co, No. 104 Broadway, New York. 7tf.

Steam Pile Driver.

FOR SALE a Steam Pile Driver with double engines, and which would be fitted to any width of track for railroad pile driving, and sawing off the piles at grade, and it may at small expense be re-fitted for sawing wood for railroads—could be had in good order for working in a few days, and would be shipped complete to any place desired. It would be a good machine for any one to build warehouse docks and wharves in California. Apply to

ESSLER & BUNCE,
Washington st., near the Battery, N. Y.
New York, Feb. 10, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.
Bosto November 29th. 1m

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tuscumbia and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, *including* all the materials. And also for the mechanical work, *excluding* timber *only*.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boated down) 3 miles above the bridge site, and Clay of a good quality is found convenient, Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. McKETHAN,
J. D. WILLIAMS,
D. G. McRAE,
} Committee.

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply, at the Company's Terminus at Longueuil, of the following description of RAILWAY CARRIAGES, viz:

One hundred and twenty Baggage Carriages, enclosed, on Iron Trucks with lateral motion.

Ninety Platform Carriages, on Iron Trucks.

To be correspondent in other respects to pattern Carriages of the respective kinds, to be seen on the Road.

The Tenders may apply to the whole or any part of the supply, and the delivery must be made at the following dates: one-third at 1st May, 1853—the remainder 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed, "Tenders for Passenger Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply at Longueuil, of the following RAILWAY CARRIAGES, viz:

Six First Class Passenger Carriages.
Five Second Class " "
Three Post Office and Express Carriages.
Five Covered Luggage Vans.

To be correspondent to Carriages of the respective descriptions now on the road.

One-third to be delivered by the 1st May, 1853; the remainder by the 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.
October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.
November 1. 3m

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Penusylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next. for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER, President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER. By his Attorney, G. M. KNEVITT.

New York, 1851.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,

Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO., Broadway

September 1, 1851.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 8.] SATURDAY, FEBRUARY 21, 1852 [WHOLE No. 827, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Wilmington and Manchester Railroad.....113
Champlain and St. Lawrence Railroad.....114
Illinois Central Railroad.....114
Railroad Controversy in Virginia.....116
Pittsburg and Cincinnati Railroad.....118
Ohio Central Railroad.....118
Winans' Eight-Wheel Car.....119
North Carolina Railroad.....119
Kosciusko, Elkhart and Miami Railroad.....120
Southwestern Railroad Convent on.....120
Milwaukee Railroad.....120
Stock and Money Market.....121
Maysville and Lexington Railroad.....122
Mississippi and Atlantic Railroad.....122
Sodus Point and Southern Railroad.....122
Wheeling Bridge.....123
Railroads in Ohio.....123
Delaware and Hudson Canal.....123
European and North American Railroad.....124
Rochester and Syracuse Railroad.....124
Finances of Alabama.....124
Public Works of Pennsylvania.....125
Pacific Railroad.....125

American Railroad Journal.

Saturday, February 21, 1852.

North Carolina.

Wilmington and Manchester Railroad.—We have received the 4th annual report of the directors of this company, submitted at a meeting of the stockholders held on the 28th ult.

The whole amount expended upon the work up to the date of the report, has been $397,860 42.—The amount collected, as reported, upon the capital stock of the company, including contracts not completed and not credited to contractors, is $724,356 76

Of this sum, the collections have been on the subscription of the State of South Carolina in S. Carolina railroad stock, at par value	150,000	
In subscription of State of North Carolina, etc., in Wilmington and Raleigh railroad stock, at par value	203,000	
Subscription of the town of Wilmington, in bonds of the corporation	100,000	
		453,000 00
Leaving amount collected on private and other subscriptions of capital stock of		271,356 76

Of the stock and bonds above mentioned, all are now in the possession of the company, except $50,000 of the South Carolina railroad stock, which was sold during last spring to aid in meeting the payments of 3,200 tons of iron rails, contracted for.

The company suffered a loss of about $6,537 50 on the sale of the South Carolina railroad stock, which has since been more than made up by the dividend received on the balance remaining in their hands. This balance the company do not mean to dispose of at present, as the increased receipts of the South Carolina railroad give assurance that the stock will also increase in value.

Of the bonds subscribed by the town of Wilmington, $75,500 were sold on the 1st inst. These sales were at par value, and it is believed that the remaining $24,500 can be disposed of on the same terms.

The proceeds of these bonds were especially appropriated by the meeting of stockholders in January last, for the purchase of iron to be delivered at Wilmington.

The subscription of $200,000, to be paid in the stock of the Wilmington and Raleigh railroad, made by the State of North Carolina, the company agreed to accept, in consideration of the steadily increasing business of that road, with a large reduction in its expenses, consequent upon re-laying the track with new and heavy rails instead of the old flat bars, and have issued certificates of 2,000 shares of its stock to the State of North Carolina, in payment of 2,000 shares of the Wilmington and Raleigh railroad.

This subscription, added to that above mentioned, will increase the capital stock of the company to nearly $1,200,000. In April last the company issued mortgage bonds for $600,000, redeemable on the 1st day of June, 1866, bearing 7 per cent. interest, payable in June and December of each year, at the Merchants' Bank of New York, and convertible into the stock of the company at the option of holders, at any time previous to the 1st June, 1865.

The sales made of these bonds, and the contracts for which they are to be received in payment, have absorbed $459,000 out of the $600,000 issued, leaving yet to be sold $141,000 of them.

Of these bonds, $200,000 were paid for 7,000 tons of iron rails, contracted for with Messrs. Bailey, Brothers & Co., of London, which are to be delivered in Wilmington and Charleston in March and June of the present year, at $41 50 per ton. For all but the prime cost of the iron, however, $200,000, the company have to provide, which amount is to be deducted from the price to be paid.

The estimated cost of the road, made by the chief engineer, is $1,550,000. From which deduct expenditures already made, and there is left $896,139 58. Add bills for $30,000, payable at the State Bank of South Carolina, and the amount to be provided for is $926,139 58.

The company have in stock, bonds, etc., the sum of $1,070,105 92. From which deduct the $926,139 58, before mentioned, and there is a balance left of $143,966 34 to cover losses from stock, bonds, subscription lists, etc., which it is now impossible to estimate, from the nature of the securities held.

It is believed that the company will be able to complete their road with the present means, without incurring permanently any new liabilities, or such at least as the present means of the company, when made available, may not discharge.

With regard to the progress of the road, 15½ miles from its junction with the Camden branch to Sumterville, is completed and in operation. The business on this part of the road is very profitable.—From Sumterville to the Great Pee Dee, the work is progressing steadily, and it is confidently expected that the road will be finished to a point sufficiently near the Pee Dee to take off the crops of that region the present year, if offered.

On the eastern end of the road, there has not been so large a force collected yet as desired, but no exertions will be spared to increase it, and to hasten the laying of the track from Wilmington westward. The time since which freights have been taken is too short to enable the company to form a reliable estimate of the future business of the road. They believe that the traffic would be large, if they could only succeed in making satisfactory arrangements with the South Carolina railroad company, for authority to receive and deliver freights at the junction of the Camden and Columbia branches. They have not succeeded in making such an arrangement as yet, but it is to be hoped they will, for it would be for the advantage of both companies.

We are gratified in being able to give so favorable an account of the condition of the above project. There is no improvement in the United States more needed. We believe there are but few

that promise better results. It will add very much to the value of all the railway property in the Southern States, as it will form the connecting link between widely separated systems. We are happy to say that the project has been carried forward in a manner that has secured the confidence of capitalists and the public, as is proved by the ready manner with which the securities of the company have been taken.

Canada.

Champlain and St. Lawrence Railroad.—We learn from a recent report of the superintendent that the continuation of this road, from St. Johns to Rouse's Point, 23 miles, was opened for business on the 26th of August last. The other extension to St. Lambert, 11 miles, was opened on the 14th of January, 1852, making 42 miles of road from that place to Rouse's Point.

Two passenger trains and one freight train per day were run to Rouse's Point, until the close of navigation, Dec. 6th. From that time but one train per day was run till the 20th of January, when an accomodation and freight train commenced running. The total number of miles traversed by passenger and freight trains was 44,640.

The receipts of the road for the season were £26,246 15s. 5d. The expenditures were £15,918 12s. 3d., leaving a balance of £10,328 3s. 2d.

The expenses of transportation were heavier than during the previous year, on account of the accident to the steamer Prince Albert, belonging to the company; the unfinished state of the road, and the increased length of the same, requiring a large force to keep it in repair.

There has been quite a large expenditure of capital during the past year for improvements and for further equipment of the road. A portion of the old road has been raised and ballasted, and the remainder is to be completed in the same manner.—Several buildings have been erected, wharves built, and engines and cars added to the running stock of the road.

There still remains to be completed on the Rouse's Point branch, most of the ballasting, a part of the masonry and superstructure of some of the small bridges, and a few miles of fencing, all of which, it is expected, will be finished early in the ensuing season.

The St. Lambert branch is nearly all graded, and the buildings upon that portion of the road will soon be completed. The contract for the construction of the branch road to St. Lambert, 11 miles, was given to the same contractor who built the southern extension, for the sum of £37,500; £7,500 in stock at par; iron to the value of £10,000; and the balance, £20,000, in cash.

A contract was made with the same person for the construction of very extensive wharves and piers, from the main shore across Moffatt's Island, and projecting into the river 2,000 feet, with an extension down stream, affording a deep water front of 1,800 feet, where vessels of the largest capacity can discharge. The amount of this last contract is £50,000, of which £17,500 are payable in stock.

Of the wharfing, eleven piers have already been sunk, extending about half the distance from the St. Lambert shore to Moffatt's Island, and the remainder are in progress.

A project has been entertained during the past year for a connection between the Champlain and St. Lawrence railroad, and those running from Whitehall to New York, on the west side of Lake Champlain. For the accomplishment of this project, a company has been formed, a direction organized, and stock subscribed sufficient to warrant the commencement of a line from Rouse's Point to Plattsburgh. The surveys made of the route were very favorable, the length of the proposed line being 19 miles; making the total distance from the centre of Montreal to Plattsburg, but 63 miles. If this line be constructed, the advantages accruing to the Champlain and St. Lawrence railroad, will be very great. It will then form the shortest communication between Montreal and the great commercial emporiums of Boston and New York. As the track is nearly level, and composed of three straight lines, with only two curves of 3000 feet radius, a high rate of speed can be attained on the line, and the time from Montreal to Rouse's Point will not exceed an hour and a half. It is the expectation of the company, that with judicious management, the road can be made to pay a dividend of at least 10 per cent on an outlay of $1,500,000.

Illinois Central Railroad.

The following, which is going the rounds of the papers, is the authorized statement, we presume, of the company:—

A very decisive step in the right direction has been made by the Illinois Central railroad company, and this important work of internal improvement has now been fairly commenced. A sale of four millions of the construction bonds has been made at par to capitalists of New York and Boston, and with this beginning, the company have resolved to proceed immediately with the construction of the road. Mr. Mason, the Chief Engineer, will proceed to Illinois at once, accompanied by contractors of known ability and experience, with instructions to place under contract the entire line from Chicago to Cairo, the southern terminus, and also some sixty miles of the main stem from La Salle, south. The remainder of the line will also receive immediate attention. Mr. Neal will not return to London, but will devote himself to the interest of the company in Illinois.

The following is, we presume, a more correct version of the story of the sale of the company's bonds. The company having failed to sell their securities in England, found them compelled to put their hands into their pockets and advance sufficient funds to commence the work; in other words, the stockholders have divided up a portion of the bonds among themselves for the money they advance, and have given out word that they have been sold at *par*, both for the sake of keeping up their price, and to give the public the idea that there has been an actual sale to *disinterested* parties. Such a sale, if actually made, would at once give currency and confidence to the securities. Now we are confident that not one bond has been sold to a person not immediately interested in the road. In the first place, good *convertible* securities of roads in operation, and as promising in every respect as the Illinois Central, are selling at from 85 to 90 per cent., and it is not likely that capitalists would give par for the *unconvertible* bonds of a road upon which the first blow has not been struck. In the second place, the company cannot realize 85 cents on the dollar for their bonds in this market. They are not so good in the present condition of matters, as hundreds of securities which are sold at 85. What is more, we do not believe they could be *sold* in this market at all, at the present time.

We believe the bonds of the company to be ultimately good; but they are nothing extra. We are glad too, to see that the company are going the right way to work, the way we suggested; of first putting their own shoulders to the wheel, before calling upon Hercules. But instead of going along in a straightforward manner, we are sorry to see them resort to the low humbugging tricks of Wall Street, thus attempting to pull the wool over the eyes of the public, and of manufacturing an opinion in favor of their securities, that is not justified by the state of facts which exist.

For the American Railroad Journal.

Ohio Railroads.

The State of Ohio from geographical position, is destined to be the great field of railway transit between the Seaboard and all, or nearly all, of the valley of the Mississippi lying north of 35° of north latitude.

This fact has given much interest to the speculation as to which of the *six* contending routes in Ohio is to take the lead in the commercial movements of the great valley. The lines in question are the "Lake Shore," the "Ohio and Pennsylvania," the "Steubenville and Indiana," the "Central Ohio," the "Cincinnati and Marietta" and the "Cincinnati, Hillsboro' and Parkersburgh."

The Lake Shore route, in its future connexions, will probably control an exclusive lake shore traffic; but our inquiries, at this time will be more particularly directed to a consideration of the control of that most fruitful and most populous belt of territory between the thirty-fifth and forty-first degrees of north latitude.

Between New York and the great diverging points in the west—Columbus, Springfield, Cincinnati and Indianapolis—the lake shore route is much the longest of the six. Its advocates however, argue, that its grades and curvature are so much more favorable than those routes looking to a mountain passage as to compensate for increased length of time. This argument would have been good a few years since when the Baltimore and Ohio, and the Philadelphia and Columbia roads used inclined planes to overcome summits which improved machinery enabled them to pass with scarcely a perceptible diminution of speed,—where indeed the speed obtained may be as great as would be *safe* or economical upon lower grades; and where as between the public and the railways it becomes simply a question of *economy* in working. In this view of the matter the adaptation of bituminous coal to locomotive engines, its obtainment at much cheaper rates by the Pennsylvania and Maryland roads than can ever be controlled for the northern lines—the high rate of speed attained by the express trains upon the Baltimore road without the draw-back, I believe, of a single accident;—together with the advantage of a more genial climate,—the argument of a difference in lineal distance remains a substantial one.

All the routes south of the Lake Shore line point to a mountain transit. The difference between the maximum grades of the Pennsylvania and of the Maryland roads is but about 26 feet to the mile; and as even that difference may be countervailed by the "*disposition*" of the grades—admitting, if needed, a greater economy and facility in working an auxiliary engine in one case than the other—these several rival interests are, practically, very nearly upon an equality upon the score of alignment and grades; and as there is an approximation of equality in lineal distence the question may become one of pretty sharp competition.

Of these routes the most northerly is the "Ohio and Pennsylvania." Its friends have claimed for it that this is a part of the *shortest* route between St. Louis and Philadelphia; and with the aid of the lately projected line between Springfield and Loudonville, some claim that it will furnish the *best*

communication between *Cincinnati* and Philadelphia. However this may be, the work is being driven with a great deal of energy and confidence upon the part of its managers.

The next route south of the last is the "Steubenville and Indiana." As Virginia has *twice* refused the right of way for this interest across the strip of her territory between Steubenville and Pittsburg, and as the company will have to depend upon the "Ohio Central" road for an outlet from Newark to the west, there is nothing that would have ever brought this line into public notice in any higher rank than that of a mere *local* road except the indefatigable industry and tact of its late and lamented President. The line passing thro' a rural district of but limited commercial rank or resources, the principal means of the company are in the shape of *township* bonds, which, I suppose, in any condition of the money market, would be unavailable except at ruinous sacrifices. The fact that, in addition to this, about 70 miles of the road would traverse longitudinally the valleys occupied by the Ohio canal, and for all local traffic, during seven months of the year must enter into competition with that well managed public work, would so far preclude the hope of large dividends, as to furnish no attractions for the investment of capital from abroad. These considerations forbid the hope that much more than the 28 miles of the road now under contract will be built for a number of years. Even the interest which Pittsburg now manifests in the work was very suddenly born upon the organization of the Hempfield railroad company, and will just as suddenly expire when she finds that she cannot prevent the construction of that (to her) very objectionable enterprize.—Finding her arguments insufficient to induce Philadelphia to accept of the Steubenville project as a substitute for a more direct and untrammelled communication with Central, Southern and Southwestern Ohio and Kentucky, she will make a virtue of necessity, and at less than half the cost of making a connection with Steubenville, she will build a road of 29 miles to the town of Washington, by which route she will have a connection with Cincinnati in 14 miles shorter distance than by Steubenville.

Next south is the "Central Ohio railroad."—This line has such connection with the several roads from Columbus as probably to dispense with the necessity of extension west of that city. Between Columbus and Zanesville the road is said to be nearly complete, with some 25 miles in operation. From Zanesville to Wheeling, at which latter point it will meet both the Baltimore and Ohio and Hempfield railroads, it is, we believe, intended to be placed under contract in the ensuing spring. At Zanesville the Cincinnati, Wilmington and Zanesville railroad line branches off.

With these several connections the friends of the Central Ohio road claim that it will furnish to Cincinnati and St. Louis the *shortest practicable* line of railroad communication with Philadelphia and New York.

Next south of the "Central" is the "Cincinnati and Marietta railroad," aiming at a connection with the "Hempfield" and "Baltimore and Ohio" at Wheeling. As, however, this line is 26 miles longer than the route by Zanesville, and certainly not more favorable in grades or curves, it must depend upon *local* support. Between Marietta and Wheeling, a distance of 80 miles, the line occupies the margin of the Ohio river, and during the season of navigation would find the steamboats control local traffic. This fact will make the extension of this road east of Marietta a very difficult matter.

The "Hillsboro' and Parkersburgh" route will unquestionably furnish the shortest communication between Cincinnati and Baltimore, but that it will be the best line for St. Louis travel or trade is not so clear. The route from Baltimore through Wheeling, Columbus, Indianapolis and Terre Haute will be but thirteen miles longer than the route directly through Cincinnati. At the latter city the depots of the east and west roads respectively are so situated that no easier communication can be had between them than by carriages and drays; whilst by the Central route, after crossing the Ohio, steam power will be used for the whole transit without interruption, over probably more straight line of road than can be found elsewhere in the world.

With these preliminary remarks, allow me to submit a table of distances by the various routes. It has been collated with great care, and with the exception of the Marietta and the Parkersburgh routes, in which cases I have taken the estimates of the friends of each respectively, the table is made up from reports of surveys.

Table of Distances by various Railroad Routes in Ohio, from Cincinnati to New York.

"Lake Shore" route, via Columbus and Cleveland:—

	Miles.
To Columbus	119
To Cleveland	135
To Dunkirk	138
To New York	469
	861

"Ohio and Pennsylvania," via Springfield and Loudonville:—

To Springfield	84
To Loudonville	111
To Pittsburg	158
To Philadelphia	353
To New York	88
	794

"Steubenville," with benefit of 33 miles of the Columbus railroad:—

To Columbus	119
To Newark	33
To Coshocton	38
To Steubenville	83
To Pittsburg	42
To Philadelphia	353
To New York	88
	756

"Central Ohio" and Hempfield:—

To Zanesville, (by Cin., Wil. and Zanesville railroad)	160
To Wheeling	82
To Greensburgh	78
To Philadelphia	322
To New York	88
	730

"Cincinnati and Marietta," by Hempfield:—

To Marietta	188
To Wheeling	80
To Philadelphia	400
New York	88
	756

"Hillsborough and Parkersburgh"—

To Baltimore, (by Mr. Latrobe's estimate)	587
To Philadelphia	98
To New York	88
	773

The distance between St. Louis and New York by the several lines, giving to each the most advantageous connections claimed, will be as follows, viz:—

	Miles.
"Lake Shore" route	1126
"Ohio and Pennsylvania"	1067
"Steubenville"	1047
"Central Ohio"	1038
"Cincinnati and Marietta"	1086
"Parkersburg"	1103

Of all of the above lines, the Ohio and Pennsylvania and the Central Ohio traverse the best cultivated and the most populous regions; and from that fact will probably pay the largest dividends.

Of the four roads built, and *likely to be built*, the Central is the only one that will have, at its eastern terminus, a connection with *two* railways leading directly to the seaboard.

INVESTIGATOR.

New York.

The Harlem Railroad Company have applied for the right to increase their capital stock to eight millions for the purposes named in the annexed act:

SECTION 1. The New York and Harlem Railroad Company is hereby authorized to increase its capital stock to an amount not exceeding in the whole eight millions of dollars, to be issued in such manner as the board of directors may deem expedient, and the said board may, in their discretion authorize the holders of any of the liabilities of said company to convert the same into the stock to be issued under this act at such time or times, and under such regulations and conditions as they may prescribe.

SEC. 2. The said company may borrow from time to time such sums of money as may be necessary to discharge their existing liabilities, and to construct and purchase such turnouts, double and branch tracks, depots, station and engine-houses, cars, engines, and other equipments, as the exigencies of their business may require, and their charter may authorize at a rate of interest not exceeding 7 per cent. per annum, payable quarterly or semi-annually, and may give to the holder of any bond or evidence of debt which may be issued by them for any part of the loans hereby authorized, the privilege of converting the same into the stock to be issued under this act, at or before the maturity of such loans, and the said company may secure the payment of the loans hereby authorized by mortgage of any part of their real or personal estate, as the board of directors may deem expedient.

SEC. 3. No stock of said company shall be issued, sold or received in exchange for its debts or liabilities at less than its par value.

SEC. 4. This act shall take effect whenever the said company shall have complied with the requirements of section 9 of the General Railroad act.

The above bill has been favorably reported in the Senate.

Massachusetts.

Amherst Railroad.—The stock of the proposed railroad from Palmer to Amherst has been subscribed, and the road put under contract. The contractors are Messrs. Willis and George Phelps of Springfield. The road will be equipped and run for a term of years, by the New London and Palmer railroad company.

A meeting of the Amherst and Belchertown railroad company was held at Amherst on Wednesday last, and the following persons chosen directors:—Luke Sweetser, Ithmar Conkey and Edward Dickinson of Amherst; Myron Lawrence of Belchertown; Joseph Brown of Palmer; and Thomas W. Williams, and A. C. Lippett of New London. The directors made choice of Luke Sweetser for President, and John S. Adams, Clerk and Treasurer.

Virginia.

Virginia Central Railroad.—This company have completed, through Winslow, Lanier & Co., a purchase of 6000 tons of rails for the purpose of laying that portion of their road now in progress,

To Col. C. F. M. Garnett,

Engineer of the Virginia and Tennessee R.R.:

Dear Sir: I regret that it has become necessary to conduct this correspondence. In your letter addressed to me, in the Whig of this morning, dated the 17th of January, you say that you thought it your duty to show that the central line of communication with the Ohio from Richmond, was inferior to the New River route. Whilst it does not seem to me that there was any obligation on you to undertake to expose objections to the Central railroad, yet, if you felt called on to do so, in a published report, all will agree that I would have failed in that vigilance which I am expected to practice over the interests of the Central road, if I had not noticed your report; but, if the subject must be discussed, I am glad that it can be done with personal courtesy and good feeling, and I will certainly endeavor to follow your good example.

You profess to cherish a deep seated devotion to the best interests of Virginia, as the main spring to your solicitude on this subject. I am very far from questioning your patriotism. I accord it to you in all sincerity, but you can hardly expect that fact to weigh much in determining the merits of the question, as myself and other friends of the central line have as good claim to get the benefit of that argument as you or any one can have. I have a large family and some property here—*all that I have, or ever expect to have*, is, and will be, of Virginia; but our mutual attachment to our common mother, is of no consequence in this question.

The most prominent part of your argument is on the point of exceptional grades; that subject, and the question of the width of track or "guage," being professional, I shall advert to very briefly, leaving to Mr. Shaw to answer more in detail the objections you have urged to his views. Before I do that, however, I will remark, that your positions in relation to the difficulties in the way of completing the Central line, whether they refer to the time necessary, or the means, seem to me equally untenable with those advanced in your report.

We are not discussing the cost of the Blue Ridge tunnel. I cannot comprehend what that has to do with the subject, unless (which I can hardly believe) the friends of the Virginia and Tennessee road mean to raise the question of its discontinuance. If the whole cost of the Central railroad from Richmond to the mouth of Greenbrier is to be considered, then the cost of the canal at Lynchburg must be added to your route, as you refer to that as giving you connection with Richmond; the South Side road requiring, as you say, by their report, $600,000 to complete it; but I do not understand that to be your design.

In your report you assumed that your line was complete, or possessed the means of completion to Christiansburg, leaving 77 miles to get to the mouth of Greenbrier. The object, I supposed, was to enquire into the difficulties in the way of each line reaching the mouth of Greenbrier; that is, the time necessary, and the prospect of obtaining means; I therefore thought it was not fair to locate the completion of the Central road 16 miles west of Charlottesville," on the east side of the Blue Ridge, when all the cost of passing the mountain was provided by the State, the work being in a course of successful construction, and the grading of the company's work nearly completed to Staunton, to say nothing of the means in hand to grade a large portion of the line between Staunton and Covington; and I cannot perceive the justice or propriety of your saying in this letter "*Richmond* must make 92½ miles more of railroad and spend $1,855,000 more, to reach the mouth of Greenbrier by way of Staunton, than would be required by way of Christiansburg"—this seeming still to be based on the assignment of a point 16 miles west of Charlottesville, as the limitation of our means of completion.

Richmond should not be startled by the announcement of having to spend so large a sum. How she is in any way bound for it I do not know. Surely the State is able, and no doubt intends to complete the tunnel, and the company will complete the road from Waynesborough to Staunton.

The important question—the *real question* is, which line, when completed, will secure the trade and travel, and develope the greatest advantages to the State?

But how will the matter stand as to time of completion and probable means? The distance from Christiansburg to the mouth of Greenbrier is.....77 miles.

From Covington to White Sulphur Springs being the Central route to same point.....76 "

Governor Johnson has recommended that this work should be executed on State account *to connect with the canal.* The Virginia and Tennessee company expect to raise two-fifths to construct the New River branch; each being about the same distance, which may be expected to be done first? As this line from Covington, west, has always been regarded so important to the State, as to be often suggested as a State work—it will not be considered presumption in the friends of the Central railroad to expect that it will be constructed on State account.

While this is being done, the line between Staunton and Covington can be completed, being only 70 miles, 20 of which are now under contract. It appears, then, that so far as the means relied on are concerned, and the time necessary for completion, it is probable the Central line will reach the Ohio first.

The cases you refer to, of the abandonment of what you style *exceptional grades*, and substitution therefor of grades within the compass of locomotive power, are not analogous, and therefore do not by any means prove that there would ever be hereafter any practical difficulty experienced in working the section at the crossing of the Allegheny.—Because it was found best to incur considerable expense to get clear of *inclined planes and grades where horse power was used*, it does not follow that we should find any difficulty on grades of only 92 and 105 feet to the mile, these being grades on which a locomotive can be used.

To create distrust as to the practical value of assisting power, on grades of 92 and 105 feet, you mention the abandonment of "a *series of inclined planes worked by stationary power*" in Pennsylvania—worked with *stationary* not assisting locomotive power—you refer to an *inclined plane* in South Carolina, worked by a rope attached to the load around a drum—also to the old high grade on the Baltimore and Ohio railroad at Parr's ridge, where I think horses drew up the trains. These cases have no sort of analogy to the pass of the Alleghany. Inclined planes, and ropes with drums are attended with extreme danger, and were doubtless abandoned on that account. I am not prepared to name the precise grade of these planes, but I suppose of many hundred feet, far beyond the application of locomotive power. The cases of the Albany, Schenectady, and Erie roads, in New York, I presume, are of the same character; it cannot, therefore, be contended that experience has decided against exceptional grades where locomotive power can be used.

The case of the Boston and Albany road is still more inapplicable as an illustration of your position. The new road is not being built by the Boston and Albany company, on account of 82 feet grades on their present road, with any intention of substituting it for the old one. The projectors are different parties; rivals contending for the same trade. They may have some faint hope of success, as the new is the shortest, but the 83 feet grades are worked with so much success, that I have been told, the new company have but little prospect of supplanting them.

The use of assistant locomotives to overcome obstacles of any kind, is no untried experiment. If you have to encounter a heavy grade, or an unusual accumulation of snow or ice, impeding the progress of the train, the practice is the same in each case; there is, therefore, no difficulty in understanding how the assistant locomotive will answer at the Alleghany. The daily resort of them every where to get over ice and snow, such as we have had with us recently, being far worse than 105 feet grade, illustrate very plainly how they would answer. If, however, it is necessary to refer to cases where they are constantly used to overcome high grades, I refer you to the Baltimore and Ohio road crossing the Alleghany with 116 feet grade, and the Greensville road coming up from the Roanoke with grades of 90 feet. At this point the same locomotive divides the load and makes two or more trips up the grade until the whole train is gotten up, but it would be better to have the second locomotive to assist.

On the Central line, between the Ohio and the Alleghany, no grade exceeding 20 feet to the mile, occurs for 200 miles, bringing us to the western base of the mountain, then two miles of 90 feet to the summit, and descending five miles at 105 feet to the mile. From the eastern base going to Covington, no grade over 40 feet. It will therefore be easily understood that, a single heavy class locomotive aiding on the seven mile section of the Alleghany, will enable the locomotive coming from the Ohio, to do about as much as if there were no grade on the whole route over 40 feet to the mile.

According to our own rule of calculating the power of an engine on different grades, a similar engine on your 60 feet grades, will draw little more than half of what it can on the 40 feet grades of the Central road. It will be seen therefore, that the cost of transportation of heavy freight can be greatly reduced on the Central line, by incurring the trifling expense of keeping one heavy engine in addition at the Alleghany, the price of which would be about $8,000. Let the heavy tonnage be delivered to the canal, at Covington; it will then receive patronage 90 miles further west than at Lynchburg, and a rate of charge might be adopted which the Virginia and Tennessee road could not afford. First, because the grades of the road would forbid the transportation of freight at very low rates; and secondly, because it could not receive an amount of travel sufficient to sustain it, and which would be found indispensable unless it was allowed very high rates of freight. The Central road on the other hand, passing through the heart of the Virginia Springs, would receive an amount of travel in addition to the through passengers, which would enable it to dispense with profit from the transportation of freight.

You express the opinion that the use of the 4 ft. 8½ inch gauge or width of track, has been a great curse to Virginia, and that the Virginia and Tennessee road, being five feet wide, is a strong reason why that road should be extended to the Ohio, instead of the Central road. Engineers differ as to which is the best width. Some of the most profitable roads in this country have the 4 feet 8½ gauge; and if there was not very high authority differing with you, it would be difficult to make it appear that 3½ inches in the width of track could produce such very important results. The Great Western road from Boston to Albany, doing among the largest and most profitable business of any road in this country, is of that width. So are all the other roads in Massachusetts. The Baltimore and Ohio is of that width. The Hudson River road, in New York, recently built, at the cost of twelve millions of dollars, with the full benefit of experience, I am informed, is also 4 feet 8½ inches. We may therefore be induced to doubt whether that width is deserving of such decided condemnation.

If, however, it should be conceded, amidst these conflicting opinions, that there was some small advantage in a five foot gauge, the gauge of the Central railroad ought to be used in the connection with the Ohio, for this conclusive reason, that the roads in Kentucky and Ohio, the States with which we are aiming to connect, are all of the same width of the Central road, 4 feet 8½ inches.

You think there is danger of the western trade leaving the Central road at Staunton, and going to Baltimore; if there be any just ground for that apprehension, how do you expect to prevent it going there by the "air line" from Cincinnati? Richmond is 82 miles nearer to Staunton than Baltimore is; if, with that advantage, and all the evils of transhipment against Baltimore, Richmond cannot keep the trade of the great west on the Central road, how do you expect to attract it to Richmond from Cincinnati, by way of Lynchburg, when the distance is about the same from that city to Baltimore as it is to Richmond, each being about 600 miles? If you feel satisfied that Baltimore cannot absorb the trade of the west *from Cincinnati* in an *equal contest* with Richmond *as to distance*, I think you are compelled to admit that it will not be attracted *from Staunton* over an *increased distance of* 82 *miles*, with the superadded disadvantage of transhipment.

Major Gwynn, in his late report to the James River and Kanawha company, makes it from Cincinnati to Baltimore, by Parkersburg, (perhaps 20 miles too short)		580 miles.
Cincinnati to Point Pleasant by railroad survey	156 miles.	
Point Pleasant to the mouth of Greenbrier by railroad survey	152 miles.	
Mouth of Greenbrier to Richmond, by your estimate, which, I find, is 7 *miles too short*	278 miles.	
		586 miles.
From Staunton to Baltimore, via Winchester		218 miles.
From Staunton to Richmond		136 miles.
Richmond nearer to Staunton than Baltimore is		82 miles.

Let us suppose the produce of the west in the cars of the Central railroad at Staunton; if the battle is to ensue with Baltimore, which is alluded to, will it not be an easy victory for Richmond? If it goes to Baltimore it will have an increased distance of 82 miles to encounter, besides the delay, damage and expense of transhipment. It must be remembered that the Central road will not very readily surrender the trade when once in its cars, if it can do anything lawfully to retain it. There is much it can do, which it is not necessary to enumerate. There is another important fact to be considered; the heavy tonnage will no doubt be transferred to the canal at the point of connection; I allude to the flour, bacon, hemp, iron, coal, etc., which will, from every consideration, belong to the canal, because it ought to be carried at rates that will not be very profitable to a railroad. Baltimore, in any event, will struggle in vain for trade once embarked on the Central road.

I will close this letter with a table of distances, from which it may be judged which of these two lines is most likely to bring the trade of the far west to Richmond; which of the two has the best prospect of getting that revenue from travel which is admitted by all to be necessary to enable a road to transport freight at rates low enough to get it at Cincinnati, when the "battle ensues between Baltimore and Richmond," when there will be competition for it, through the various channels of railroads and canals leading to northern markets:

From Cincinnati, via Parkersburg, to Baltimore, say		600 miles.
From Cincinnati to Point Pleasant, by railroad survey	156 miles.	
From Point Pleasant to Greenbrier river, by railroad survey	152 "	
From Greenbrier river, by your report, to Christiansburg	77½ "	
From Christiansburg to Lynchburg, by same report	86 "	
From Lynchburg to junction of Danville road, (see rep. of S. Side railroad)	67½ "	
From Danville Junction to Richmond	55 "	
Cincinnati to Richmond, via Lynchburg and Christiansburg		593 miles.

It seems the distances differ but little, not enough to affect the trade, if the charge for freight was very low on a competing line, and in this comparison I have placed Baltimore 20 miles farther than Major Gwynn.

From Cincinnati to Baltimore, via Lynchburg and Richmond, according to Major Gwynn		760 miles.
From Cincinnati to Baltimore by Parkersburg	600 "	
		160 miles.

Increased distance from Cincinnati to Baltimore by the Virginia and Tennessee railroad is 160 miles, which settles the question that it can get none of that travel.

From Cincinnati to Washington, via Lynchburg and Richmond		720 miles.
From Cincinnati to Washington, via Baltimore and Ohio road	622 "	
		98 miles.

Increased distance to Washington from Cincinnati, by Lynchburg and Richmond, 98 miles, and therefore none of the Washington travel will come by that route. It seems to me, looking at these facts, there is but a poor prospect of getting revenue enough from travel on the New River branch, to enable the company to put freight at rates low enough to attract it.

Now let us see how it will be with the Central line.

From Cincinnati to Washington, via Parkersburg, as above		622 miles.
From Cincinnati to the mouth of Greenbrier	308 miles.	
From Greenbrier to Staunton via Covington	146 miles.	
From Staunton to Gordonsville	60 miles.	
From Gordonsville, via Orange and Alexandria road, to Washington	94 miles.	
From Cincinnati to Washington, by Central line		608 miles.
		14 miles.

Nearer by 14 miles by the Central than the Baltimore and Ohio road.

This advantage of distance, added to that of climate and grades, must bring all the Washington travel over the Central route, and as Washington city must always be a point of attraction for passengers going farther north, it may be expected that the Central line can enter into a fair competition for all the western travel, making a fair allowance for the advantage it possesses over the Baltimore road upon the principle of equated grades.

The revenue which the Central road must draw from the multitudes visiting the various mineral springs of western Virginia, will be an amount difficult to estimate. Without stating my own impressions as to the value of this resource for revenue, I think it is apparent that the Central line has much the best prospect of being likely to get sufficient profit from passengers to enable it to bring freight at those *low rates which are necessary to secure it for Virginia.*

Very respectfully,
E. FONTAINE,
President Central Railroad.

Richmond, January 22, 1851.

Letter of Mr. Shaw.

The allusion contained in an article in your paper of Wednesday, from the pen of Col. Garnett, to recent communications of my own; and the arguments—if they may be so termed—of that article, are not, as he perhaps supposes, the closing of the debate between us, on the subject of railway gradients.

The gallant Colonel has not yet broken a lance on the body of my argument; but fighting like one who beateth the air, has but encountered a phantom of his own raising; and as Falstaff slew the already dead Percy, "with a new wound in the thigh," so has he done renewed murder on the antiquated and abandoned system of *inclined planes with stationary power.*

Not being able, as I shall presently show, to meet the issues proposed by me, he has contrived a false issue, in affecting to suppose that in the *exceptional grades* of the Allegheny, mentioned in my recent communications, there was intended to be an application of this disused plan.

An ordinary citizen—to say nothing of an engineer—must have been in a Rip Van Wynkle slumber in regard to railway progress, not to have learned that that sort of exceptional grades, as the Colonel calls them has been long dead or forgotten, or deserves to be so.

Any candid reader of my reports of the last and the present year, can perceive at once that there is not the slightest ground for such a mistake; and I cannot do such injustice to the real good sense of Col. Garnett, as to believe that my meaning was ever so misapprehended by him.

The proof that no reference was had in my reports to the old stationary system, so ingeniously confounded by Col. Garnett, with my mention of exceptional grade, will at once be found in the subjoined quotations from my report of last year. In them also will be found the evidence—though Col. Garnett may not know, as he says, *how* assistant power on an exceptional grade will work, because he "is not aware that it has ever been tried at any place in our whole country, where there was a large trade to accommodate"—that such applications of power have been for some years successfully made in Great Britain, and have entirely supplanted the old method of stationary power.

Unless we suppose the laws of gravity and mechanical resistance to be different in this country, we may be satisfied to proceed at once in imitation of the very extended and successful use of assistant locomotive power at certain points of railways. It can no longer be considered an experiment.

The Railway Department of the Board of Trade was constituted, by minute of the Lords of the Committee of the Privy Council for Trade, for the transaction of railway business. This body made a report to Parliament in 1845, on the railways of the Manchester and Leeds district.

From this important document, which is still in my possession, my last year's report made sundry quotations; and that legislators, and others interested in a true solution of this question, may not be confused by sophisticated or uncandid statements, I will here repeat such portions as will show that my real meaning ought not to have been mistaken, and that my facts can be substantiated.

The parliamentary report observes (see my own report last year, Assembly Doc. No. 18, page 470, near the bottom.) "It is important to ascertain, by reference to *actual practice*, the results which have already been arrived at, and which must be taken as starting points to guide us in the consideration of any new scheme."

"The Lickey incline on the Birmingham and Gloucester railway, is a conclusive proof that a gradient of 1 in 37½, (*nearly* 141 *feet per mile,*) for a length of 2 miles, 3 chains, may be worked by the aid of an engine constructed for the purpose, without serious inconvenience to an extensive traffic. It is also proof that such an incline may be descended without danger by the force of gravity regulated by the action of brakes."

"The Sutton incline of 1 in 88, on the Liverpool and Manchester railway, is surmounted by the ordinary trains of that railway, whose traffic is of a very heavy description with a single locomotive."

"The use of *a stationary engine* for ascending the incline on the Manchester and Leeds railway, from the Victoria station, which is 1 in 59 for 1000 yards, and 1 in 49 [nearly 110 *feet per mile*] for 640 yards, *has been in a great measure discontinued*, the ordinary goods-engine being found capable of taking up it heavy passengers and good trains of not less than 80 tons."

"On the Glasgow and Edinburgh railway, *stationary power has also been discontinued*, the locomotive engine being found a more efficient and economical substitute on the Glasgow incline of 1 in 42 [125 *feet per mile*] for 1¼ miles; and recently the locomotive engine has been equally substituted for stationary power upon the inclined plane of the London and Birmingham railway, from the Euston square terminus to Camdentown, parts of which are at 1 in 66, and 1 in 75."

"*Many other facts* of a similar nature might be quoted, but the above seem quite sufficient to establish the general proposition."

"1. That gradients of from 1 in 50 to 1 in 100, are perfectly practicable to the ordinary locomotive, with moderate loads."

"2. *That gradients up to 1 in 37½, or higher, may be surmounted by heavy trains with the aid of an assistant engine of peculiar construction.*"

These quotations will show that I have not announced, as Colonel Garnett affects to think, any new or imperfectly tried *principle.* I therefore pass by, as not relevant to our discussion, his list of railways having stationary assistant engines. Nearly twenty years since, in common with other engineers, I thought them deserving examination, and visited those at the north for that purpose. I know no railway here in Virginia on which the grade has exceeded 70 feet to the mile, *except one of Col. Garnett's*—the Greensville and Gaston—where the grade is 92 feet per mile for about 1 mile. Here the trains used to be, and are still in all probability, propelled by successive operations to a temporary depot at the head of the plain. I presume an

assistant engine of the requisite force was not used because the traffic was not sufficiently active to keep it at full work.

One eminently practical and experienced engineer, Mr. Latrobe, of the Baltimore and Ohio railroad, has not scrupled, in obedience to the convictions effected by these English (not Yankee) experiments—to embrace in the space of 52½ miles, 33½ miles continuous gradients of from 5 to 10 miles each, with a rate of grade varying from 100 to 116 feet per mile.

Col. Garnett asks, "would not every man suppose that Mr. Shaw had intended giving a fair comparison of the grades on the two lines connecting Richmond with the mouth of Greenbrier?" He then makes sundry statements in regard to the grades between Staunton and Covington, and on the Blue Ridge railroad, calculated to draw the public aside from considering the proposition made to him twice before, and which I here repeat, to compare the profiles on both lines, and to equate the distances according—to use his own language again—"to the rule generally used for assigning to a certain amount of ascents and descents on a road their equivalent in distance." If he wishes to establish the superiority in grade of his road, he must accept this issue, or stand before the community the defeated party.

I never pretended to make this "fair comparison" as alleged against me between the Virginia and Tennessee and the Central roads throughout; I only invited Col. Garnett to do so—believing, as I still do, from a good general knowledge of both lines, that the Central railroad is the better line of the two even to Richmond.

I did not make such comparisons as demonstrate that, even were the Virginia and Tennessee better in grade, the whole western travelling towards Washington and Baltimore would prefer the Central line; and such moreover as show that in connection with the James River canal, the Covington and Ohio railroad will effectually deprive the Virginia and Tennessee railroad of the tonnage traffic. I trust I need not repeat that argument. It is before the public in another document.

The Colonel concludes his article by a little flourish regarding the "curse" inflicted on the country by the Yankee pioneers in railways, in the adoption of the narrow gauge of 4 feet 8½ inches, instead of that proposed by himself of 5 feet.

If the question had been, as in England, between gauges of 4 feet 8½ inches and 7 feet, it might have *seemed* (as it does not now) to be worth due inquiry. Those who have examined this gauge question will be at a loss to perceive any advantage in the little difference of 3½ inches—except it be to subject to a break of gauge, any connecting line, (the Central, for instance, at the mouth of Greenbrier,) and thereby create an inducement to take an otherwise disadvantageous line like the Virginia and Tennessee.

Is Col. Garnett not aware of the decision of the Gauge Committee in favor of the "narrow gauge" of 4 feet 9½ inches, in the controversy of Stephenson and Brunel. The former, the greatest of living engineers, persists in inflicting on his country the curse which Col. Garnett, with such patriotic zeal, deprecates for poor old Virginia. If Col. Garnett wishes to revive, in this country, the question which certainly was not settled according to his views in England, and thinks the difference of 3½ inches worth a controversy, I am prepared to engage in it, and to show that *uniformity* of gauge is much more important. I adopt the views expressed in that facetious publication, the "Dialogue of the Gauges," and am content to bear all the stigma of sympathy, on this question, with 'Yankees,' and with the architect of that triumph of modern art, the Britannia Tubular Bridge.

I hope I shall not be deemed by Col. Garnett, to have departed from the courteous mode of discussion which he has, in accordance with his known disposition, prescribed to himself, and that nothing herein may be considered to detract from the high consideration in which he is held, both professionally as a gentlemen, by CHAS. B. SHAW.

Richmond, Jan. 22, 1852.

Ohio Canals

The Ohio canals are to be opened on the 20th prox;

Pittsburg and Cincinnati Railway.

Several days since we published a communication on the subject of the above named important enterprise, which, we doubt not, attracted the attention of many of our intelligent readers, whose minds are ever awake to the means of extending the railway connections of Philadelphia with the Great West. The State of Ohio, already the third in the Union in population and wealth, is fast securing to herself the glory and advantage of being *par excellence*, the railway State of the Mississippi Valley; and every new link in the grand chain work of improvement, with which she is being covered, has an interest for us in this city, as it has for our friends and rivals in the Empire emporium. This is especially true of the Pittsburg and Cincinnati undertaking, which recommends itself with peculiar force to our favorable consideration; and we deem ourselves justified in extracting upon our first page a brief account of it from the pen of C. Anthony, Esq., the president of the company, which we find in a pamphlet recently issued from the Gazette office, in Springfield. Mr. Anthony is now in this city endeavoring to give a proper direction to the friendly appreciation of our men of public spirit, in which, although the particular time is not so auspicious as it ought to be, we trust that he will meet with the fullest success.

Mr. Anthony's account is sufficiently explicit to supersede the necessity of any detailed description on our part; but a recapitulatory view may assist some of our readers in forming a judgment in the matter. The Pittsburg and Cincinnati railroad, as surveyed and located, is one hundred and ten miles in length, extending from Springfield, through Marysville, Delaware, and Mount Vernon, to Loudonville. Loudonville, it will be remembered, is on the line of the Ohio and Pennsylvania railroad, one hundred and fifty-two miles west of Pittsburg; and Springfield is already connected by railroad with Cincinnati, eighty-four miles distant. The whole distance from Pittsburg to Cincinnati by the route is, therefore, three hundred and forty-six miles; making, with the Pennsylvania railroad, a total distance between Cincinnati and Philadelphia of seven hundred miles. We need not say how much shorter this route is than any New York enjoys, or can ever possess, to the Queen City of the West. The shortest route, in fact, that New Yorkers could take, supposing the whole line completed, would be by way of Philadelphia and the Pennsylvania railroad; which would give the former all the advantages of the ninety-four miles which separate New York from Philadelphia. The disadvantage of the former would be more than twice as great, if confined to the long and circuitous route by the Erie railroad and Lake Erie.

The Pittsburg and Cincinnati railroad—which from the circumstance of its tracing, as will be seen by reference to a map, hypothenuse lines to two railroad angles, the apices of which are respectively at Mansfield and Columbus, and thus cutting off considerable distances both to Cleveland and to Pittsburg, has gained the name of the *cut-off* line—is not a mere project, but an enterprise actually commenced and in progress, with every promise of being brought to an early completion. The first steps were taken less than a year ago; and already, we believe, nearly fifty miles, from Springfield to Delaware, (where the line connects with the Cleveland and Columbus road,) are under contract; and it is the aim of the managers, and their intention, should the means of the company warrant it, to place the whole remaining portion to Loudonville under contract early in the coming season.

As regards the estimates and financial capabilities of the company, it appears that the computed cost of the road is only about sixteen thousand dollars a mile; and we are informed that in addition to the four hundred and twenty-thousand dollars of public subscriptions referred to in Mr. Anthony's paper, the company has guarantees of four hundred thousand more in Cincinnati and Pittsburg. If Philadelphia feels, or understands, her interest sufficiently in the matter to bestow aid no greater even than will be extended by each of the Western cities, so far her interiors in wealth and ability, the Pittsburg and Cincinnati railroad will become immediately a fixed fact; and under the wise councils and energetic spirit which have already given it so strong an impulse, it will be pushed forward with such activity as perhaps to make the same day witness the opening of the Ohio and Pennsylvania railroad to Loudonville and the completion of a direct and perfect railway connection between Philadelphia and Cincinnati. It will be, as Mr. Anthony remarks, but twenty-five hours railroad distance between the two cities.—*Phil. N. American.*

Ohio Central Railroad.

Below we give the recent circular of the President of the above company addressed to their Trustee in this city:—

New York, Feb. 10, 1852.

Dear Sir—I have much satisfaction in saying that on the 26th ult. we opened, for trade and travel, so much of our road as lies between Zanesville and Newark, a distance of 25½ miles. Of the remainder of the line to Columbus—33 miles—we have about two-thirds of the whole distance now ready for the cross-ties and rail; and by the month of June next, we trust to be in full connection with the railways at Columbus.

In the construction of our road, a just appreciation of its importance has induced us to spare no pains to make it a *first-class* road. Whilst we have done nothing for mere ornament, we have, in no case, sacrificed durability to temporary expedients.

Upon the whole line, from Zanesville to Newark, we have placed a full bedding, fifteen inches in depth, of clean gravel and sand; thereby not only making our road bed more permanent in itself, but by the facility with which the track can be kept in adjustment, providing for the lowest scale of wear and tear of machinery. Our bridges are all of Howe's patent—a plan so far approved as to be adopted even upon the great Russian railway between St. Petersburgh and Moscow. Our masonry is the admiration of builders, and is made of imperishable materials.

It is not the least gratifying part of our work that we are accomplishing it *within* our estimates. The *net* cost will not exceed what we have heretofore stated to you. The *gross* cost of the whole line from West Zanesville to Columbus—a distance of 58½ miles—(including about 70 acres of land for depots and machine shops in different places, and worth $50,000) and also including cost of right of way, and about $70,000 worth of machinery, will not, I trust, exceed $980,000. This estimate covers also discount upon bonds, interest, and commissions for the purchase of rail.

The traffic of the road between Zanesville and Newark is much greater than we expected on so short a line, and with incomplete connections, as it is. At Newark we meet the Newark, Mansfield and Sandusky railroad, leading to Sandusky city upon Lake Erie. With that road interchanges of freight are already being made, of much interest to both parties, although there is, as yet, a gap of some eighty rods between the two roads, which has to be supplied by drayage.

The much shorter distance upon which stage coaches need be used upon the Pennsylvania route, has, for the present, diverted the through travel from the National road to the circuitous route by Cleveland and Pittsburg; and accordingly our reliance had to be upon local support alone. We had made no ceremonious opening of our road, and in consequence of some negotiations on foot with the Post Office Department for the transportation of mails, we had made no *publication* of our time schedule, and yet, within a week of our opening, our list of passengers was from eighty to one hundred daily, and we had more freight offering than we had cars to accommodate. Our superintendent has already made a requisition for more machinery, both locomotives and cars.

You are aware that we have been confident of a large benefit accruing to the western division of our road by the control which it must have over the coal trade.

There are two great coal fields in the valley of the Mississppi, one in the eastern slope of the valley, and the other intersected nearly midwise by the Mississippi river. Zanesville is upon the western rim of the *eastern* field; between which and the eastern rim of the *western* field an interval of 270 miles occurs. Half of the intermediate country, or a belt of 135 miles, by 120, will be supplied

by the Central Ohio road and its connections. This belt, to say nothing of the northwestern demand for domestic use, for manufacturing establishments and for lake steamers touching at Sandusky and Toledo, covers, in the direct line of the road, the populous and thriving towns and cities of Newark, Columbus, Springfield, and Dayton. These places heretofore have been supplied by river and canal transportation; but the high prices sustained during the present winter, varying from 10 to 18 cents per bushel of 70 pounds, are evidence that the old modes of transport will not be sufficient to keep pace with a rapidly increasing population, and still more rapid increase of consumption.

Our heretofore estimate of the value of the coal trade was predicated upon *direct* access to the mines, by which cartage and handling (a very important part of the cost of coal) would be saved; but such has been the demand for this indispensable article at Newark and along the whole line of the Newark, Mansfield and Sandusky railroad, that every car which we could spare for the purpose has been brought into requisition; and coal has been carted three miles to our temporary terminus in West Zanesville, paying toll also across the Muskingum river, for the purpose of supplying the demand, even under the necessity of carting it the second time, from our road to the other.

If anything were previously needed, these facts amply sustain the estimate heretofore made of the value of this coal traffic.

In this connection a few figures will show the influence which our road is to work upon the coal trade, and by necessary re-action, powerfully and favorably affecting the revenues of the western division of our work.

COAL TRADE.

	Present prices. Cents.	At what prices will be delivered by C.O.R.R. Cents.	Save to consumer. Cents, per bu.
At Newark...	10	4½	5½
" Columbus.	18	7	11
" Springfield	18	9	9
" Dayton...	18	11	7

It is not too much to assume that the *coal trade alone* will furnish to the western division of our road a *nett* income of not less than 6 per cent upon the cost.

When you take, in connection with this position, the fact that the road passes through a country as rich in agricultural resources and capabilities as any in the world, with a population already of from 50 to 70 to the square mile, you may assure our friends of the happiest results from the enterprise.

The eastern division of our road, extending from Zanesville to Wheeling, has been *located* upon favorable ground in a chained distance of a fraction less than 82 miles. We hope to place the entire line in the hands of contractors by 1st of April next At Wheeling we shall meet the Baltimore and Ohio railroad *complete* in January next, and also the Hempfield railroad leading *directly* to Philadelphia, in process of construction. When these connections shall be made, furnishing the shortest route between New York and Philadelphia in the East, and Cincinnati and St. Louis in the West, we shall look upon our great road with no ordinary feelings of pride.

Very respectfully,
J. H. SULLIVAN,
Prest. Central O. R. R. Co.

New York.

Canandaigua Railroad.—It is stated that a contract for the construction of this road has been made with Messrs. King, Steinfieldt & Co., well known contractors, to build and equip this road.—We understand that the necessary stock has been subscribed, and that an agent has gone to England to purchase the iron.

Buffalo and State Line Railroad.—This important line of road has been completed, so that the Central line in this State, as well as the Erie, will, in a few months, be in connection with the railroads of Ohio.

The Eight-Wheel Railway Car.

Many of our readers will recollect that a verdict was rendered at Canandaigua, in July, 1850, in favor of Ross Winans, against the Schenectady and Troy railroad company, for violation of the rights secured to him by letters patent for an invention known as the "eight-wheel railway car."

It appears that the railroad company, in connection with others in this State, were not disposed to submit to this verdict, and made an appeal for a new trial. The motion was fully argued before a full bench of the United States Circuit Court, and after due deliberation was denied, Mr. Justice Nelson filing an opinion in which the following occurs:—

"I have examined the various grounds presented by the counsel for the defendants on the motion for a new trial, and after the fullest consideration, am of an opinion the motion must be denied:—

"His claim (the patentee's) is for the car itself, constructed and arranged as described in his patent. This, I think, is the clear meaning of the specification, and of the claim as pointed out in it; proving, therefore, that parts of the arrangement and construction, which were before known, amounted to nothing. The question was, whether or not, cars or carriages for running on railroads, as a whole substantially like the one described in the patent, had been before known or in public use, not whether certain parts were, or were not, substantially similar. The result of the entire arrangement and adjustment of the several parts described, namely:—*the railroad car complete and fit for use, is the thing pointed out and claimed as new.* This is the view taken by the Chief Justice of the patent, in the case of the present plaintiff against the 'Newcastle and Frenchtown railroad company,' tried before him in the Maryland Circuit, and which construction was adopted by the Judge in the trial of this case."

"III. The questions of originality and of infringement were questions of fact, depending upon the evidence, and were properly submitted to the Jury. We think the weight of it decidedly with the verdict. Upon the whole, after a careful examination of the case, and of all the points made by the defendants on the argument, many of which have been noticed above, we are satisfied that the verdict is right, and that a new trial should be denied."

The company then moved for "writ of error" to the Supreme Court of the United States, on written briefs filed by D. Buel, Jr., and S. Stevens, Esq., for the company, and J. A. Spencer, Esq., for the plaintiff, which was decided at Washington, Jan. 24th, 1852, NEGATIVELY, thus closing the case in favor of the plaintiff, and against the company, after five year's litigation.

Counsel for the plaintiff then moved the Court at its late session in this city, for an injunction to restrain the defendants from further violating his rights, upon which the following rule was directed to be entered:—

"*Circuit Court of the United States, Northern District of New York.*—Ross Winans versus the Schenectady and Troy railroad company. In equity, Jan. 29th 1852.—On reading and filing the bill of complaint in the above entitled suit, and the affidavids connected therewith, and admission of service of the same notice for an injunction, on motion of Joshua A. Spencer, Esq., of counsel for the complainant, and after hearing David Buel, Jr., and Samuel Stevens, Esqs., of counsel for the defendants, it is ordered—That an injunction issue out of, and under the seal of this Court, directed to the defendants, the Schenectady and Troy railroad company, its officers and agents, restraining them from using or putting in practice the cars or carriages constructed in the improved mode secured to the complainant by the letters patent mentioned in his bill of complaint, upon the railroad of the defendants; and from making, or causing to be made, or vending to others to be used, the said improved cars or carriages, substantially the same in construction and mode of operation as the said cars or carriages invented by the complainant, and patented by him, as stated in the said bill of complaint.

[A copy.] A. A. BOYCE, Clerk."

Upon which the Schenectady and Troy railroad company has compensated the patentee for violation of his patented rights, and has also bought of him a license for the use of the invention on their railroad during the remainder of the patent term.

Ross Winans, having been successful in each instance before the proper tribunals against his powerful opponents, it is not too much to expect that his rights will now be respected, and that he will be permitted either to have the exclusive use of his great invention, or that he will be cheerfully paid a moderate compensation for the use of it.

New Railroad into the Tennessee Valley.

We copy the following from the Charleston Mercury, in reference to the proposed extension of the South Carolina railroads into the Valley of the Tennessee river.

The Georgia Legislature has rejected every proposition to aid the removal of the objections to intercourse at Augusta. A last attempt was made on Monday, but it failed by a very decisive majority. It is for the interest of Savannah that this "Chinese Wall" should be kept up, and Augusta allows herself to be made the instrument for effecting the selfish purposes of the former. In due time Augusta will learn that Savannah aims as directly and far more fatally at her own prosperity than at that of Charleston, and she will be ready to make concessions when they will have lost not only all their grace; butperhaps all their value. For the present it is useless to expect anything from that quarter. But the road to the West is not therefore barred altogether, because it is obstructed at Augusta, and a new channel of communication has already been marked out, which is likely to gain public favor just in proportion as it is examined. The Columbia and Greenville railroad divides in Abbeville District one branch running to Greenville, and the other which is a more direct continuation of the main trunk, running to Anderson. From this road it is proposed to open a road to Knoxville in Tennessee. The route we understand is very practicable. It passes through the North-eastern corner of Georgia, strikes the course of the Little Tennessee river, which it follows to near its mouth, and by the way of Maryville reaches Knoxville. From this, a road already chartered and the construction of which in no long time is certain, would connect Charleston with Lexington in Kentucky, and from there a railroad is already constructed to Cincinnati, thus connecting us with the whole Northwest. Towards the South, a branch of no great length would connect with the Nashville railroad, and the Memphis and Charleston railroad at Chattanooga.

There is nothing chimerical about this plan.—We have conversed with intelligent gentlemen from East Tennessee, who express entire confidence in its practicability; who assure us that the people on that side are alive to its importance, and ready to do their best to carry it out, and that it only needs the concurrence of the people of this State to make it very shortly a substantial reality. The region immediately opened by the road to Knoxville is, of itself, of great interest. Its agricultural resources are great; it abounds in mineral wealth; and, with almost illimitable water-power, it is fast becoming a great manufacturing country. Add to all these immediate sources of support, the ease with which the most extensive and beneficial communications can be opened from it into Kentucky, and by Chattanooga into the whole South west; and it is not too much to say, that the completion of this route is one of the noblest and most inviting enterprises ever offered to the people of this State. We can thus settle the question of the bridge over the Savannah river to our own satisfaction at least, if not to that of Augusta; and we see no other way of settling it which will be half as easy, or a tenth part as profitable.

North Carolina Railroad.

The Raleigh Standard states that the President of this company has been authorized to negotiate for the purchase of iron for the road, and lay the result of his inquiries before the next meeting; or, if he think it best, to conclude a contract of purchase. The rails are to be of T pattern, eighteen feet long, and weighing sixty pounds to the yard. He was also authorized to purchase two twenty

ton locomotives, with a set of freight cars for each. The work on the line of the road is in a rapid state of progress, and its condition is as flattering as the most sanguine of its friends could have anticipated.

American Railroad Journal.

Saturday, February 21, 1852.

Government aid to Railroads.

We published last week the circular of General Green, inviting railroad companies to meet in convention at Washington, on the first of March next, for the purpose of presenting some plan to secure Government aid to our new railroad projects. As soon as railroads are opened they immediately become the carriers of the Government mails, at stipulated rates. General Green urges that as the Government in all cases use railroads, there can be no objection to issuing government scrip to railroads, the interest on which to be equal to the sum now paid by contract. This would give to first class roads, at an interest of 6 per cent., $5,000 per mile; more than sufficient to purchase the iron for a road. If the above project could be carried out, and we can see no objection to it, it would exert an incalculable influence upon the prosperity, not only of railroads, but the whole country. We commend this subject to the attention of railroad companies. We hope they will be fully represented at the convention. To new companies that are struggling under the magnitude of their projects, it would at once give vitality and life. The plan, if adopted, would not only effect a vast saving to the Government, but to railroad companies, by relieving them of the ruinous shaves to which they are now subjected, to provide means to carry forward their works.

Eight Wheel Car Case.

We call attention to the notice in our columns of the settlement in favor of the patentee, Mr. Ross Winans, of a long-pending controversy which has excited much interest in this quarter among railroad men.

The invention is of great utility, as proved by its general adoption, and exclusive use for passengers on American railroads. It is one of the many fruits of American ingenuity, and it is contended by engineers that our railroads could not be constructed at present rates per mile, and be worked at the required rates of speed, without the use of the Eight Wheel Car.

Vermont

Passumpsic Railroad.—A circular to the stockholders of the Connecticut and Passumpsic railroads, just sent out, furnishes the following statements: The capital stock of the company, applicable to construction, is as follows:

10,976 shares of stock	$1,097,600	
Bonds	550,000	
		1,647,600 00
Construction to Wells river 40 miles	$1,149,623 77	
" to St. Johnsbury, 20¾ "	538,424 18	
Extra for cars and engines	53,468 20	
Contingent	4,000 00	
Total		$1,745,516 15

The road from White river Junction to St. Johnsbury is 60¾ miles long, with the side tracks and branches equal to more than five in length. The cost of the equipment of cars and engines amounts to $165,602. The entire cost of the road [60¾ miles] is a fraction short of $29,000 a mile, which includes buildings, offices, equipment, etc., and also the account of interest paid to stockholders, [about $42,000,] prior to the commencement of the earnings' account, Dec. 1, 1848, and the interest paid for loans and renewals to the present time.

Indiana.

Kosciusko, Elkhart and Miami Railroad.—A preliminary survey of the route of this proposed road, which is to extend from Goshen to Peru, has been completed. The distance is 62½ miles. The route is an extremely favorable one in every respect, and runs through a beautiful country.

The company propose to put the first division of the road, extending from Goshen to Warsaw, a distance of 25 miles, under contract at once, and express a determination to have this portion of it in operation by the first of January, 1853.

At Goshen, the road will connect with the Indiana Northern road; at Peru, with the Peru and Indianapolis railroad; thus forming a part of a direct line of railroad through the State, from north to south. At Peru it will also connect with the Erie and Wabash canal.

The country traversed by the proposed road, though newly settled, is one of great fertility, and already furnishes a large amount of surplus produce for exportation. The route is a very cheap one, and the project we should judge to be within the capacity of the people upon its line, with such aid as they may reasonably expect from abroad.—We hope to see the determination expressed by the directors carried into practice, and the road commenced at once.

Railroad Decision.

In the suit of Kennard vs. the New Jersey railroad company, a verdict has been given to the plaintiff of $2,500. Mr. Kennard was sitting in the cars with his arm *out of the window*, which was broken above the elbow by coming in contact with a bridge. The bridge was of the ordinary width. The Judge decided that a railway company was liable for all such accidents as arose from the construction of the road or its connections; that carelessness on the part of travellers was no defence; and that a notice posted up that no traveller shall put his head or arms out of the window, furnished no defence, because it may not and often cannot be read by passengers. We have some doubts of the correctness of a decision which punishes the company for the carelessness of the traveller.

Southwestern Railroad.

The great Southwestern convention which was recently held at New Orleans, adjourned to meet at Jackson, Miss., on the 12th inst. It was well represented, and continued in session three days.—The most important proceeding of the convention was the adoption of a resolution in favor of extending the New Orleans and Jackson railroad from Jackson north to the State line through the most central and practicable route, so as to unite with such road and roads as may be projected thence, and designed to connect Nashville, Tennessee, with any great central railroad improvement through Mississippi, connecting Nashville and New Orleans.

New Jersey.

The bill before the New Jersey House of Assembly, to charter a railroad from Keyport to Camden, opposite Philadelphia, has been defeated, owing it is said, to the chartered rights, claimed by the Camden and Amboy railroad company.

The Morris and Essex extension from Dover to Hacketstown, as will be seen by an advertisement in another column, is to be placed under contract in a few days.

Cast Iron Tires for Locomotives.

We invite attention to the advertisement of *Cast Iron Locomotive Tires* for freight engines, by Mr. L. B. Tyng of Lowell, Mass. The cast tire has been in use many years upon some of our leading roads, and has given entire satisfaction wherever tried. The testimonials of Mr. Parker of the Bal. and Ohio road, and Mr. Trimble of the Phil., Wil. and Baltimore road, may be regarded as full and satisfactory proof of the value of the improvement. If cast iron can be used instead of wrought, for tires, the saving to be effected will be at once appreciated by every railroad man.

We also invite attention to Mr. Tyng's method of applying wrought iron tires to passenger engines. There can be no doubt in our minds that the present mode of shrinking them on, is objectionable every way. In numerous cases the *tension* is so great as to part the tire. In all, it seriously impairs its strength, and in consequence causes it to wear much faster than it otherwise would.

The ease with which the *slip tire* can be applied and removed is another strong reason for its use.

We call attention to the letter of Mr. Latrobe of the Baltimore and Ohio railroad, whose opinion upon every subject is sure to command attention and respect.

Ohio.

Cleveland and Mahoning Railroad.—It is stated that about $300,000 have been subscribed to the stock of the proposed Cleveland and Mahoning railroad. This road will be about 80 miles long, and connects with the Ohio and Pennsylvania road at Enon Valley.

The Board of Public Works of Ohio have fixed the rates of toll on the Ohio canal for the current year. Upon many of the leading articles reductions have been made. In 1851 the through toll upon flour was 21c. 6m., and in the same proportion of $1 per 1,000 lb. upon Pork, Beef and wheat. Under the new rates Flour, Beef, Pork and Whisky pays 8c. per cwt., or Flour 17c. 2m per bbl.—Wheat 133 miles or over, 4c. 8m. per bushel; Corn, 120 miles or over, 3c. 3m. On Salt, not of Ohio manufacture, a reduction of 12c. per bbl. is made, and it now pays 18c. per bbl. for any distance over 100 miles. The tolls upon Fish and Lime are reduced in a similar proportion with those on Salt.

Indiana Northern Railroad.

The extension of the Indiana Northern railroad to Chicago, has been completed, leaving but eleven miles of unfinished track. This distance is over a plank road, and the trip from Chicago to Toledo can be now made by daylight.

Wisconsin.

Milwaukee and Mississippi Railroad.—The following gentlemen have been chosen directors of this road for the current year, viz: John H. Tweedy, Alex. Mitchell, George H. Walker, E. B. Wolcott, J. Kneeland, Anson Eldred, E. D. Holton, J. Catlin, S. C. Hall, Joshua Cobb, A. E. Ray, D. L. Mills, L. Stoughton, W. A. Barstow.

Mississippi.

Canton and Jackson Railroad.—The American Citizen announces the fact, that the entire road is under contract for grading. Messrs. Shacklford & Latimer have taken about four miles; Whitehead & McKee seven and a half miles, and Parker & Willis twelve miles, making the entire distance. The contractors are all responsible gentlemen, and the work will be pushed forward with dispatch.

Stock and Money Market.

Money continues easy on call, and is abundant in the ordinary business channels. In the stock market, after receding considerably during the latter part of the last, and the beginning of the present week, is again improving. A periodical "spring" rise is always looked for among the fancy stocks, which affects by sympathy, all other securities. The inflation has not been so great the present as during the past year. While money has been abundant, the feeling of distrust as to the result of the large shipments of specie, have had an effect to discourage speculation. In addition to this reason, some of the leading stocks do not stand so well in public estimation, as at a corresponding period of the past year, which has depressed the general tone of the market. The first class securities continue to command a high price.

In railroad bonds, which are now a leading article of commerce, a fair business is doing. Those of western roads are fast becoming the favorite securities in this market. Monied men are beginning to be conviced that western roads are to be our best paying lines, and the great success that has followed the opening of the few roads in that section, has done much to confirm this opinion.—The result has been to cause the convertible bonds of such roads as the Cleveland and Columbus, Cleveland and Pittsburg, Xenia and Columbus, the little Miami, and others of that class, to be taken at once from the market. Those who purchased these bonds when they were first offered for sale have realized a very handsome sum on their advance. Most of the purchasers still hold them for the purposes of conversion. Bonds of the class of roads to which we have alluded, are very scarce at prices not much below par. The same will be the case of all strong and well managed projects. Those who can get such securities on the eve of the opening of the road, at 85, and who will hold them for one year, will in all probability realize at from 8 to 10 per cent advance, it they wish to sell again. The convertible clause is looked upon as adding largely to the value of the security, which is a pretty good evidence of the estimate which is put upon the productiveness of our western railroads.

As a general rule, we can say to our railroad friends, that money can be had for all new works that *deserve* credit. For instance, if a company in Ohio, whose road is estimated to cost $1,000,000, can put into the concern $500,000 of domestic means, there will be no difficulty whatever in borrowing in this market the balance, at what may be termed fair rates, say 85 cents on the dollar. The difficulty in the way of negotiations at the present time is not the *want* of money, but of sufficient security upon which to base a loan. If, where a road costs only $15,000 per mile, the people on its line cannot furnish one-half of the means, we suggest that they are too early with the project.—Where their means do not come up to the standard required, the route would not probably furnish sufficient business to give the railroad profitable employment. If railroad companies will only do what they should at home, they will find no difficulty in their negotiations here. If they can furnish half the capital required, they can easily borrow the other moiety. If they cannot do this, they may as well stay at home.

There are a large number of county bonds offering, with considerable sales. The greater part of those that have come into the market, are from Ohio. They are regarded with favor, though the questions that have arisen in reference to the constitutionality of the issues may interfere with their sales. We presume, however, no one doubts that they will be sustained. In Kentucky, this question has been forever put to rest by the decision of the Court of Appeals. A few of the bonds of the counties of Mason, Bourbon and Fayette have come into market since that question has been disposed of, and they will meet, we have no doubt, with a ready sale. There are no better securities than these of the Kentucky counties.

The following are the prices realized at a public sale of railroad stocks during the past week by Mr. Simeon Draper, viz:

10,000 U. S. 6s, 1868	115¼
90,000 U. S. 6s, 1868	115¼
13.000 N. Y. State 6s, 1862	110¼
15,000 N. Y. city 7s, 1852	100¼
5,000 Kentucky 6s, 1871	106¼
1 bond $1,000 Ohio Central R.R.	87
54 shares Patterson and Hudson R.R.	96
57 shares Patterson and Ramapo P.R.	78
50 shares Hartford and New Haven R.R.	123

The receipts of the Michigan Central railroad for January, despite the interruption of the business during half the month, were equal to those of January 1851. The figures are:

Freght	$13,296 04
Passengers	11,837 29
Total	$25,134 23
January 1851	25,103 36

The receipts for mails, etc., are not included.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK FEBRUARY 21, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	105¼
U. S. 6's, 1862	111
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	115¼
U. S. 6's, 1868	116
U. S. 6's, 1868—coupon	120
Indiana 5's	82
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	68
Illinois 6's—interest	42
Kentucky 6's, 1871	106¼
Massachusetts sterling 5's	105¼
Massachusetts 5's, 1859	100
Maine 6's, 1855	103
Maryland 6's	102¼
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	—
New York 5½'s, 1860-'61	—
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100¼
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	105
Ohio 6's, 1860	106½
Ohio 6's, 1870	115
Ohio 6's, 1875	114½
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	89¼
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	100
Virginia 6's, 1886	106

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	106¼
Cincinnati 6's	106¼
St. Louis	93½
Louisville 6's 1880	93½
Pittsburg 6's, 1869-1871	95
New York 7's, 1857	107
New York 5's, 1858-'60	101
New York 5's, 1870-'75	102
New York 5's, 1890	102½
Fire loan 5's, 1886	101¼
Philadelphia 6's, 1870-'90	100¼
Baltimore 1870-'90	104
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	109¼
Erie 2d mortgage, 7's, 1859	104¼
Erie income 7's, 1855	92½
Erie convertible bonds, 7's, 1871	88¼
Hudson River 1st mort., 7's, 1869	102
Hudson River 2d mort., 7's, 1860	93½
New York and New Haven 7's, 1861	102
Reading 6's, 1870	76¼
Reading mortgage, 6's, 1860	80
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	103
Cleveland and Pittsburg 7's, 1860	95
Ohio and Pennsylvania 7's, 1865	95
Ohio Central 7's, 1861	92

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Feb. 18	Feb. 11.
Albany and Schenectady	97	96
Boston and Maine	104¼	105
Boston and Lowell	109	109
Boston and Worcester	99¼	99¼
Boston and Providence	85	87
Baltimore and Ohio	64	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112¼	113
Eastern	96¼	94¼
Erie	78¼	78¼
Fall River	98¼	98¼
Fitchburgh	102¼	103¼
Georgia	—	—
Georgia Central	—	—
Harlem	66	67¼
" preferred	108	109
Hartford and New Haven	123	124
Housatonic (preferred)	38	38
Hudson River	63	64
Little Miami	—	—
Long Island	18¼	18¼
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	95	96
Michigan Southern	101	100
New York and New Haven	107	112¼
New Jersey	125	130
Nashua and Lowell	104¼	104
New Bedford and Taunton	116	116
Norwich and Worcester	50¼	50¼
Ogdensburgh	26¼	27¼
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29¼	29¼
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	67	67¼
Rochester and Syracuse	109	119
Stonington	50	51½
South Carolina	—	—
Syracuse and Utica	128	128
Taunton Branch	115	113
Utica and Schenectady	125	127
Vermont Central	23¼	24¼
Vermont and Massachusetts	21¼	23¼
Virginia Central	—	—
Western	101¼	100¼
Wilmington and Raleigh	56	58

Lowmoor Iron.

We invite attention to the Advertisement of W. B. Lang, Agent for the sale of this celebrated iron.

Kentucky.

Kentucky County Bonds.—We learn that Henry Waller, Esq., of Maysville, Ky., the President of the Maysville and Lexington railroad company. is now in this city for the purpose of disposing of county securities issued to, and guaranteed by that company.

He has bonds of the counties of Fayette, Bourbon and Mason, and of the city of Maysville, bearing an interest of 6 per cent, payable semi-annually in this city.

These counties are the very richest in the State, and embrace the garden lands of the west. The city of Lexington, and Ashland, the home of Henry Clay, are in the county of Fayette. The property of these counties as taken by assessment and exhibited by the Auditor's books of 1851, is as follows:—

Fayette	$17,756,785
Bourbon	11,941,707
Mason	9,154,648

This assessment, as we are assessed by the Representatives in Congress from the districts including those counties, *is greatly below the market value of the property.*

Neither of these counties owe any other debt than those just created for railroad purposes, and for these bonds the counties receive stock in the company to their full nominal amount.

The issue of these bonds was voted by remarkable unanimity, at polls opened specially, by law, to take the full sense of the people on the subject.

It seems to us there can be no surer basis of credit than is furnished in this instance.

The whole amount issued and to be issued by these counties and the city of Maysville for the above object, is $650,000.

The questions as to the constitutionality of the charter of this company, the validity of the tax, and the regularity of the issue of the bonds, have recently been elaborately decided in favor of the company, by the Court of Appeals of Kentucky, the tribunal of last resort, in a very able opinion published by us, in full, last week.

The President has furnished us with the opinion of Hon. James Harlan, Attorney General of Kentucky, affirming the full application of the principles settled by the Appellate Court to the whole of the bonds issued to this company, and also the power which exists in the judicial system of Kentucky. to coerce out of the *individual property* of the citizens of the counties the payment of *both principal* and *interest* of the bonds. This opinion of Mr. Harlan is fully endorsed by Mr. Crittenden, Attorney General of the United States.

We have also seen letters from Mr. Clay, and from Mr. Corwine, Secretary of the Treasury of the United States, in which they say that the above counties are the richest and best in the State, and that no securities can be safer or better than are offered in these bonds,

The work they are intended to promote which is now in a rapid state of construction, being under contract for its entire length, is one of great interest and importance to Kentucky, and of national importance in its relations and connections to the great lines now in progress reaching from the South and West to the North and East. Its direct influence upon the fertile lands of those counties, must be of immense benefit; and there can be no question but that the road must pay fine dividends.

Thus if we consider the solid wealth upon which these bonds are based—the popular favor by which they are and will be sustained—the already judicially decided and irreversible fact of their validity, the character of the enterprise for which they are issued, and of the company by which they are guarranteed—we can come to no other conclusion than that they are as sound and good securities as any capitalist can desire.

We understand Mr. Waller intends making a full publication of all the vouchers and documents by which the above facts are demonstrated, and we sincerely hope him the success his enterprise deserves, in a fair and ready sale of his valuable bonds.

Mississippi and Atlantic Railroad.

The petition of the President and Directors of the Mississippi and Atlantic railroad company to the Congress of the United States, respectfully represents:

That they are constituted a corporate body by virtue and under the provisions of "An act to provide for a general system of railroad incorporation" passed by the General Assembly of the State of Illinois, under the name of the Mississippi and Atlantic railroad company, for the purpose of constructing and maintaining a railroad from the State line of Illinois, at a point opposite Terre Haute, to Illinoistown opposite St. Louis, crossing the entire State from east to west, on the route originally designated for the great Cumberland road.

The claims of this road to the consideration of the general government, are urged with the more confidence, because demanded by the interests of commerce as one of the most direct and important lines of communication between the great Atlantic cities and the Mississippi valley, and as such has been selected, more than thirty years since, by scientific and impartial men, under the authority of Congress, as the site of the Cumberland road.

The claim in behalf of nine hundred stockholders, all living upon the line of the road, may be deemed the more entitled to attention, from the fact that they are located here in consequence of the former action of Congress, which justified the assurance to the public that the Cumberland road would be constructed. But the national government failed to meet this expectation, to the great disappointment and serious injury of the stockholders, in whose behalf this petition is now respectfully preferred. The well-known character of this enterprise, so perfectly calculated to unite the two halves of the nation upon a central, populous and commanding route, would seem therefore to justify and sanction the request which we hereby respectfully made, that Congress would donate to the Mississippi and Atlantic railroad company, for the purpose of aiding the accomplishment of their enterprise, the right of way through such tracts of land as belong to the general government, on the line of their survey, and also, such grant of land in addition to such right of way as they may deem appropriate to the strength and merits of their claim.

Wm. S. Wait, Pres't.

Directors—Augustus C. French, Wm. B. Archer, Lora Corey, John Cutright, James Ewart, J. F. Waschefort, P. Tunkhouser, Henry Waterman, Robert Blackwell, Samuel White, Benl. Johnson, Wm. McCain, Curtiss Blakeman, S. H. Mudge.

Massachusetts.

Western Railroad.—At the recent meeting of the stockholders of this company, the following gentlemen were chosen directors for the present year:—Messrs. Wm. H. Swift, Josiah Stickney, Edward Austin, Robert Campbell, and Geo. H. Kugh.

New York.

Sodus Point and Southern Railroad.—In our paper of the 1st of Nov. last, we gave a brief notice of this project, the object of which is to connect Sodus Bay, the finest harbor on the south shore of Lake Ontario, with the Central and Erie lines of railroad. Since that time, we have been favored with an examination of the minutes of the survey of the route by Mr. Sims, engineer for the company, from which we are able to present the following more detailed account of the route of the road, its connections, prospects, etc.

The route of the road commences at Sodus Point at the outlet of the bay, which, as before stated, is the most capacious, and in every respect the best harbor on the south shore of Lake Ontario, and extending in a general southerly direction, crosses the Rochester and Syracuse railroad at Vienna, and strikes the Canandaigua route at "Hall's Corners," a distance of 35 miles.

The route is one presenting unusual facilities for cheap construction. The estimated cost of the road, predicated upon very careful surveys is only $12,000 per mile. Nearly 80 per cent of the line will be straight. The curves, with one exception, have large radii. The maximum grades were 40½ feet to the mile which occur in only two or three instances, and these are in the direction of the greatest traffic. The general features of the country in this part of New York are well known, and there is probably no project in the State that can be so cheaply constructed as the above.

The country traversed by the above line is of the most fertile description. It will run through the towns of Sodus and Arcadia, in Wayne county, and Phelps and Seneca, in Ontario county, which rank for excellence of soil and amount of production among the very best in the State. In the town of Sodus, are inexhaustible quarries of superior lime, and in the town of Phelps there is an abundance of gypsum. It is believed that the carriage of these articles will furnish, of themselves, a large amount of business, as an extensive demand for them already exists not only in the State of New York, but in Pennsylvania, where these articles are not found.

Another very large source of anticipated income is in the transportation of coal. As the Erie railroad is now connected with the Lackawanna and Blossburgh coal fields of Pennsylvania, the construction of the above road will open a direct outlet for these to Lake Ontario, and will supply the steamers upon that lake with their fuel; a most important consideration, not only to the great shipping interest of the lake, but as far as the business of the road is concerned. The distance from Sodus Point to Blossburgh, by way of Jefferson and Corning, is estimated at 118 miles; to Lackawanna from the same point, 200 miles. The Pennsylvania coal is not only to take the place of charcoal, for manufacturing purposes, but of wood, for fuel, in all the leading towns in Western New York, and upon the lakes.

The local traffic made up of the products of the soil must be large. There is no portion of the State more fertile. It is highly cultivated, and supplies a large surplus for exportation. The route crosses the canal and the New York Central line of railway, and connects with the Erie, thro' the medium of the Canandaigua road, thus opening both choice of routes and markets. The line will run through a number of flourishing villages, among which may be named Vienna and Newark.

Upon the opening of the Williamsport and Elmira railroad, a direct route will be formed, in connection with the above road, between Lake Ontario and Philadelphia and Baltimore, a matter which is regarded as of much importance by those cities.

The above are some of the claims that the project presents to the public consideration and support. It can be controlled at an exceedingly low cost. Its local business promises to be highly remunerative, and the connections it will make will render it an important through route.

A much larger stock than was required to organize the company has been subscribed. The construction of the road is clearly within the ability of those interested, if they will take hold of the project with that energy which its importance justifies. Though it has no large town interested in its support, its cost is so low, that ample means exist upon its line to secure the success of the work. If they can furnish one-half of the necessary am't, they can without doubt borrow the balance. It rests with those immediately interested, whether they will have the road or not. In almost any other portion of the country, under similar circumstances, a favorable answer would be given, as we believe will be the fact in the case before us.

The surveys have been conducted under the superintendence of Mr. Sours, who we presume will remain in charge of the work, should it be carried forward.

The Wheeling Bridge Case.

Decision of the Court.—The following is the decision of the Supreme Court of the United States in the matter of the Wheeling bridge case:—

1st. That the Ohio is a public navigable river, the free navigation of which is secured by the regulations of Congress establishing ports of duty, and by public expenditures to improve its navigation, and by express compact between Virginia and the other States, when Kentucky was admitted into the Union; and Virginia is bound by that compact.

2d. That the States bordering on the Ohio river, have, therefore, no right to obstruct its navigation by bridges.

3d. That the Wheeling bridge does obstruct the steamboat navigation of the Ohio river, and is a public nuisance.

4th. That the obstruction of navigation on the Ohio river, by the Wheeling bridge, is injurious to the public works of Pennsylvania and to the commerce of the river.

5th. That the State of Pennsylvania has a right to maintain her suit for the abatement of the nuisance, on the ground of its injury to her public works.

6th. That the State of Pennsylvania, being a party to the suit, the Supreme Court has original jurisdiction to grant relief.

7th. That the equitable powers of the Supreme Court authorize it to grant relief, as prayed for in the bill, by removing the bridge, or compelling it to be elevated so as not to obstruct navigation.

8th. That the bridge must be raised to the height of one hundred and eleven feet, twenty feet higher than it now is at the highest point, for a width of three hundred feet, over the channel of the river.

It was suggested to the court, yesterday, by Mr. Johnston, on the part of the defendants, that the obstruction might be removed by making a draw on the bridge. The Court said they would hear the motion, if the defendants desired to submit one on that point.

Old Colony Railroad.

The following gentlemen have been chosen directors of this road for the current year, viz:—Francis B. Crowninshield, Hollis Hunnewell, William J. Walker, James W. Sever, Nathaniel Whiting, Alexander Holmes, Charles B. Shaw.

Railroads in Ohio.

The construction of railroads in the west is now employing the means and engaging the attention of almost the entire population of the country.—Their great convenience to travellers, and important advantage to business of all kinds, is being felt and appreciated wherever they are constructed, and the commanding influence which they are known to exert upon the country, is rapidly extending itself, and prompting new enterprises in every direction.

The practical operation upon the country of the extended net work of railway improvements already projected, must be in the highest degree beneficial, while the more successful points, as *railway centres*, will secure advantages superior to those of any other character. Towns and cities will hereafter arise where, at present, no indications are to be seen of their future location—their origin being stimulated and produced by the fortunate intersection or concentration of important lines of railroad. The position of towns, with reference to their being conveniently approached by railroads, is about to become a consideration of much importance with those interested in their growth and prosperity; and, to some extent, the business now to all appearance permanently located, will be gradually transferred to new points, or *business centres*, consequent upon the construction of railroads.

In this respect, quite a number of the prominent towns in Ohio are found to be happily situated, including Columbus, Cleveland, Mansfield, Zanesville and Newark; while further west may be mentioned Sandusky, Bellefontaine, Springfield, Xenia and Dayton—all enjoying the prospect of increased advantages, from the operation of railway improvements already projected.

Among the first class towns and cities in the west, likely to enjoy the highest degree of advantage from railroads already projected or in prospect, may be mentioned Cincinnati, Louisville and St. Louis, on the rivers, and Indianapolis, Chicago and other points similarly situated.

No inland town, remote from the rivers and lakes of the west, seems likely to secure a higher degree of advantage from railway improvements, than Indianapolis, which is rapidly becoming an important point for the intersection of the railroads of Indiana.

Cincinnati, the pride of Ohio, is not less favorably situated for commanding a high degree of advantage from this class of improvements. Situated in the heart of the finest agricultural region in the west, and enjoying the natural advantages of river navigation, her position is also found to favor the concentration of several important lines of railroads, from the operation of which too much can scarcely be anticipated, in the way of advancing the interests of that city. The influence of railroads being now mainly looked to for promoting still further the growing interests of Cincinnati, the comparative merits of the several lines proposing to connect with that city should be carefully considered by the public authorities, and others interested in its future growth and prosperity.

In this respect, in our humble opinion, no other line of railway promises the same degree of advantage to that city as will be secured by the construction of the MARIETTA AND CINCINNATI RAILROAD.

Whether viewed as a *through line*, forming the most direct and natural communication with the Atlantic cities, by its connection at Parkersburg with the Baltimore and Ohio railroad, or in its *local* character, as the means of reaching the Cincinnati market with the agricultural products of an extended range of country, this route may well challenge a comparison with any other seeking entrance into that city. But, in addition to these advantages, enjoyed in common, if not in a higher degree, with other routes, is the far more important advantage to that city, of its traversing *a mineral region, which for variety and extent is without a parallel in any other part of the State.*

This would prove a new and most important element of wealth to the increasing business and growing prosperity of Cincinnati, and must attach a *prominence* to the Marietta and Cincinnati railroad over any other line.

It is no doubt the true policy of Cincinnati to encourage *generally*, the early construction of all the railroads proposing to connect with that city; *but to aid at once, and efficiently, in the immediate construction of the Marietta and Cincinnati railroad to the* MINERAL REGION *should be deemed in the highest degree important to the interests of Cincinnati.*

A city subscription, or loan, of $500,000, or even half that sum, *at an early day*, would enable the company, now actively engaged, to complete their road from Cincinnati to the immense *coal and iron deposits in Vinton county, in the next twelve months.*

We hope this matter, certainly as important to that city as to the friends of this route along the line, *will receive the early and favorable attention of the public authorities of Cincinnati*, and that the hearty co-operation of the merchants and other capitalists of the city, will not be wanting to hasten the completion of this important line of railroad. *

Delaware and Hudson Canal.

The Committee of the Pennsylvania Legislature, to whom was referred the subject of the proposed resumption by the State, of the works of the above company, within the State, have made a report adverse to the proposed measure.

The charter of the Delaware and Hudson Canal company, in Pennsylvania, was given in 1823, and provided that if, at the expiration of 30 years, it should appear that the tolls had equalled the original cost, the expense of repairs and interest, the State should have the privilege of resuming "all the rights, liberties and franchises" appertaining to the company, without any compensation; and that if the tolls should *not* amount to so much, the State should have the right of resumption by paying the difference between the receipts and expenditures.

The company, it appears, have, in one instance, divided as high as 20 per cent dividend among the stockholders—average about 10 11-14 per cent, for the 14 years in which there has been an excess of revenue.

The cost of the improvements is $1,954,306; repairs, $607,560. The tolls amount to $981,679.—In this estimate of the cost of the improvement is included the interest on the original outlay and on the repairs, $728,124.

The committee state therefore, that, "if the commonwealth shall resume the Pennsylvania section of the Delaware and Hudson canal, the large sum of $1,246,437 64 must be paid to the company, that being the difference between the amount of tolls received and the cost of construction and repairs"—the original cost of the canal being only $429,273.

The committee argue that the canal would not yield any revenue to the State, inasmuch as the Delaware and Hudson company in that event, would seek other channels, through a connection with the New York section of the canal, for con-

veying their coal to market—connecting their railroad with the Pennsylvania railroad at Hawley, only 14 miles from the State line.

European and North American Railway.

Below we give the memorial of the Legislature of Maine to Congress in favor of the European and North American railway.

The European and North American railway, when constructed, in connection with other railways built, or in progress, will connect the British Provinces of Canada, New Brunswick and Nova Scotia with each other, and the United States, over the easiest and natural routes of travel—and at the same time, shorten to the lowest limit of time and cost, the transit of the mails between New York and London. It is proposed in concurrence with the British Provinces, to bring the two great lines, from New York, and from Montreal, to a point of junction and connection in Maine,—either at the Kennebec or Penobscot river,—and crossing the Penobscot above the head of sea navigation, extend a single trunk line, to the shore of Nova Scotia or Cape Breton, at the nearest available point of this continent to Europe—so that between Galway in Ireland—the nearest and most accessible port for trans-atlantic navigation in Europe—and the American steamship terminus, the Atlantic ferry shall be crossed at its narrowest strait.

It is calculated that by shortening the sea voyage to the lowest limit, and dispensing with all unnecessary burden, the gain of two miles per hour at sea, may be made, and that the speed of the locomotive may be three times as great as that of the steamer. Comparing the present mail route between New York and London with that by the European and North American railway through Maine, the result may be stated as follows:—

PRESENT ROUTE.

Steamer from New York to Liverpool	3,100 miles	
at 13 1-8 miles per hour		9 days 20 hrs.
Railway from Liverpool to London	211 miles	5 hrs.
	3,311 miles	10 days 1 hr.

PROPOSED OVERLAND ROUTE.

Railway from New York to Halifax	867 miles	22 hrs.
Steamer from Halifax to Galway, at the rate of 15 miles per hour	2,130 miles	5 dys. 22 hrs.
Railway from Galway to Dublin	126 miles	3 hrs.
Steamer from Dublin to Holyhead	63 miles	3 hrs.
Railway from Holyhead to London	263 miles	6 hrs.
	3,449 miles	7 dys. 8 hrs.

The speed of the railway train being three times as great as the steamer, a gain of sixty-five hours time is made by the route proposed, adopting the highest speed yet attained in ocean navigation. If we assume an increased speed in the future, the committee believe that the same advantage may still be maintained by the proposed route through Maine.

The memorial to Congress in behalf of this enterprise, presents this whole matter in so clear and forcible a light that it cannot fail to arrest attention, and secure for the enterprise the favorable regards of the country. Notice of two bills in aid of the European and North American railway, have been given by the Hon. Mr. Washburn in the House of Representatives, designed to carry out the plan proposed, and to aid the friends of the enterprise in Maine, one entitled,

"*An act for shortening the transit of the mails between New York and London*," the other, "*An act making a grant of land to the State of Maine in aid of the construction of the European and North American Railway*," copies of which bills, with the petition to Congress—the despatches of Earl Grey—and the laws passed in Canada and Nova Scotia—make a part of the memorial to the Legislature, accompanying which, is a copy also of the application to Massachusetts in its behalf.

The ability with which the claims of this enterprise upon Congress are presented by the committee in the papers before us, deserves the highest commendation, to all which we beg leave to ask the attention of the Legislature, more especially to that portion of the memorial to Congress which refers to the conduct of Maine in that long protracted dispute in regard to our northeastern boundary. If Texas was entitled to a *ten million* gratuity for quieting her doubtful claim to a comparatively worthless territory, how much ought Maine to receive for a far more valuable one, whose title had been fully recognised by Congress? Maine, by her concessions, succeeded thereby, in avoiding the horrors of a foreign war with the greatest maritime power of the world.

The memorial to Congress after showing the commercial advantages of the European and North American railway, and its claims to support as a commercial undertaking, whereby the saving of time in the transit of the mails is fully shown, asks for a permanent mail contract over this route, at the rates paid for similar service between London and Liverpool.

It also asks in behalf of Maine, a grant of two millions of acres of the ungranted public lands, for the reasons following, as stated in said memorial.

"Our frontier position, with a foreign territory around us, retarded the growth of Maine till within the last few years. The settlement of our north-eastern boundary dispute by the treaty of Washington, was a new era in our history. Our former enemies became friends, and the people of Maine and the neighboring Provinces are anxiously desiring that the same freedom of intercourse shall exist with each other as with the people of different States of this Union."

"To secure the treaty of Washington, Maine surrendered for a mere nominal consideration, an undisputed territory of many thousand square miles, which is now worth a far greater sum than any grant we ask of Congress. While we take infinite pride in the settlement of that long disputed question, and regard the advantages of peace and friendship with our neighbors as worth far more than any estimate of the value of territory lost, we think the time has come when Maine should ask and receive from the general government some equivalent for the concessions and sacrifices she then made for the general good, yielding up a territory, equal in size and fertility to the commonwealth of Massachusetts."

Had the State of Maine insisted upon maintaining her title at all hazards, the position of the U. States government at the time, would have enabled us to claim, and to insist upon twice the sum paid Texas under somewhat similar circumstances.

While therefore the enterprise itself has claims upon Congress for its inherent merits, sufficient to warrant the application for aid in the form proposed, it is right to insist upon a proper respect toward Maine for the honorable manner in which she placed her interests at the disposal of the general government. The committee, therefore, in view of the immense benefits its accomplishment will confer upon Maine, so fully, so ably and so satisfactorily set forth in the papers referred to the committee, the printing and circulation of which would be of value to the State, ask leave to recommend the printing of the memorial, without the accompanying papers, and to report the following resolutions. H. CARTER, *per order*.

Kentucky.

Railroad from Lexington South.—A large meeting of the citizens of Lexington, Kentucky, and the vicinity, was recently held at that city, to take measures for the extension of the line of railroad from Cincinnati to the former place south toward Nashville. Resolutions were passed, expressing an opinion of the importance of the project to central Kentucky, and providing for the appointment of a delegation to Nashville, Tennessee, for the purpose of securing the co-operation of that city.

Gen. Leslie Coombs, Judge Geo. Robertson, Col. B. B. Taylor, B. Pindall and John Norton were appointed delegates to proceed to Nashville for the above purpose.

STATEMENT.

OFFICE ROCHESTER & SYRACUSE R.R. Co.,
Canandaigua, February 1, 1852.

Surplus profits, August 1, 1851			$90,707 19
Receipts in August, 1851			86,317 53
"	Sept.,	"	114,458 85
"	Oct.,	"	84,953 59
"	Nov.,	"	61 018 49
"	Dec..	"	50,305 80
"	January, 1852		45,745 41
Miscellaneous receipts			24,289 27
Mail service 6 months			10,330 90
			$571,127 03
Expenses in August, 1851			$29 273 56
"	Sept.,	"	23,405 96
"	Oct.,	"	27.263 36
"	Nov.,	"	35,279 84
"	Dec.,	"	35 556 82
"	January, 1852		40,484 36
Balance of Treasurer's account for his disbursements			763 70
Bonds $421,000 interest 6 mos. 7 per ct.			14,735 00
N. Y. State stock $200,000 5½ per cent. 6 mos			5,500 00
Do. do. 5 per cent 6 mos			5,000 00
Interest on scrip stock to 1st inst			8,220 70
Dividend on $4,017,700 capital stock, 5 per cent for last 6 mos			200,885 00
Balance surplus profits, Feb. 1, 1852			144,758 73
			$571,127 03

Dear Sir—Herewith we send you a copy of our last semi-annual report, which in our opinion exhibits a good and prosperous business, and which we trust will be so considered by our stockholders. We annex a statement of our general accounts.

With respect, yours truly,

HENRY B. GIBSON, President.

CHARLES SEYMOUR, Treasurer.

Finances of Alabama.

The following is the statement of the financial condition of Alabama furnished by the Comptroller of the State.

DEBT ON ACCOUNT OF STATE BONDS.

Five per cent. due in N. York, in 1852		$190,000
interest annually	$9.500 00	
Five per cent. due in N. York in 1863		2,102,000
interest annually	105.100	
Five per cent. due in N. York in 1865		57,000
interest annually	2.850	
Six per cent. due in New York in 1870		100,000
interest annually	6.000	
Five per cent. due in London in 1858.		594
Five per cent. due in London in 1866		725,000
annual interest	36,250	
666 67; annual interest	29,733 35	
Six per cent. due in London in 1870		
annual interest	43.740	
Five per ct. stock in Bank of Mobile		600,000
annual interest	30,000	

ON ACCOUNT TRUST AND OTHER FUNDS.

University fund	$250,000 00	15 006 00	
Two per cent. fund	300,900 64		
Three per cent. fund	442,747 60		
Common school fund	1,075,807,64	61,548 46	
U. S. surplus revenue	669,088 95		
Total liability	$7,836,211 50	$342,721 81	

Such are the items usually estimated as composing the State's liability, but in regard to several of them I do not suppose the State will ever be called on to pay them. In regard to the United States surplus revenue, although granted to the States on condition of repayments by instalments in a limited time after notification, it is not presumable that it will ever be called for. So, too, of the Two and Three per cent funds, if applied by the State in accordance with the terms of the grant, they vest absolutely in the State and cannot be demanded in repayment, such it is believed as has been the case with the two per cent. fund, and partially the case with the three per cent fund. The University and the Common school funds constitute a permanent liability against the State, and in good faith the State is bound to account for so much of the three

per cent. fund as has been misapplied by her legislation. The liabilities of the State then which she may expect to pay may be recapitulated as follows:

State bonds for account Bank of Mobile and State bank and branches	$5,097,666 67
Common school fund	1,075 807 64
University fund	250,000 00
Three per cent. not yet applied in accordance with conditions of the grant	379,932 43
	$6,803,406 74
Less U. S. six per cent. stock	447,000 00
	$6,356,406 74

JOEL RIGGS, Comptroller.

Public Works of Pennsylvania.

We give the following abstract from the official statement of the cost, revenues and expenditures of Pennsylvania State improvements, made up from the Auditor's report:

Lines.	Cost.	Revenue.	Expend.
Col. & Phila R.R.	$4,791,548	$7,483,395	$5,105,058
East'n div. canal.	1,737,236	2,661,008	762,981
Juniata " " .	3,570,016	1,371,948	1,760,583
Alleg'y Port. R.R.	1,860,752	2,985,769	3,161,327
West'n div. canal.	3,096,522	2,523,979	1,197,182
	15,056,074	17,026,100	11,987,132
Main Line.			
Del. div. canal...	1,384,606	2,238,694	1,117,716
Susquehanna....	987,160	402,779	554,835
North Branch....	1,598,379	1,003,047	753,662
West Branch....	1,832,023	449,058	738,470
	20,858,242	21,119,680	15,151,817
Lines in operation.			
Fr. Ck. div. canal.	817,779	5,819	143,911
Beaver " "	512,360	38,312	210,360
Finished lines...	22,188,381	21,163,812	15,506,089
Unfin. imprv'm'ts.	7,712,531	.....	.....
Board canal com.	70,782	.....	70,782
Board of apprais'rs	17,584	.....	.....
Collectors, weigh-masters & lock-keepers	.....	.....	1,348,384
Explora'y surveys	157,731	.....	.....
Total	30,147,009	21,163,812	16,925,256

To the above amount of expenditures may be added $6,400 paid for the use of patent rights, and if it be desired to connect with those expenditures the amount paid for interest on the loans pertaining, directly or indirectly, to the public improvements, the aggregate amount of said interest, to the close of the fiscal year 1851, may be stated at $30,735,213 32.

GUARANTIED INTEREST.

Danville and Pottsville railroad co...	$216,693 54
Bald Eagle and Spring Creek Navigation company	137,532 47
Tioga Navigation company	46,647 15
Codorus Navigation company (guarantied loan)	6,000 00
Total	406,873 16

The annual railroad report submitted to the Legislature of this State by the State Engineer, comprises the following information:

The total amount expended in railway construction in this State is	$73,029,551 25
The expenditure last year was	12,259,757 24

The total number of railings in use on 30th September, was 1,716¼—of which 422 miles have been opened for travel during the year, and 373¼ miles are in various stages of progress.

Ninety persons were killed in the State by railway accidents during the last year, and forty seven wounded. *Not one person in his seat in the car was killed.* Many of the deaths were of persons in a state of intoxication,

Vermont and Massachusetts Railroad.

The following gentlemen have been chosen directors of the Vermont and Massachusetts railroad: Thomas Whittemore, John J. Swift, Jas. Ellison, Joseph Goodhue, Cephas Root.

The gross income of the road for the year 1851, was	$195,923 54
Expense	114,880 31
Net income	81,043 23
Interest paid on bonds and floating debt	68,846 10
Balance of income after deducting expenses and interest	$12,197 13
Balance do. in 1849	22,248 74
Balance do. in 1850	23,334 78

The result of the year's operations exhibits a diminution of net income in the year 1851, after paying expenses and interest, of $10,051 61 as compared with 1849, and $11,137 65 as compared with 1850.

The gross income shows an excess of $18,228 86 over 1850, and 50,805 85 over 1849. The liabilities of the company are mainly as follows:

Mortgage bonds due in 1855	$940,600 00
Old bonds due in 1852	93,800 00
" " 1853	44,100 00
Floating debt	76,082 41
Total	1,154,582 41
Against which the company have assets	65,585 87
Balance of liabilities	1,088,996 54

New Hampshire.

Cheshire Railroad.—At the recent annual meeting of the stockholders of this company, the following gentlemen were chosen directors for the present year, viz: Thomas M. Edwards, Thos. Thacher, Hiram Hosmer, Joshua Hale, Thomas J. Lobdell, George Huntington and E. Murdock, Jr. The only change is the substitution of Mr. Lobdell for B. F. Adams. The annual report was accepted. It states the cost of the road so far at $2,777,843 89. Increase in cost since last report, 38,525 79, chiefly for new locomotives, cars and land damages. The income from passengers has been $107,911 81; freight, 122,807 49; mails, 5,729; miscellaneous, 5,801 65—total $242,249 95. The earnings in 1849 were $164,963 54; in 1850, 208,414 38—increase, $77,286 41. Total amount of expenditures in 1851, $110,944 18. The surplus remaining after paying interest, $65,582 31, added to the surplus of last year, 49,215 43, is 114,938 89, of which about 40,000 will be required to pay dividends on the new stock. The number of passengers carried during the year has been 83,388; number of tons of merchandise, 87,388. The total debt of the company is $1,131,520, which will be reduced to 600,000 by the proposed plan of preferred stock, each holder of three shares taking one, when all are made preferred stock. Four thousand seven hundred shares out of five thousand five hundred are already taken.

Missouri.

Pacific Railroad.—The subject of crossing the Missouri river by the line of this road, is attracting some attention in Missouri. It is proposed to leave the south bank of the river somewhere in the vicinity of Jefferson city, and thence run to the west line of the State. One reason given for the contemplated change of line, is the small amount subscribed in the line of the southern route, which amounts to less, we believe, than $300,000. It is stated, that by adopting the northerly line, subscriptions to the amount of $1,000,000 could be raised. In addition to these reasons, it is stated that the northern route would pass through a much richer section of country, and one that would furnish a much larger amount of business than the southern route.

Virginia.

The report on the subject of internal improvements of Virginia, recently presented to ths Legislature of that State, by a special committee, recommends the completion of the following works with as little delay as possible, viz: the Virginia and Tennessee, the Danville, the South Side, the Orange and Alexandria, and the Manassas Gap railroads. The committee present estimates of the cost of completion of these improvements, and recommend appropriations to accomplish that purpose—the state to subscribe three-fifths of the sums necessary. The amounts required for them respectively are as follows, viz: Virginia and Tennessee railroad, $750,000, State subscription, 450,000; Danville railroad, $600,000, State subscription, 360,000; South Side railroad, $600,000; Orange and Alexandria railroad, $120,000, State subscription, 252,000; Manassas Gap railroad, $400,000. Total amount of State subscription, $1,822,000.

Ohio.

Hillsboro' Railroad.—Our latest accounts from the line west are cheering. J. M. Trimble, Esq., has returned from Sandusky, having released the iron, and put it in motion towards its destination. A considerable portion has already been received, and the work of laying the track is now progressing at a rate that renders its completion by the time anticipated a matter of little doubt. The iron was laid to Blanchester last week, and we understand that above a hundred hands are employed in laying it down and preparing the track. Under the able supervision of Mr. W. R. Arthur, the newly elected Chief Engineer, everything which zeal and ability can accomplish will be done to push forward the enterprise. The friends of the road have every reason to be gratified at the prospect.

The present efficient board of directors deserve credit for the energy and zeal they have displayed in overcoming the difficulties by which they have been surrounded. While *all* have done well, it is but just to say that two or three of the board have been particularly conspicuous for their activity, among whom we may mention Messrs. Trimble, Fallis and Barrere. These gentlemen have displayed an untiring industry and determination in their exertions on behalf of the road, which are justly deserving of special commendation.—*Hillsboro' Gazette.*

Machinists' Tools.

THE subscribers have on hand and are constantly manufacturing at their MACHINE WORKS, LOWELL, MASS., a superior class of Machinists' Tools, among which are

ENGINE LATHES PLAINING, DRILLING AND SLOTTING MACHINES

of various sizes, designed particularly for Railroad Shops.

ALDRICH, TYNG & CO.

Lowell, Jan. 1, 1852.

New York and Canada.



The attention of Merchants, Tra-



ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CHILLED TIRES
For Freight Engines.

THESE patent tires are now in general use on several first class roads. They have peculiar and important advantages when applied to Freight Engines, and have been thoroughly tested by long and hard usage, which has proved them to be more than *SEVENTY-FIVE PER CENT CHEAPER* than those of wrought iron. They are attached to the wheels without SHRINK, and being free from tension, are considered STRONGER than the whole cast wheel, for which they are substituted. The following Testimonials in favor of their tires are respectfully submitted. References also may be made to W. H. Clement, Gen'l. Sup't. Little Miami Railroad, Cincinnati, Ohio, and F. C. Arms, Esq., Gen'l. Sup't. Georgia Railroad, Augusta, Ga.

Lowell, Mass , Jan., 1852. L. B. TYNG.

TESTIMONIALS.

Baltimore and Ohio Railroad Office, Jan. 2, 1850.

Mr. L. B. Tyng, Lowell, Mass :—Dear Sir—Your favor of the 26th ult. is before me, asking my opinion of the Chilled Cast Iron tires, of Messrs. Perkins and McMahon, patentees. I did not hesitate to speak favorably of them, or to say that I would give them the PREFERENCE over Wrought Iron Tires, whenever the adhesive tenacity of the latter to the rails is not ALL called for, there being somewhat less adhesion to the chilled wheel.

This can, however, scarcely be called a practical point, as nearly all of the Passenger Engines now in use have a SURPLUS OF ADHESION, and nearly all Freight Engines being provided with the sand box, for emergencies arising from sharp curves, heavy grades, or wet rails.

The Chilled Tire is very much cheaper in first cost, will last longer, and offers a facility for putting on the wheel, rendering comparison with the Wrought Iron Tire an absurdity—it not being necessary even to take the wheels from the machine for the purpose. Many of them are in successful use on this road, and I consider its curves and other peculiarities the most severe of all existing tests. One set of five feet in diameter, has run 50,000 miles under one of our Passenger Engines, and will, in all appearance, run as many more; and, in the meantime, they have not cost a dollar for repairs or adjustment

It may be suggested that they might not stand a northern frost. This is possible; but I believe otherwise, as the weather here is occasionally as severe as in Boston, and if I had charge of a northern road, after the experience I have had here, I would make their trial one of my very first acts.

Respectfully your ob't serv't,
WM. PARKER, Gen. Sup't, etc.

Jan. 29, 1851.
Phil., Wil. and Balt. Railroad Office, Wilmington, Del.

Mr. L. B. Tyng -Sir—We have used the solid Cast Iron Chilled Wheel, and Cast Iron Chilled Tire, for engine drivers, on this road, since 1842. When Wrought Iron Tires under new Engines, purchased from time to time, wear out, I invariably replace them with the Chilled Tire of Messrs. Perkins and McMahon, patentees

These Tires will last, on the average, three times as long as Wrought Tires; seldom requiring renewals under three years, and lasting much longer usually. We have a set which has been in constant use for five years, and still in fair order. The adhesion supplied by the Chilled Tires, I find in practice with engines of the same model and weight, to be equal to that given by Wrought Tires. This is certainly a fact, though not an acknowledged one, in general. Those who think otherwise, will in time change their opinions.

I am of opinion that the Chilled Tire is as safe as the Wrought at any temperature. In eight years use we have broken but one tire out of more than fifty, and that by a violent concussion on the occasion of a "run off."

The use of the Chilled Tire, and the ease and rapidity with which it may be replaced, would certainly enable a road to do the same amount of work with fewer engines—since but little time would be lost in laying up an engine for new tires, or for turning down old ones, as must be done when wrought tires are used.

I am yours, respectfully,
I. R. TRIMBLE, Engineer and Gen'l Sup't.

For sale by
Messrs. ALDRICH, TYNG & CO., Lowell, Mass.
" BUSH & LOBDELL, Wilmington, Del.
" SMITH & PERKINS, (Engine Builders) Alexandria, Va.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed :—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir :—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

IMPROVED TIRES
Attached Without Shrink,
FROM LOWMOOR, BOWLING, and GLENDON IRON.

THE subscriber begs leave to call the attention of Agents, Engineers, and other persons having charge of Railroad Machinery to his

PATENT SLIP TIRES

FOR ENGINES AND CARS.

The merits of these tires consist in their SUPERIOR STRENGTH and SIMPLICITY of APPLICATION, in which they are not subjected to SHRINK, consequently are free from TENSION, and less liable to break than those attached to wheels in the ordinary manner, as it is well known the process of SHRINKING often causes tires to break in the hands of the workmen, and that it is the chief, if not the only cause of their breaking so frequently on Engines and Cars. Slip-tires are more readily applied, and may be repaired or renewed without removing the wheel from the engine.

This plan for attaching tires to the wheels has been thoroughly tested, and called forth testimonials of the highest character, which are respectfully submitted. L. B. TYNG.

Lowell, Mass., Jan., 1852.

For sale by
Messrs. ALDRICH, TYNG & CO., Lowell, Mass.
" SMITH & PERKINS, (Engine Builders,) Alexandria, Va.

Engineer's Office, B. and O. R. R., Baltimore, Dec. 29, 1850.

Ma. L B. TYNG, Lowell, Mass:

Dear Sir—Your letter of the 20th was received yesterday, and I take pleasure in replying to it as follows :—

The improved plan of applying tires to the wheels of locomotive engines and other railroad carriages has always had my approval. From several years observation of the use of the improvement upon the Baltimore and Ohio railroad, I am fully satisfied that it is the most simple, substantial, and economical mode of attaching tires to railroad wheels that has been yet proposed.

With best wishes for the success of this valuable improvement, I remain,

Respectfully your ob't serv't,
BENJ. H. LATROBE, Chief Engineer.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India-rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE, President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

Steam Pile Driver.

FOR SALE a Steam Pile Driver with double engines, and which would be fitted to any width of track for railroad pile driving, and sawing off the piles at grade, and it may at small expense be re-fitted for sawing wood for railroads—could be had in good order for working in a few days, and would be shipped complete to any place desired. It would be a good machine for any one to build warehouse docks and wharves in California. Apply to

ESSLER & BUNCE,
Washington st., near the Battery, N. Y.

New York, Feb. 10, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co. Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named. J. B. BASSINGER,
Chief Engineer.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5¼ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.
Boston November 29th. 1m

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tuscumbia and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, *including* all the materials. And also for the mechanical work, *excluding* timber *only*.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boated down) 3 miles above the bridge site, and Clay of a good quality is found convenient, Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. McKETHAN,
J. D. WILLIAMS,
D. G. McRAE, } Committee.

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply, at the Company's Terminus at Longueuil, of the following description of RAILWAY CARRIAGES, viz:

One hundred and twenty Baggage Carriages, enclosed, on Iron Trucks with lateral motion.

Ninety Platform Carriages, on Iron Trucks.

To be correspondent in other respects to pattern Carriages of the respective kinds, to be seen on the Road.

The Tenders may apply to the whole or any part of the supply, and the delivery must be made at the following dates; one-third at 1st May, 1853—the remainder 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed, "Tenders for Passenger Carriages," will be received at this Office, up to FRIDAY, the 20th February next, at noon, for the supply at Longueuil, of the following RAILWAY CARRIAGES, viz:

Six First Class Passenger Carriages.
Five Second Class " "
Three Post Office and Express Carriages.
Five Covered Luggage Vans.

To be correspondent to Carriages of the respective descriptions now on the road.

One-third to be delivered by the 1st May, 1853; the remainder by the 15th August, 1853.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$100 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.
October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

Engine Waste.

CLEAN WASTE for Locomotive and Steamboat Engines, in lots as wanted; also, superior Steam Packing. Orders, with explicit directions for forwarding, should be addressed to

J. MORTIMER HALL,
36 South st., New York.
November 1. 3m

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next. for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER, President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.
By his Attorney, G. M. KNEVITT.
New York, 1851.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway
September 1, 1851.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 9] SATURDAY, FEBRUARY 28, 1852 [WHOLE No. 828. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

County Subscriptions to Railroads.....129
Railroad Controversy in Virginia.....130
Statistics of New York Railroads.....131
Ohio and Mississippi Railroad.....142, 131
Rutland and Washington Railroad.....134
Agricultural Statistics of Ohio.....135
Finances of Kentucky.....135
Panama Railroad.....136
Tunnel under the Hudson River Railroad.....136
Tolls on the James River Canal.....136
Railroads in Virginia.....137
South Carolina Railroad.....137
Western Vermont Railroad.....137
Stock and Money Market.....137
Railroads in the Provinces.....138
Boardman's Locomotive Boiler.....138
Coal for Locomotives.....138
Allegheny Valley Railroad.....138
Dayton and Western Railroad.....139
Wisconsin and her Resources.....140
Statistics of Ohio.....140
Cleveland and Pittsburgh Railroad.....141
Alabama and Mississippi Railroad.....141

American Railroad Journal.

Saturday, February 28, 1852.

The Railway Subscription Case.

We are indebted to the Ohio State Journal for a full statement of the facts and circumstances attending the railway subscription cases, lately before the Supreme court of Ohio, and in relation to which Judge Spalding forced on the public an extra judicial opinion of his own, calculated to depress the credit of the county and city banks for the benefit of speculators. From this statement we learn:

That in 1846, the county of Crawford was authorized by law to subscribe $100,000 to the capital stock of any company then incorporated, or thereafter to be incorporated, to construct a railway through the county to or near its seat of justice, *provided*, that before the county commissioners should subscribe the stock, the question should be submitted to the voters at the annual Spring or Fall election, and receive the assent of a majority of the votes.

In 1848, the Ohio and Indiana company, was incorporated, and authorized among other things, to construct a railway from Mansfield westwardly by the way of Bucyrus, the county seat of Crawford county, to the west line of the State of Ohio. The question of subscribing the $100,000 to the stock of this company was submitted to the voters of Crawford county at the election in October, 1848, and a majority of the votes were given for subscription, but the county commissioners never made it.

In 1850 a new act passed, incorporating the Ohio and Indiana company with authority to construct a railway from a specified point in Richland county, to Bucyrus in Crawford, and Upper Sandusky in Wyandotte county, and thence westward to the State line.

The fourth section of this act provides "that the county commissioners of any county through which said railroad may be located, by and with the consent of a majority of the legal voters of such county, * * * be, and they are hereby authorized and required to subscribe, in the name and for the benefit of such county, to the capital stock of said company, any sum not exceeding one hundred thousand dollars," etc. Local Laws, vol. 47, page 297. This charter is also subjected to the restrictions of the general railroad act of Feb. 14, 1848.

The same year an act was passed which authorized and required the commissioners of Crawford to *change* the subscription theretofore authorized by a vote of the people to the Ohio and Pennsylvania road, and subscribe it to the stock of any companies then or to be thereafter incorporated, to construct a railway commencing or terminating at any point in or passing through or adjoining the town of Bucyrus, the sum of $100,000.

In October, 1850, a vote was taken in Wyandotte county on the question of subscribing $50,000 to the stock of the Ohio and Indiana company which was directed by a majority of 92 votes. The county commissioners were about to subscribe according to this vote, when legal proceedings were commenced to prevent further action on their part.

To prevent a subscription in Wyandotte county, John Carey and others filed a bill in Chancery in the Court of Common Pleas, to enjoin the commissioners from making the subscription. They claim to be citizens of the county, tax payers on property liable to be annually assessed to pay the interest, etc., and also that the vote in favor of the subscription was procured by fraud on the part of its advocates, the complainants having voted in the negative. Such is the Wyandotte case.

In Crawford county Griffith and others filed a bill for an injunction. They allege that the commissioners had subscribed $100,000 to the Ohio and Indiana road, and had issued and delivered to the company on the subscription, $10,000 in fifteen year county bonds, which the company was about to negotiate, to raise funds to construct the road, that the commissioners were about to issue bonds for the remainder of said subscription, and pray an injunction against the further issue of bonds against the sale of those issued and against the levy of any tax to pay the interest or the principal of said bonds. Preliminary injunctions were allowed by a single Judge in both cases.

In 1851 after these injunctions had been allowed, the Legislature passed an act to amend the act directing the mode of proceeding in Chancery cases, '*in the counties of Wyandotte and Crawford*,' which provided that in suits then pending or to be thereafter commenced, in said counties, where injunction had been allowed, a motion might be filed in the Supreme Court, in the county or in bank, and conferred upon either court the power to hear the motion, on ten days notice, and dissolve the injunction. Under this law applications were made in both Crawford and Wyandotte counties to the Supreme Court, in July, 1851, to dissolve the preliminary injunctions above named, and the questions, in both cases, were reserved for decision to the Court in Bank, *both cases were then pending in the Court of Common Pleas.*

These anomalous motions were heard in the Court in Bank in the absence of C. J. Hitchcock, and the court determined, we think properly, on the case presented, that the court had no power to hear and decide a motion to dissolve an injunction in a case pending in the Court of Common Pleas, notwithstanding the special act of the Legislature. The court did not consider either the legality of the vote in the counties, the subscription, the power of the Legislature to authorize the subscription or vote, nor any question except relating to its own authority to act on a case pending in another court. On that question it found no legal authority to act, and of course dismissed the motion to dissolve the injunction.

This being done, Judge Spalding improperly and extrajudicially availed himself of the occasion to declare his own *individual* opinion "that the Legislature had no constitutional power to authorize the majority of citizens in a county to vote a subscription of stock to a railroad company, that shall be binding on the property of the *minority*." He

added that this was his opinion *alone*, and did not commit any other Judge as concurring in it.

We said at the time of it, that this obitur dictum of Judge Spalding was absurd, and we have seen no reason to change that opinion. He is to retire from the bench next week, and will exert no influence on the other Judges. The declaration should not alarm any one interested in county bonds.—*Cincinnati Gazette.*

The Virginia Controversy.

We have for our own convenience, transferred the order of the letters between Mr. Garnett and Mr. Fontaine, in reference to the discussion as to the respective merits of the Virginia Central, and the Virginia and Tennessee railroads, as routes of communication between the Atlantic cities and the Ohio. We shall give Mr. Garnett's letter in our next.

Office Virginia Central Railroad,
Richmond, Jan. 30th, 1852.

To Col. C. F. M. Garnett:—

Dear Sir—In this reply to your communication of the 26th, addressed to me in the Whig of yesterday, which will probably be the last in a correspondence, the necessity for which seems to be mutually regretted, perhaps I ought to acknowledge the rather *equivocal compliment* contained in your first paragraph.

If my "armour is always bright, and lance always in rest," they are used under a sense of duty only for *defence* and *not for attack*, as I am sure you will acknowledge is the case in the present instance.

The accompanying letter from Mr. Shaw, has precluded the necessity of my saying much on the occasion, but it is proper to observe, that your letter is in effect a concession of two very important controverted points, viz:—that the New river branch cannot get the support of the western travel, and that Baltimore cannot divert from the Central road the trade of the west when it reaches Staunton, and lest I do you injustice, I will quote from your own words.

Referring to the New river line, you say, "It has ever been my opinion that very little travel could be drawn from Ohio by this railroad, except that for the Virginia Springs, and that which necessarily follows the trade." I think it has been conclusively shown, that the large capital of the northern cities competing for the western trade, will attract it, unless the Virginia road is in possession of an amount of travel capable of sustaining it, dispensing with profit from freight. Although it is true that travel will follow trade, yet in this case the trade will follow the travel, or in other words, will go on that road whose position will ensure an amount of travel, sufficient to enable it to carry freight without profit, and as you expect but little travel from Ohio, you cannot afford to carry "the trade," and therefore will not have the trade for the travel to follow.

In Mr. Shaw's report to the Board of Public Works, it is shown that the New river road is at an average distance of 50 miles from ten of the principal Springs; and therefore cannot accommodate that trade, while the Central road passes immediately by the most important of the whole, the White Sulphur, and is at an average distance of eight miles only from the same ten Springs.

On the subject of trade leaving the Central road you say, "*I do not think it very probable that the cheap tonnage would leave the Central road at Staunton for Baltimore.*" But you go on to express the opinion that "facilities for shipping," command of capital, etc., would "almost certainly enable Baltimore to supply the merchandise to this country,"—that "82 miles extra distance to Baltimore will not protect the wholesale merchants of Alexandria, Richmond, Petersburg and Norfolk." If you are right in this latter opinion, what becomes of the bright visions of the future greatness of Petersburg and Norfolk? How are these cities to be built up by the Virginia and Tennessee road? If it cannot secure to them the *wholesale business*, it ought not to desire to supplant the Central road. If your road could be sustained by travel, and bring the trade of the west at sufficiently low rates to secure a large amount of it, the fixed laws of commerce would direct capital to those cities, and they would enjoy a wholesale business.

The friends of the Central road are not disposed to surrender so quietly to Baltimore; they are prepared to unite in a great effort to secure for Virginia that share of the import and export trade which her position entitles her to expect. They hope to accomplish it in part, by making their road a channel of cheap transportation of the heavy productions of the west, and thus to invite capital, which is a necessary agent in this work.—They wish to increase the wealth of Richmond, to enable her to open the navigation of James river, or to build a railroad to some point below the worst bars, in Charles city county, thus making Norfolk the great sea port for the south, or if York river is the best outlet, to make a road in that direction.

I am really very tired with this discussion, but hope it will have the effect of eliciting the truth on the subject involved, and I will dismiss it, assuring you, that you are mistaken if you suppose there is any disposition on my part to withhold information about the grades of our line between Covington and Richmond; but I think the manner in which you refer to the grades, as being 70 and 80, between Staunton and Covington, and 70 *and* 75 *for* 11 *miles* at the Blue Ridge, is calculated to produce a false impression. It might be inferred that the maximum grades mentioned, occurred as well against the heavy as the light trade, which is not the fact. It is important also to know whether these grades are on curves or straight lines.

The highest grade between Covington and the summit at the Blue Ridge, going east, will be 70 feet, and going west 80. There is a 75 feet grade, ascending the Blue Ridge going west, but it is on a straight line, which is more favorable than a much lower grade on a curve; from the Blue Ridge to Richmond, the grades are light, and taking the whole together, I believe will be found much more favorable than on the competing route.

For the rest, I will refer you to Mr. Shaw's letter, which follows. Very respectfully,

E. Fontaine.

To Col. E. Fontaine:

Dear Sir—As Col. Garnett's letter to you in this morning's Whig, makes some little complaint of his having to encounter, single handed, both yourself and me, it may perhaps meet your approbation that the less formidable antagonist should appear in defence of our position.

Professional controversies are always distasteful to the public. They are very little read, because, frequently, of their not being understood by unprofessional readers, but oftener, because of the prejudice entertained against even the best intentioned controversalist—the public being disposed in all controversies to accuse advocates of the wish rather to present themselves than their cause.

Of this I am so convinced that, but for the mention of me and my argument, I should have been disposed to rest the case without further debate.

I shall do so now in a brief recapitulation of what I consider we have jointly proved against the rival interest—adverting, in conclusion, to one or two striking inconsistencies in Col. Garnett's argumentation.

Every point raised by him is debateable, but let a few suffice as a sample of the weakness of his position:—

1. We have proved that the distance from the mouth of Greenbrier to Washington and Baltimore is 108 miles shorter by the Central than by the Virginia and Tennessee railroad.

2. That the distance from Cincinnati to Washington is 14 miles shorter by the Central than by the Parkersburg branch of the Baltimore and Ohio railroad.

3. That the distance from Staunton to Baltimore is 82 miles longer than from the same point to Richmond.

4. That from Staunton to the Capes of Virginia, by way of Richmond, is 182 miles shorter than by way of Baltimore.

5. That the distance from Cincinnati to Baltimore, by the Baltimore and Ohio road, though a few miles shorter in measured distance, is at least 50 miles longer, in equated distance, than by the Virginia Central road.

6. That with the use of two assistant locomotives at the Alleghany Mountains, which will create a very small additional charge on the through traffic, 7 engines will do on the Covington and Ohio road, the work of 10 engines on the Virginia and Tennessee road.

7. That in connection with the cheap transportation of the canal from Covington to Richmond, this route would command all the heavy tonnage.

8. That the proposed New river branch of the Virginia and Tennessee railroad cannot at all accommodate the Springs travelling as the Central would do.

9. That, in consequence of its presenting the very best route from west to north, the Central must command the through traffic, both in goods and passengers, in competition with the Virginia and Tennessee road; and,

10 That tonnage, even by Col. Garnett's admission, will not leave the Central line at Staunton for Baltimore, the distance being 82 miles shorter to Richmond.

I do not agree with Col. Garnett, that in spite of all the above enumerated advantages, the Virginia towns must concede the contest for import trade to Baltimore. Such a conclusion would be very disheartening to southern enterprise. Moreover, if the Central road, with aid of the canal, should fail in this object, how can the Virginia and Tennessee road expect to accomplish it?

As respects the gauge question, Col. Garnett has certainly made the best argument possible for his gauge, though he has failed to establish the proposition with which he set out, viz: that the difference in gauge of 3½ inches is a curse to the State. He seems now only to be trying to prove that the State is cursed to the amount of 18 per cent. That is, however, by no means evident. Light engines and frequently light trains are getting now to be the fashion on active lines, as the Central is expected to be; and increased width of track will involve the use of longer, as well as broader, and consequently of heavier engines. These can neither start nor stop with the ease and expedition required by the local traffic, and will require also a heavier and more expensive superstructure.

I shall exhibit to the Committee of roads, proof that bridges to connect the railways of Pennsylvania and Virginia with those of Ohio, are confidently expected, and that meanwhile the use of swing bridges will accommodate the trade; and that they suppose and require *uniformity* of gauge on the two sides of the river.

The *inconsistencies* in Col. Garnett's mode of arguing consist,

1st, In insisting that the difference in measured distance is of importance, until he finds, contrary to his expectation, that it is against his road, when, all at once, it becomes a matter of small moment.

2d. In claiming for the Virginia and Tennessee road a great advantage over the Central, on the grounnd that at a few points there might be inferiority to a small amount in grade; and that consequently, the shorter distance on the Central would not avail it in competition with the Virginia and Tennessee road; while at the same time, he argues that all travelling destined for Baltimore, "will find its nearest route by Parkersburg," tho' he admits the fact that this latter route is encumbered with a large amount of grade as high as 116 feet per mile. By some new process of reasoning, he seems to argue that this latter disadvantage, being "a matter of necessity, and not of choice," is not of much consequence.

This argument against Col. G's consistency might be expanded, but brevity is now my professed object. I am glad to find that the comparison of grades which he would have the public suppose that I decline, though I have several times proposed it to him, is at last directed by the Legislature. The Central road has nothing to fear, though some of its grades may exceed the limit on the Virginia and Tennessee road; the latter road is so far surpassed in goodness of grade on the Covington extension westward.

As the public is probably by this time tired of us, I would recommend that we commit our case to the Legislature. Yours with esteem,

Richmond, Jan. 29, 1852. Chas. B. Shaw.

Cost of Railroads of the State of New York, 1851.

NAME.	Miles in use.	Capital stock by charter and articles.	Amount of stock subscribed.	Amount paid in by last report.	Amount now paid in.	Funded debt by last report.	Funded debt, present amount.	Floating debt by last report.	Floating debt, present amount.	Funded and floating debt, present amount.	Interest per cent on debt.	Cost of road by last report.	Cost of road to present time.
Albany and Schenectady	17	$1,000,000	$1,000,000 00	$1,000,000 00	$1,000,000 00	$700,000 00	$716,665 00	.....	.....	$716,665 00	6	$1,711,412 30	$1,740,449 97
Albany and W. Stockb.	384	1,000,000	1,000,000 00	1,000,000 00	1,000,000 00	none.	none.	none.	none.	none.	none.	1,930,895 01	1,930,895 01
Buffalo and Niagara Falls	22	393,750	393,750 00	256,250 00	302,866 70	21,670 00	19,670 00	12,495 00	5,178 36	24,848 36	7	428,241 39	440,919 46
Buffalo and Rochester	76	1,825,000	1,825,000 00	1,825,000 00	1,825,000 00	.....	160,903 00	.....	.....	160,903 00	7	.....	2,228,976 89
Cayuga and Susquehanna	35	500,000	168,000 00	168,000 00	168,000 00	300,000 00	300,000 00	134,849 83	231,452 53	531,452 53	7	514,884 17	617,313 26
Hudson River	144	4,000,000	3,719,239 23	3,310,552 17	3,703,229 23	3,486,750 00	5,646,884 92	111,151 37	159,427 58	5,806,312 50	7	6,666,681 55	9,305,551 09
Hudson and Berkshire	31¼	450,000	380,000 00	425,000 00	425,000 00	325,000 00	325,000 00	49,149 92	48,000 00	373,000 00	7	821,331 45	823,331 45
Long Island	95	3,000,000	3,000,000 00	1,825,148 28	1,825,148 28	426,670 63	512,957 25	14,535 62	7,403 81	520,361 06	6	2,091,341 59	2,339,938 64
New York and Erie	464	10,500,000	5,996,200 00	5,801,985 29	5,992,289 29	9,856,568 90	14,503,868 90	2,475,864 64	2,957,376 31	17,461,245 21	7	20,323,581 03	24,098,858 20
New York and Harlem	131	5,000,000	3,888,750 00	3,887,930 00	3,888,750 00	365,503 48	869,201 48	212,684 57	115,366 28	984,567 76	6¼	4,466,208 05	4,873,317 76
New York and N. Haven	61	3,000,000	3,000,000 00	2,499,250 00	2,788,375 00	881,000 00	1,376,000 00	37,487 14	69,534 18	1,445,534 18	7	3,417,737 14	4,223,909 18
Northern	118	2,000,000	2,000,000 00	1,334,612 91	1,529,863 21	1,081,232 50	1,602,790 00	546,650 04	1,081,831 93	2,684,621 93	7	2,979,937 31	4,299,089 35
Oswego and Syracuse	35	350,000	350,000 00	350,000 00	350,000 00	200,000 00	200,000 00	10,403 67	10,413 27	210,413 27	7	571,774 21	588,678 02
Rensselaer and Saratoga	25	610,000	610,000 00	300,000 00	610,000 00	185,500 00	821,000 00	4,379 00	.....	25,000 00	7	687,813 43	723,565 48
Rochester and Syracuse	104	5,549,800	5,549,800 00	3,364,979 75	4,170,000 00	916,000 00	821,000 00	.....	.....	821,000 00	6	4,200,000 00	4,861,361 94
Saratoga and Washington	524	1,350,000	886,200 00	850,400 00	886,200 00	424,000 00	596,500 00	66,000 00	120,000 00	662,500 00	7	1,102,505 65	1,452,635 07
Schenectady and Troy	20¼	650,000	650,000 00	650,000 00	650,000 00	59,700 00	73,800 00	1,698 89	2,654 96	76,454 96	7	680,046 32	681,046 86
Syracuse and Utica	53	2,400,000	2,400,000 00	2,400,000 00	2,400,000 00	48,000 00	103,000 00	none.	none.	103,000 00	7	2,490,083 99	2,570,981 71
Troy and Greenbush	6	275,000	274,400 00	274,400 00	274,400 00	4,550 00	3,850 00	4,100 72	none.	3,850 00	7	292,527 93	294,731 43
Utica and Schenectady	78	4,500,000	4,500,000 00	3,494,010 00	4,124,000 00	102,500 00	102,500 00	none.	none.	105,500 00	7	4,143,918 00	3,971,155 89
Watertown and Rome	72	1,500,000	890,100 00	467,636 37	659,715 78	200,000 00	442,000 00	.....	53,385 26	495,385 26	7	603,456 52	1,133,397 36
Buffalo & Conh'n Val. (1)	....	1,400,000	1,411,900 00	.....	230,494 00	.....	.....	.....	110,000 00	.....	.....	.....	274,267 62
Buffalo and State Line (2)	....	1,000,000	791,000 00	31,932 45	605,926 41	.....	.....	.....	87,177 20	87,177 20	7	32,120 15	640,696 42
Canandaigua & Corn'g (3)	464	1,600,000	458,700 00	64,457 62	462,589 27	none.	231,000 00	none.	256,870 15	507,870 15	7	45,028 54	883,304 11
Chemung	17¼	380,000	380,000 00	380,000 00	380,000 00	70,000 00	70,000 00	5,000 00	none.	70,000 00	7	450,000 00	490,000 00
Plattsburg & Montreal (1)	....	500,000	.....	.....	12,460 00	.....	.....	.....	.....	.....	.....	.....	10,781 77
Sackett's Har. & Ellisb (5)	....	175,000	78,450 00	.....	66,613 61	.....	.....	.....	6,556 74	.....	.....	22,888 97	68,917 81
Roch., Lockp. & N. F. (6)	....	175,000	175,000 00	24,778 68	238,273 75	.....	none.	.....	none.	.....	.....	.....	556,090 62
Saratoga and Schenec'y (7)	22	300,000	1,036,800 00	300,000 00	300,000 00	42,000 00	125,000 00	22,500 00	none.	125,000 00	7	396,379 53	462,131 35

1. First report, no part in operation. 2. No part in operation. 3. Operated by Erie railroad company. 4. Leased to Erie railroad company. 5. Second report, no part in operation. 6. Re-organized December, 1850. 7. Leased to Rensselaer and Saratoga railroad company.

Ohio and Mississippi Railroad.

We have received a copy of the recent report of the Chief Engineer of this road, O. M. Mitchell, Esq., setting forth the present condition and prospects of the Ohio and Mississippi railroad, which is to connect, by the shortest practicable line, the cities of Cincinnati and St Louis.

The report states that after a full and deliberate examination of the resources of the cities of St. Louis and Cincinnati, and the intervening country, the conclusion was reached that it would be unsafe to rely upon the west for more than $3,500,000, in stock subscriptions; that whatever beyond this sum might be required, must be sought for abroad. In view of these facts, the Engineer suggested the expediency of inducing a powerful company of contractors in the eastern States, to undertake the construction of the road, upon terms within the reach of the company. In pursuance of this suggestion, Mr. Mitchell visited this city for the purpose of effecting the above object; and on the 22nd day of November last, a contract was entered into with H. C. Seymour and his associates, for the entire construction and equipment of the whole road, which has been duly ratified by the respective railroad companies.

The following are some of the most important details of the contract:

Messrs. Seymour & Co. have contracted to build, finish, furnish and equip the entire line of railroad extending from the city of Cincinnati to the city of St. Louis, for the gross sum of nine millions of dollars, the distance not to exceed three hundred and thirty five miles. In case the distance exceeds the above, the excess to be paid by the companies, and not by the contractors.

For the sum of nine millions the contractors obligate themselves to finish in five years the entire work, and to turn over to the company each successive section so soon as it may be finished, with adequate depots, and machinery for working so much of the line as may be then ready for use.—The grades, curves, width of cuts, embankments, tunnels, etc., etc., are all specified in the contract. The character of the masonry, bridges, ties, chairs, rails, etc., are in like manner specifically stated, and all the work is to be done under the direction and to the satisfaction of the engineers of the company.

The expenses of engineering, with the exception of the salaries of the chief consulting and constructing engineers, are all charged to construction, and are paid by the contractors. To secure the right of way, depot grounds, etc., the contractors allow the companies the sum of three hundred dollars per mile, or about one hundred thousand dollars. Any amount beyond this which the land and land damages may cost must be paid by the companies.

The contractors are further obligated to build all the depots, station houses, engine houses, turn tables, and machine shops required on a first class railroad; and to furnish from time to time, as may be wanted, forty locomotives, forty passenger cars, five hundred freight cars, thirty sideings of 1000 feet each, etc., etc.

The companies, on their part, obligate themselves to pay the contractors, as the work progresses, on the monthly estimates of the engineers as follows:

Seven-eighteenths in cash;

Five and one-half eighteenths in stock of the company;

Five and one-half eighteenths in the bonds of the company.

Thus, for the entire construction, engineering, furnishing and equipping as above, the companies will pay to the contractors nine millions as follows, viz:

Three and one-half millions in cash;

Two and three-quarter millions in stock;

Two and three quarter millions in bonds.

This will cover the total cost of construction excepting salaries of the two chief engineers, and of the officers, office expenses, depot grounds, and such incidental expenses as may arise in procuring the right of way.

It will be seen by this contract, the companies obligate themselves to pay the contractors three and one-half millions of dollars in cash, to be obtained from subscriptions of stock and from the loan of the city of Cincinnati. There remains at present yet to be obtained about one and a half millions of stock subscription, to complete the entire amount of cash required under the contract. The companies have, however, reserved the right to issue one million of dollars of second mortgage bonds in case it be impossible to procure the necessary amount of cash from other resources, these bonds only to be issued after five millions of dollars shall have been expended on the construction of the work.

It is confidently believed, says the report, that the entire amount in stock required under the contract, will be taken in the west, so soon as arrangements can be made to enable me in person to present this subject to the citizens of Cincinnati and St. Louis, and to the persons living along the line in Ohio, Indiana and Illinois.

The bonds given by the companies to the contractors in part payment, are secured by a first mortgage on all the property of the companies.—The sum total thus secured amounts to two millions seven hundred and fifty thousand dollars. No other mortgage can be given by the companies except that already mentioned of one million of dollars, which it is believed will never be required, and if used can only be employed after the expenditure of five millions of dollars in construction and equipment. It will thus be seen that the probable amount for which the road will stand mortgaged, will be two millions and three-quarters, while under no circumstances can it exceed three and three-quarter millions.

The immediate resources of the company are as follows:

Loan of the city of Cincinnati, secured by mortgage on the stock of the company.	$600,000
Stock subscriptions in Cincinnati, about.	300,000
Subscription of city of Aurora.....	50,000
" citizens of Aurora, about.	50,000
" Ripley county, Indiana..	50,000
" Jennings " " ..	50,000
" Knox " " ..	200,000
" Daviess county.....	30,000
" citizens of Knox co. about	100,000
" city of St. Louis.....	500,000
" citizens of St. Louis.....	125,000
Total.....	$2,055,000

No effort has been made to procure subscriptions to the stock since the completion of the contract for construction. Mr. Mitchell proposed to immediately commence a canvass, for the purpose of securing the necessary additional amount of stock subscriptions, and expresses his entire confidence in being able to secure the required sum.

The work of construction was formally commenced on the 7th inst., at Illinoistown, and on the 9th inst., at Salem, the Illinois charter requiring the absolute commencement of the work on or before the 12th inst. A large engineering force is now in the field, carrying out and perfecting surveys; and it is the intention of the contractors to commence operations on a large scale at various points, as soon as the season opens.

After giving the above concise history of the operations of the company up to the present time, Mr. Mitchell devotes the remainder of his report to a discussion, of the general characteristics and business prospects of the proposed road.

It will be unnecessary to repeat the arguments adduced to show the importance of a direct line of railroad between the cities of Cincinnati and St. Louis. They are the two great commercial cities in the west. They are certain to be visited by the western traveller, whether upon business or pleasure. The great routes of western travel must pass from one to the other. This travel, though only in its infancy, already exceeds the capacity of any one road to accommodate. Of its future extent we can form no adequate idea. Upon the best route between the two cities will be thrown not only the travel between Cincinnati and St. Louis, but that passing from one extremity of the continent to the other. Lines of railroads from all the eastern cities converge upon Cincinnati. They will all be carried forward to the Mississippi by the above road. These general statements will probably convey a better idea of the value and importance of the Ohio and Mississippi railroad, as a *through route*, than any statistics of existing or anticipated sources of business.

By the above road, the time required to go from Cincinnati to St. Louis will be about 14 hours. It now requires 4 days to pass between the two places by steamboat.

We give the following from the report in reference to the route traversed, and the local business of the road.

I will now say a few words of the country traversed by this line of railway, commencing with the Western Division. Stretching across the vast prairies, our route presents the highest advantages for a distance of one hundred and forty-five miles within the limits of the State of Illinois. With easy grades, and gentle curves and a solid foundation, this division is susceptible of the highest velocities, and of vast working capacity. Throughout this distance there will be little difficulty in so locating the stations, that trains may actually be visible from station to station, and signals may indicate such facts as may render it possible with a single track, thus securely managed, to do the business of a double track, saving the original outlay and all subsequent repairs. Some of these prairies extend unbroken for fifteen and twenty miles, and there are points at which an observer may stand and note the coming of a train for fifteen miles in either direction.

These prairies are not flat, marshy and unproductive, they are on the contrary rich, and sufficiently rolling to present an admirable foundation on which to build, susceptible of complete drainage by the side drains of the road, always exposed to the sun and air, the repairs on this large section of the road must ever remain a very inconsiderable item, compared with those required in wooded countries.

Along the entire distance, while there are now thrifty farms, and towns and villages, nearly the entire country is in a rude and uncultivated condition. This is simply owing to the fact that up to the present time, the agriculturalist has had no inducement to industry. He was so far from market that it was even better to let his corn and wheat rot on the ground than to attempt its transportation.

I have actually known thousands of bushels of corn, even on the Wabash, lost for want of a purchaser at ten cents per bushel;

How rapid and almost magical the change which will be wrought by the construction of this railway? Under the stimulating power of a lucrative market, this entire country will teem with the industrious and the enterprising. Every product of the soil, and every species of stock, will by the facilities thus afforded, crown the efforts of the husbandman, and stimulate to new enterprise.

This division of the road can be build without delay, and as rapidly as may be consistent with the best interests of the parties to the contract. There is no heavy cutting, filling or bridging, which can prevent, if desired, the completion of this section within a period of fifteen or eighteen months.

The same remarks which have been made with reference to the undeveloped condition of Illinois, apply with equal force to the route through the State of Indiana. The rich and fertile valleys of the Wabash, the East and West forks of White river, and other streams along our line, present susceptibilities which it is impossible to estimate. After penetrating forty miles east of the Wabash, the prairie entirely disappears, and a heavily timbered country is traversed through the remaining distance in Indiana.

In speaking of the undeveloped condition of Illinois and Indiana, it is not intended to convey the idea that the sections traversed by our line, are less populous or rich than other sections of these States. On the contrary the tier of counties through which our location will be made, is not exceeded in wealth and population by any parallel tier with the exception, perhaps, of those counties through which the National road passes, and which from this special advantage have improved more rapidly than any other portion of the State. I merely wish to convey the idea that the whole region is comparatively a wilderness and that no just estimate of what it may become, can be formed from what it now is.

In the rich alluvial bottom lands, corn is grown in vast quantities, and in many instances it is left standing in the field until consumed by droves of hogs, which are thus made to be its harvesters.—Hundreds of acres, bearing on each from fifty to one hundred bushels of corn, I have known to be actually sold standing, at five dollars the acre.

So soon as a market can be furnished, an entire change will be wrought in the agriculture from one end of our line to the other.

While the country thus directly traversed by our road is destined to furnish a vast and ever increasing business, the surrounding regions will be made tributary by the numerous feeders, furnished by the natural and artificial channels which cross our route nearly at right angles.

I will rapidly enumerate these in their order, passing from the west to the east. At the distance of seventy-five miles from St. Louis, we intersect the great Central Illinois railroad, uniting the mouth of the Ohio with Northern Illinois, and with the great lakes. The Chicago branch will, in all probability, be taken out at or near our point of intersection. This road, bisecting nearly the State of Illinois north and south, will give to each of these divisions of the State a choice of markets, either to proceed to the south, or by our road to seek the north.

In like manner the travel by the lower Mississippi river and the Mobile and Ohio railroad, on reaching Cairo, will by this road naturally fall into ours, and thus make their transit to the eastern seaboard in far less time than is now required to ascend the Ohio river by steamer to Cincinnati.

One hundred and forty-five miles from St. Louis we cross the Wabash river, and also the Evansville and Terre Haute railroad. The Wabash valley has long been celebrated even in the west for its uncommon fertility. Extending for some two hundred miles above Vincennes, its products will naturally seek our road, either by flatboat or steamer, as the outlet to market. The more especially is this true, in consequence of the fact that a choice will here be presented either to go south, to St. Louis or New Orleans, or east to Cincinnati and the seaboard. The Evansville and Terre Haute railroad will also furnish facilities to travellers from St. Louis seeking Kentucky, and Northern Indiana. On arriving at Vincennes, they may either proceed to Evansville or to Terre Haute, where they intersect the Terre Haute and Indianapolis railroad.

Proceeding east from Vincennes, we intersect the Wabash and Erie canal at a distance from Vincennes of about twelve miles. Here we also fall into and cross the extensive valley of the west fork of White river. Our line next crosses the New Albany and Bedford railroad, and there passes probably into the valley of the east fork of White river. Proceeding east about one hundred and twenty miles from Cincinnati, we intersect the Jeffersonville and Columbus railway, a road of special consequence from the fact, that when once reached by our line from Cincinnati, a direct and rapid communication is at once formed between this city and the city of Louisville.

The next intersection occurs at seventy-five miles from Cincinnati with the Madison and Indianapolis railroad, and on reaching Lawrenceburg, 22 miles from Cincinnati, we reach the terminus of the Lawrenceburg and Indianapolis railway, also the terminus of the Lawrenceburg and Indiana canal.

Commencing now at Cincinnati, it will be seen that our road by its various connections and intersections, furnishes direct communication with Indianapolis, and all Northern Indiana by two short and expeditious routes, also with Madison, and with

Louisville and New Albany; with Evansville and Northern Kentucky, and with Terre Haute and the upper Wabash; with Northern and Southern Illinois, and with the mouth of the Ohio river.

In reference to the value of the stock, we give the following, viz:—

I proceed to the last point of examination—an estimate of the probable value of the stock. Before entering on this subject directly, I must be permitted to avert to some peculiar features in our organization and resources. The money subscribed by Cincinnati, by St. Louis, and by the counties of Indiana, must be expended in the immediate vicinity where the subscription is made. This condition without explanation might seem to hamper the movements of the company, while on the contrary there is not the slightest disadvantage arising from it. The true interests of the company, even in case all the money required for construction were in the treasury, would demand the immediate construction of so much of the eastern division as extends from Cincinnati to the Jeffersonville and Columbus railroad, for this section once finished, a large revenue will at once arise from the trade and travel passing over our line to Madison, Indianapolis, Louisville and New Albany.

The subscriptions and loan of Cincinnati, of Aurora, and of Ripley and Jennings counties Indiana, are directly applicable to the construction of this section and are amply sufficient to complete it in the shortest possible time consistent with economy.

In like manner the subscriptions of St. Louis and Illinois are devoted to the construction of the western division, uniting St. Louis with Vincennes, the Wabash and with the Evansville and Terre Haute railway. From this section a large revenue will be derived. Finally, the subscription of Knox and the adjoining counties of Indiana, are directly appropriated to the construction of the line from Vincennes eastward, and are sufficient to build the road for forty or fifty miles, on the prolongation of the western division.

For these sections then, there are ample means already subscribed, and these are the sections which should be first constructed. These once finished, St. Louis and Cincinnati will be brought within twenty-one hours of each other, with the entire distance (twenty miles excepted,) traversed by iron, as will be seen from the following table:

St. Louis to Vincennes	145	miles,	6 hours.
Vincennes to White river	40	"	2 "
White river to Orleans by stage	20	"	4 "
Orleans to New Albany railroad			2 "
New Albany to Jeffersonville			1 "
Jeffersonville to intersection			2 "
Intersection to Cincinnati			4 "
Total			21 hours.

Thus it is seen that so soon as these sections can be completed, we have every reason to believe that we can command the through travel from St. Louis and from the mouth of the Ohio, and also from the east going south and west.

Indeed our income will commence with the completion of each successive part of the eastern section, and increase as we approach nearer to the junction with the Jeffersonville and Columbus railway.

Should the receipts from these sources during the progress of the work, prove sufficient to keep down the cost of construction to nine millions of dollars, (as it is believed they certainly will do,) our estimate of the value of the stock may be based on this sum as the absolute cost of construction.—To cover, however, every possible contingency, interest, etc., our estimates will relate to an outlay of ten millions of dollars.

In estimating the number of passengers which may traverse the entire length of our road, on the daily through travel, reliance has been placed upon the register of steamboats at St. Louis, Cairo, and at Cincinnati.

All steamers arriving from the Ohio river above Cincinnati, may bring passengers for the Ohio and Mississippi railroad. In like manner all New Orleans boats, all boats arriving from points below the mouth of the Ohio, and the Louisville packets bringing the passengers from the Mississippi boats, may bring passengers tributary to our road.

At St. Louis the arrivals from the Missouri, the upper Mississippi, and the Illinois, especially the former, will furnish passengers to the road. Arrivals from the lower Mississippi must in like manner become available in this estimate.

The total number of arrivals and departures registered at Cincinnati during the year just closed is 7,000. Of these 1,200 come from the upper Ohio; 1,400 come from Louisville; 1,000 come from the lower Mississippi; and 700 come from St. Louis and the upper Mississippi.

The total average number of arrivals and departures at St. Louis, for the past five years is five thousand four hundred. Of these seven hundred and forty-four are from New Orleans; eight hundred and eighty-six from the Ohio river, exclusive of Cairo; thirteen hundred and ninety-six from the upper Mississippi river; and six hundred and seventy-four from the Missouri river.

We find therefore that there are just three thousand six hundred and fifty arrivals and departures at St. Louis, of boats bringing passengers who may pass over our road.

Of these boats, many are of the largest size, and afford accommodations for from three hundred to five hundred passengers. If to these sources we add the patronage derived from railways and all other modes of transportation, it can hardly be possible that the through travel per diem, on opening the road, can fall below the following estimate, viz:—

500 1st class through passengers at $6 70	$845,200
250 2d class through passengers at $3 35	261,300
Way passengers equal half the through do	522,600
Income for 312 days	$1,629,100

To carry the passengers thus estimated, two daily express trains, two daily accommodation trains, and two daily emigrant trains will be required.

If the estimate for passengers has been difficult, that involving the freight is not less so.

We first present some general considerations, which are considered of vast importance in this estimate, and deserve the most attentive consideration.

It is found by the last census that Ohio, Indiana, and Illinois, in the production of breadstuffs, far exceed any other three States in the Union; while Missouri also holds a high rank in the production of wheat, corn, cattle, hogs, etc. Our road links together four States, whose power, influence and capacity it is impossible to estimate.

We find for example, the following exhibit of the productions of wheat and corn, of the six most powerful States in the Union:—

	Bushels.
Ohio	74,759,000
Illinois	66,613 090
Indiana	59 513,000
Virginia	50,056,000
Pennsylvania	35,190,000
New York	31,918,000

The east and south must look to the agricultural products of Ohio, Indiana, Illinois, and Missouri, both animal and vegetable, as among the principal sources of wealth. And both the eastern and southern railroads, are in like manner measureably dependent on the same products for their value.

Our road is so situated that no matter in which direction the current of trade may flow, whether to the eastern seaboard or to the southern cities, it must in any and every event pay its tribute to the Ohio and Mississippi railroad. During the past winter, the Ohio and Mississippi, at Cincinnati and St. Louis have been blocked with ice, and for many weeks navigation has been entirely suspended; at such periods our road would furnish the only outlet for the flour, pork, beef, etc., etc., to reach the eastern or southern market.

The through freight to be derived from the exports of Cincinnati, in every article of her manufactures, may be judged of from the fact, that during the past year (as already stated) the gross am't of trade with the west and south has reached the sum of forty millions of dollars.

The imports of Cincinnati and St. Louis will furnish another source of freight to the road. All southern imports of groceries, etc., into Cincinnati, and all eastern imports of merchandize, etc., into St. Louis, will furnish sources from which our road must derive more or less business.

The southern imports of Cincinnati have increased in a high ratio, as means of rapid distribution have become greater. The Ohio and Mississippi railroad, will greatly increase their facilities for distribution throughout Indiana and Illinois, and will thus add in a double sense to its own value; first, in increasing the imports into the two commercial cities, and secondly, by transporting these importations to the points of distribution along our line of road,

The freights arising from the imports from the interior by our road into St. Louis and Cincinnati, can only be judged of from the productiveness and capability of the vast regions of Indiana and Illinois, which are reached by the road and its tributaries.

The live stock, hogs cattle, sheep, etc., the grains, wheat, corn, oats, rye, barley and all other vegetables, produced by the fertile regions tributary to our road, must furnish a large and perpetually increasing business. Let it be remembered that all the channels of communication, from the interior, both natural and artificial, run towards the Ohio river, and cross our line near their termini, thus connecting us directly with the interior by railway, canal and turnpike.

With these facts, I have thought it safe to estimate that at least two freight trains, of sixty tons each per day, would be required from each terminus of our road. This would be equal to one train of sixty tons per day over (4×335=1340) miles of road. Fixing the average at three cents per ton per mile, this will yield a gross income from freight equal to $2,400 per day, or $748,800 per annum.

The gross income per annum as above will be as follows:

From first class through passengers at 2 cents per mile, 500 per day, at $6 70 each, makes a gross receipt per annum of	$845,200
250 second class, do., do., at $3 35 each.	261,300
Way passengers equal to one half through do.	522,600
Freight	748,800
Total per annum	$2,377,900

In case we allow 45 per cent of the gross receipts for expenses, wear and tear, sinking fund, etc., etc., we have a net income of $1,306,855, on a total possible expenditure of ten millions of dollars.

In the appendix, which at my request has been carefully prepared by E. D. Mansfield Esq., will be found statistical tables of great value, and which I am confident will fully sustain the estimated results above given.

All of which is respectfully submitted,

O. M. Mitchell,

Chief Consulting Engineer and Commissioner, Ohio and Mississippi Railroad Company.

Cincinnati, February 20, 1852.

We give the following from the statistical tables annexed to the report, viz:

Table 1st.

Of the Population and Growth of Cincinnati.

Years.	Population.	Decennial increase.	Per cent. of increase.
In 1800..	750	....	.....
In 1810..	2 320	1,570	200 per cent.
In 1820..	9,602	7,282	314 "
In 1830..	24 831	15,229	158 "
In 1840..	46,338	21,507	87 "
In 1850..	116,108	69,770	150 "

Inference from this Table.—1. The average per cent. of increase decennially from 1820 to 1850, is about 130 per cent. 2. The per cent of increase from 1840 to 1850 is much greater than the per cent from 1830 to 1840—the previous ten years. 3. The increment of increase in the last ten years is three times as great as in the previous ten years. 4. The actual increase of the city from 1840 to 1850 is much greater than the entire population of the city in 1840! 5. In each ten years, from 1800 to 1850, the increment of increase in Cincinnati has increased on that of the previous ten years.

Deductions for the future.—As the per cent of increase in 1850 was much greater than from 1830 to 1840, it is fair to infer that from 1850 to 1860, the

per cent of increase will hardly fall below the average of three decennial periods, or 118 per cent.—2. As the actual increment has increased in each ten years, it is fair to conclude that it will do so from 1850 to 1860. Fifty per cent as the increment (from 1830 to 1840) was the least of these increases. Taking this per cent on the last increment, the actual increase from 1850 to 1860 will be 105,000, or about 90 per cent. Combining the two ratios of increase thus obtained—118 per cent and 90 per cent—and we have 100 per ct. as the probable increase of Cincinnati from 1850 to 1860, making then 232,000 as its population.

TABLE 2D.

Of the principal articles Manufactured in Cincinnati, for general distribution, in the years 1840 *and* 1850, *with the per cent of increase during that decennial period.*

Articles.	1850.	1840.	Increase per cent.
Iron.—Manufactures of, viz: rolled iron, boilers, machinery, cutlery, tools, grates, safes, rails, stoves, etc.....	$5,547,900	$1,288,199	330
Cloth and clothing—bagging, sheeting, yarn, clothing, hats, gloves, caps, etc.	4,427,500	1,940,450	130
Leather, viz:—Leather, boots, shoes, harness, hose, saddles, etc.....	2,589,650	748,211	250
Furniture and wood, viz :—Furniture, buckets, baskets, blinds, refrigerators, boxes, matresses, trunks, etc.	2,356,890	937,715	150
Grease and oils, viz:—Soap, candles, lard oil, stearine, Castor, linseed oil, etc.....	4,808,000	353,940	1,400
Liquors, viz:—Domestic, distilled alcohol, and wines..	4,191,920	145,000	3,000
Copper and tin, viz: Bells, copper vessels, plates, and tin vessels	515,000	313,000	
Animal meats, viz:—Pork, hams, beef, tongues, and pick'd meats.....	5,895 000	4,000,000	45
Books and Publications..... ..	1,246,000	500,000	150
Flour and feed.....	1,690,000	816,700	100
Tobacco	931,000	225,000	300
Cars, carriages etc..	355,000	127,000	200
Ale	566,000	68 000	700
White lead.....	385.000	121,750	200
Miscellaneous.....	1,172,000	791,000	50
Totals.....	$36,656,860	$12,402 965	200

Observations on Manufactures.—The table of Cincinnati Manufactures does not include any of those products of mechanical labor which are used entirely in this city, such as carpentry, brick laying, tailoring, baking, with various other mechanical work of that kind. The total *production* of manufacturing and mechanical labor in Cincinnati, exceeds *fifty-five millions* of dollars, as determined by the census statistics. The vast increase in these manufactures, of which the raw material—*iron, animals*, and grain—exist there in the greatest abundance, must strike the intelligent observer Take those of Iron, Leather, and Grease, collectively, for example:

	1840.	1850.
Iron.....	$1,288,199	$5,547,900
Leather, etc.....	748,211	2,356,890
Grease and Oils.....	353,940	4,808,000
	$2,390,350	$12,712,790

In ten years time these three classes of products have increased 400 per cent.! These articles are among those which are widely distributed throughout the west. So also of all the manufactured products of grain.

If, as it is believed, the Eastern railroad from Cincinnati to Marietta, or Parkersburg, shall cheapen or render uniform the price of coal, (the motive power of manufacturing,) the manufactures of Cincinnati for distribution, must rapidly increase, (as they have done in past years,) and the manufactured articles for distribution, will, in a few years, be doubled and trebled, thus furnishing so much increased freight for railroad carriage.

TABLE 3d.

Of the population and growth of St. Louis from 1820 *to* 1850.

Years.	Population.	Decennial increase.	Increase per cent.
In 1820..	4,598	.....	....
In 1830..	5,852	1,534	35 per cent.
In 1840..	16,469	10,617	100 "
In 1850..	82,742	66,273	400 "

Inferences from this Table.—1. The ratio of increase has been constantly and rapidly increasing. 2. The increments (third column) have also been rapidly increasing. 3. The average ratio of increasing for thirty years, decennially, is 175 per ct. 4. Supposing the last increment to be the same for the next ten years it would give 75 per cent. 5.—Combining the ratio of increase [average] with the increment, [last,] the result will give 125 per cent. increase for the next ten years, which would make the population of St. Louis 186,000 in 1860.

TABLE 4th.

Of Steamboat Arrivals and Departures at and from Cincinnati and St. Louis for 1850—51.

Places.	Arrivals.	Departur's	Total
Cincinnati to N. Orleans	...	249	249
" from "...	288	...	288
" to St. Louis...	...	...	222
" from ".....	214	...	214
" to Pittsburg..	...	547	547
" from ".....	658	...	658
" to other ports.	...	2,274	2 274
" from ".....2,538		.....	2,538
St. Louis from N. Orleans	300	...	300
" from Ohio river. [not Cincinnati.]	457	...	457
" Illinois river....	631	...	634
" Missouri river..	301	...	301
" Cairo "....	119	...	119
" Upper Missouri	639	...	639
" Other points....	175	...	175
	6,323	3,070	9,615

Note.—The number of departures from St. Louis are not included in the above table; but as the departures and arrivals must be very near equal, we may opine the departures from St. Louis to be equal to the arrivals, making the total number of Steamboat arrivals and departures equal to 12 240, or that number of distinct voyages. These boats average more than 200 tons each, and the carriage of boats is much beyond their measured tonnage. Assuming that they carry actually 150 tons each, the tonnage carried in these voyages is equal to 1,836 000 tons.

The above road is one of the greatest projects of the kind ever undertaken in this country. In looking at a map of the United States we cannot select a more important route for a railroad than that between Cincinnati and St. Louis. It has long been a favorite project with the former city, and has occupied a conspicuous place in public estimation.—The company ought certainly to have no difficulty in making good their part of the contract, as we feel assured the contractors will theirs. They are men of undoubted capacity, and of great experience in the work of railroad construction, and we have full confidence that they will push forward with energy and vigor. They propose, we understand to have the Illinois portion of the road completed in 18 months from the opening of the season; at which time New York and St. Louis will be connected by a continuous line of railroad which will bring the Ohio and Mississippi railroad into profitable use.

Rutland and Washington Railroad.

Report of the Directors.—We are happy on this occasion, to congratulate you on the completion of your entire road, from Rutland to Salem, N. Y., so far at least, as to be in condition to be opened for public use. Some further work yet remains to be done by the contractors in gravelling, fencing, and masonry where stone was not accessible during the progress of the work.

You were made aware, by our previous report, that the contracts with Messrs. Strong & Chamberlain, and with Messrs. Eastman & Page, provided for the entire construction of the road, including the right of way, the grading, superstructure, and fencing, ready for the running of the cars in a manner equal to the first class New England roads, at a cost of twenty-five thousand dollars per mile.—We are happy to say that these contracts will be complied with, and without any advance in prices, and we believe that you will have a railroad which in all the requisites of a first class road, in perfectness of construction, in its unusual proportion of straight line, and in its light grades will have *few equals* and *no superior* in the Eastern States. Commencing at its connection with the Rutland and Burlington road in Rutland, it passes through West Rutland, (near Clarendon Springs,) Ira, Castleton, Poultney, Vt. Hampton, Granville, N. Y., Pawlet, Rupert, Vt., to Salem, N. Y., thence connecting with the Troy and Rutland road; which latter at Eagle bridge connects with the Troy and Boston road, from Eagle bridge to Troy.

Your directors have taken a perpetual lease of the Troy and Rutland road, from Salem to Eagle bridge, a distance of 17 miles, for the sum of $9,000 the first year, and after that at 4 per cent on its cost of $400,000, and one-half the net income above that sum. The road to be entirely completed, bridges covered, depots and water stations erected, which gives us an entire line from Rutland to Eagle bridge.

A favorable contract for doing the business of your road has been made with the Troy and Boston road. Your directors have also made a contract with the Albany Northern road, a corporation who are now building a road from Albany to Eagle bridge, which the corporation have agreed to complete by the first day of January next, by which the business of the two roads is to be consolidated, and to be managed by one set of officers, and the earnings and expenses to be divided in proportion to the cost of each road—thus in effect, making your road *ninety miles* from Rutland to Albany, and having an outlet south at both Albany and Troy, and connecting with both the Hudson river and the Harlem railroads to New York city, and connecting with the Albany and Troy railroads to Schenectady and Buffalo.

Our attention has been called by many persons of capital and intelligence, in Granville and Whitehall, to the value and necessity of a road between those places. The advocates of this project say, that from a point on this road, in the town of Granville, it is only nine miles to Whitehall, at the head of navigation on Lake Champlain, over a route of easy and cheap construction. That this link being supplied would make yours the shortest road between Whitehall and Troy and Albany, as it already is, and ever must be, between Montreal and Quebec on the north, and New York on the south. They further urge that by the building of this short line of road, an immense trade would be fostered and in some measure created between the Canadas, Northern New York and Vermont, and the manufacturing country of Western Massachusetts and Connecticut on the south. These exchanges so far as they now exist, are carried on circuitously through New York, subject to many charges, and one or more additional profits. The friends of this project insist that, with proper encouragement and attention, that portion of the exchanges of the 300,000 manufacturing population of Western Massachusetts, Connecticut and part of Rhode Island, destined for the valley of Lake Champlain and the St. Lawrence, will concentrate at Eagle bridge, and thence over your road, will seek the head of navigation of Lake Champlain at Whitehall, that they will find this route the short-

est in distance, the quickest in time, and the cheapest in price. They say that each of these countries produce the commodities that the other wants, and that now, for the first time being about to have the opportunity to make direct exchanges at less expense and in much shorter time, it is inevitable that a greatly enlarged intercouse must take place. These views are entitled to respect, and we recommend them to the careful consideration of the stockholders of this road, and all others interested.

In brief, then, your road is an important link in the *great trunk line* from Montreal (and all the Canadas) to New York city, the commercial metropolis of America, and especially the mart of our *foreign trade*, which distance will oe accomplished the present season in *fourteen hours*.

It is an important link in the shortest chain of roads from Lake Champlain to Boston. It is an important link also, in the chain of roads from Boston and all New England, north and east of Boston to Saratoga Springs, and the great west, either by Ogdensburgh, or by the line of roads to Buffalo.

Having thus mentioned the connection of yours, with other roads, and the reasons for anticipating a large through business, we with more pleasure allude to the local business upon your own line, which is entirely within your own control. The munificence with which Providence has filled the mountains and valleys of Vermont with *mineral* wealth, will ere long be as proverbial as are now their healthful climate and beautiful scenery.—But in an especial manner is your road highly favored.

Your directors have, during the past year, constructed a side track of half a mile, to the *extensive marble quarries* of West Rutland. These quarries have only been worked within the past ten years, and mostly within five years. *Ninety four* gangs of saws are to be supplied the present year from these quarries. The tonnage of which will be at least twenty thousand tons, and the value, little, if any, short of $500,000. The business has grown to its present magnitude under the incumbrance of an expensive cartage to Whitehall of 50 per cent more than the whole railroad freight to tide water hereafter will be; and this, at *increasing* prices for the marble sold. That the business is destined to an enormous and almost incalculable increase, will be readily believed, from the fact that good marble for architectural purposes can now be delivered at a profit in New York in large blocks, and in any quantity, at the present price of Connecticut or New Jersey sandstone, being less that *one-third* the price of marble. Such, however, is the demand for *Rutland* marble for supplying the *west*, that it is sold at the mills where sawed, at the price of *Italian* marble in New York. It is supposed that the Rutland quarries are the only ones in the country accessible by railroad, without the expense of cartage; this, while it gives those quarries a decided advantage, is of vast importance to your road as possessing advantages over any other for the transportation of large masses which cannot be moved by wagons, or reloaded without great expense.

Another very large source of permanent business to your road will be the transportation of slate from the inexhaustible quarries near the line of your road, the working of which has just commenced. Without going into details, we may say on the authority of a very large importer of Welch slate, who has opened a quarry the past year near the line of your road, and who says that he alone shall send to market the coming season, *one hundred tons daily*; and not content with stopping the *importation of Welch* slate to this country, that he shall export *Vermont* slate to England. On this authority, we may safely say that it is to be a very large business, and if the predictions of our friend are fulfilled, that Welch slate is to be driven from the American market and its place supplied by *Vermont* slate, it will equal, if not exceed the marble tonnage; these results will be accomplished in consequence of the superiority of the quarries and the unequalled cheapness with which they can be worked.

Having this amount of freight on your own line, going to Troy and Albany, the natural consequence would be that your return cars will be empty. This fact, together with your more favorable grades, will give you decided advantages in the competition with any other road for the freight from the Erie canal and the great west, seeking the eastern market. On any other route, by far the largest portion of their freight is from the Erie canal to the seaboard, and their cars return empty; consequently, their charges for freight to market must to a considerable extent, cover the expenses for drawing the empty cars back; while on yours it will only load the cars which otherwise would return empty; thus enabling you not only to bring return freight at low prices, but to carry your own freight at such moderate prices as will induce production of the largest quantity.

We might speak of the unsurpassed agricultural fertility of the country on the line of your road, but you all know that there is none better. And of the beautiful scenery and the attractions of your route for pleasure travel, but these are apparent, and will command the admiration of thousands before another summer shall have passed.

We have shown you that your road in connection with other roads is an important link in *three* distinct great thoroughfares for business, and in this respect, yours is *second to none*. In the amount of *local business*, we believe that yours is *superior to any*. What other road possesses in two single articles of general use, (marble and slate) business enough to furnish *one-third* the income necessary to pay *six per cent* to its stockholders? You have only to wait for a short time the developement of the business on the line of your road, and your stock is one of the best investments in the country.

Cost of the road—

Capital stock paid in	$850,000
6 per cent mortgage bonds	225 000
Income bonds	175,000
Total cost of road and equipment	$1,250,000

Rate of interest paid, 6 per cent.

To pay the interest of the bonds and 6 per cent on the stock, will require a net annual income of $91,000, or a gross income of $182,000, allowing one half for expenses, which, on a road as cheaply operated as can be the above, is a very high estimate. The above estimate is equal only to about one half of the average receipts of other New England roads, and we can see no reason why its earnings should not come fully up to that average.

The above road has been pushed forward with energy and dispatch, which reflects the greatest credit on the contractors. It owes its construction to the efforts and means of the gentlemen who constitute the board of directors, who have furnished a very large proportion of the money. It is an excellent illustration of what Yankee enterprise and perseverance can effect.

Ohio--Its Agricultural Position and Wealth.

In the census statistics, (of which a brief summary has been published,) there is nothing more interesting, than the account of agricultural products, machinery, and domestic manufactures.—Taken as a whole, this summary is quite accurate, at least, as much so as statistics of this kind are ever made. The position of Ohio in this aggregate is the most remarkable thing in it. This State, in regard to some of the most important articles, is the *first*; in regard to aggregate *quantity* the *second*; and in regard to *value* the *third*. It would have been the second in the value of its products, but for the loss of half the wheat crop, whose results were put in the census; and also for its distance from the Atlantic markets. If we were to take age and cultivation into view, then Ohio is beyond question the first agricultural State of the Union. The articles, in which it is behind New York, are chiefly hay and cattle, the products of grass cultivation; and this is the result of *older* cultivation. In no country is grass more cultivated than in England, where lands are the highest priced. It is a consequence of the high price of animals.

In grain, Ohio is the first agricultural State of the Union, and in all probability will remain so, on account of the great proportion of lands, well adapted to corn and wheat. We have heard much in the New York papers, in past years, of the immense supplies of wheat in Michigan, Wisconsin, Illinois, etc.; but the wheat crop of Ohio is more than all of them put together; and it is a better and more certain crop in Ohio than in either of them.

Below, we have compiled a brief table, marking by figures, the *order of position* for Ohio, New York, Pennsylvania, Virginia, Indiana, and Illinois, in reference to the principal articles of agricultural production:—

	Ohio.	N.Y.	Penn.	Vir.	Ia.	Ill.
Indian corn	1	13	12	7	4	3
Wheat	2	4	1	3	6	5
Wool	1	2	3	5	6	8
Flax seed	1	3	5	4	7	11
Cheese	2	1	7	14	11	9
Butter	3	1	2	7	4	5
Hay	3	1	2	13	11	8
Tobacco	7	18	11	1	9	12
Sugar	6	4	10	11	7	16
Wine	1	10	2	7	3	12
Live stock	2	1	3	4	10	9
Farm machinery	3	1	2	5	5	7
House manufactures	7	10	14	3	8	17

In the above classification, Ohio appears as the *second* on the wheat list, and we cheerfully abide, by whatever rank it gives us, because, in the long run, it is as fair for one State as another. It is, however, well known, that in fact, Ohio is in the production of wheat very far in advance of any other State. If this had appeared in the census returns, we should have been in *quantity* the first agricultural State of the Union. As it is we are first, in the aggregate of grain. The following is the *aggregate* of wheat and corn in the above six States:—

	Bushels.
Ohio	74,758,806
Illinois	66,613,248
Indiana	59,513,038
Virginia	50,055,532
Pennsylvania	35,189,893
New York	31,918,165

Nothing can show better than this table how completely dependent the Atlantic States are on the west, or rather Central west, for bread. New York, who by virtue of her hay, and grass products, is the first in the *value* of her products, dwindles down to quite a low position (the ninth) in the amount of her *grain* crops. Ohio alone raises as much grain, in the aggregate, as *thirteen States*, viz:—the six New England States, New York, New Jersey, Delaware, Florida, Louisiana, Texas and Arkansas. It may be asked, if the great cotton, or sugar crops of some of the States do not make the value of their crops equal to those of Ohio? By no means. Alabama raises the largest cotton crop, and the home value of her cotton was about $20,000,000, and the total value of its agricultural products about two-thirds those of Ohio.

The value of cotton and sugar in Louisiana is about equal to $23,000,000; but the total value of its products less than one-half those of Ohio. We speak of *agricultural* products only; for none of the slave States have any large amount of manufactured productions.

Among the slave States, Tennessee is, on the whole, the most eminent in agriculture—its productions being very various, and its lands very fertile. In reference to the whole Union, if allowance be made for time and surface, Ohio is the first agricultural State, although the *value* of its products are much less than those of New York, and not more than equal to those of Pennsylvania.

Finances of Kentucky.

The total amount of the State debt of Kentucky is $5,726,307 82, of which $1,326,770 01 exists in the form of bonds to the board of education—in other words a debt of the State to herself. Deducting this, the remainder of the debt is $4,399,-537 81. But this amount should be practically considered still further reduced by the fact that the State owns $1,420,500 in bank stocks, the dividends from which considerably exceed the interest paid by the State on the same amount of her debt. But deducting this amount, as will be the practical

operation of winding up the banks, the public debt would then be $2,979,037 81. The whole amount invested by the State in turnpike roads is $2,694,-239 98. But this investment does not yield six per cent. The railroad stocks owned by the State are profitable investments at present.

American Railroad Journal.

Saturday, February 28, 1852.

Rubber Springs for Cars.

We gather the following interesting facts from the recent circular of the New England Car Spring Company.

Since the introduction of India-rubber Springs in 1847, the sales of the New England Car Spring Company have amonnted to *one million five hundred thousand pounds.*

The proportion of rubber used in place of steel is one pound to twelve pounds, consequently the above amount of India-rubber has taken the place of 18,000,000 pounds of steel, and has produced an actual saving in weight of *sixteen million five hundred thousand pounds.*

The cost of steel springs for cars on which India-rubber has been used for the last five years, would be, *say*—

18,000,000 lbs. at 8 cents lb.....	$1,440,000 00
And for keeping the same in repair, say ten per cent per annum on original cost, making in five years	720,000 00
	$2,160,000 00
The cost of India-rubber Springs for same cars, which are warranted for five years, and consequently not subject to any other expense, is 1,500,000 pounds at 75 cents per pound.....	1,125,000 00
	$1,035,000 00

Making a saving of *one million and thirty-five thousand dollars*, of which railroad companies have directly derived the benefit in proportion to the use they have made of India-rubber, besides a corresponding saving in wear and tear of rails, axles and wheels, and the cost of transportation of the extra weight, which has been estimated at from ¾ to 1¼ cents a ton per mile.

The greater economy in repairs adds very largely to the amount saved by the use of the rubber Spring.

When we take into consideration the amount actually saved by the use of this Spring, and its vastly superior qualities for this purpose for which it is used, and the revolution it has effected in supplanting the steel spring, he former may justly take rank as one of the most important and useful inventions of the present day.

While upon the subject, we may state that Mr. Ray, President of the Car Spring Company, has favored us with an examination of a new invention by him, applicable to railroad machinery, which we believe will prove still more valuable to railroad companies than the rubber spring. Its object is to remove what all admit to be the great evil to which both the road and equipment are subject, and which has heretofore baffled all effort to remove. As Mr. Ray is soon to bring out his inventionu pon a number of roads, we forbear description, until a trial has been made. We are glad to learn that it is the intention of Mr. Ray, to give the gratuitous use of his improvement to all companies that use the rubber spring, contenting himself with what he may be able to realize upon his patent for the latter article.

Mr. Ray authorizes us to say that his invention does not embrace any of the matters for which he has recently offered premiums.

To Railroad Companies, Engineers, Contractors, etc.

Our Advertising Department is well worth the attention of all parties interested in railway property, or engaged in railway employment, in any one of its departments—whether in building or managing roads, or in the manufacture of rails or machinery. To the business man in every department of industry, the practical results of experience are worth more than all the theories or speculations of the most enthusiastic inventors, or projectors of new and untried experiments.

Panama Railroad.

We learn that propositions have been made to a leading house in this city, largely engaged in railroad construction, to take up and complete the Panama railroad, which has resulted in sending out some efficient contractors, for the purpose of examining and reporting upon the condition, and probable cost of carrying out the above project. As these parties will soon return to the United States, to report the result of their examinations, we shall probably get at something tangible in reference to the company's affairs.

The company have, we understand, called in $1,000,000 of the stock, and have sold bonds to the amount of $900,000. Whether these sums cover the whole amount of expenditure, we have no means of knowing, but we presume they are very far from doing so; while according to Mr. Hughe's report, the real difficulties in the way have not yet been encountered. We have from an early day expected, from what we knew of the management of the company, to see the whole project terminate in a grand break down; and we regard the present movement as indicating the fact that the present managers have got nearly to the end of their tether; as an admission of incompetency and inability to proceed further. Having failed in all their pledges and statements, we have regarded the recent silence of the company, compared with the magnificent accounts with which they were wont to entertain the public, as ominous of a desperate state of affairs.

The company, after wasting their means and precious years in fruitless attempts to construct their road, now propose to follow the advice we gave them long ago; to imitate the example of other companies, and entrust their work to competent persons; to transfer the executive department to the theatre of operations, instead of perching it upon a stool, behind a desk, in New York, and confiding it to men who have not even the apology of "*Bookish theorando*" as a warrant for their places. Fortunately, the contributors to the project are men of fortune, and their losses will not cause so much inconvenience as in ordinary cases. So long as no attempt is made to shove their blunders from off the shoulders of the present stockholders, to the public, we shall be content to let the company go on in their own way; but we soon expect to see an effort made by some of the leading persons interested, to slip their own neck out of the scrape.

The company, unfortunately for their own interest, have let the golden moment pass by, without profiting by it. If, while they enjoyed the monopoly of the California travel, they had succeeded in completing their road at an early day, this would have probably defeated the rival projects, which bid fair to render the Panama road worthless, after it shall be completed, and that, too, at an enormous cost.

Tunnel under the Hudson River at Albany.

The project of constructing a tunnel *under* the Hudson river at Albany, for the purpose of connecting, by railroad, the lines upon its opposite banks, is attracting considerable attention in that city. It is stated that, by striking the river *diagonally*, the entrance to the tunnel can be effected by a grade not exceeding 150 feet to the mile, which may be considered as practicable grades, under the circumstances. Boreings have been made, we understand, by which it is ascertained that the material is favorable to the success of the enterprize, consisting chiefly of a compact clay. There would appear to be no insuperable engineering difficulties to be encountered. The whole matter resolves itself into a question of *expense.* We have the cost estimated at $500,000. If it can be accomplished for this sum, it is certainly a warrantable enterprize. It would accomplish the same object as a bridge, and would put to rest the controversy that has so long existed, in reference to this matter, between the cities of Albany and Troy.

Railroad Extension West.

A public meeting of the citizens of Lafayette, Ia., was held on the 9th inst., in relation to memorializing Congress to grant lands to the States of Indiana, Illinois and Iowa, to construct the Lafayette, Peoria and Burlington railroad. Hon. Albert S. White was chairman of the meeting. A preamble, with a series of resolutions prepared and presented by the city council, unanimously passed.—one of these resolutions reads as follows:

Resolved, That this road, connecting Pittsburg, Cincinnati and Louisville, and through those cities and our central seaboard, with the great crossing at Council Bluffs in a direction to the 'South Pass' of the Rocky Mountains, will, when completed to the Missouri, perfect one entire national commercial system, whether the present generation shall or not realise its progress down the Pacific slope.

A committee of ten was appointed to draft and circulate for signatures, a memorial to Congress, asking for a grant of lands to construct the proposed road.

Tolls on the James River Canal.

The following rate of toll upon a number of important articles has been adopted by the above company for the present year, viz:—

Articles.	New rate. cts.	mills.	Old rate. cts.	mills.
Ag. implements.....	2		4	
Bacon, coffee, and sugar.....	3	5	4	
Flour.....	2		2	5
Lime down the canal.		2		
Salt.....	1	5	2	
Tobacco, (all kinds).	3		3	5
Vegetables	1		2	
Wheat	2		2	5

Steamers on Lake Erie.

The Dunkirk papers states that the following will be the arrangements for running steamboats on the Lakes, in connection with the Erie and Central line of railroads for the coming season.

There will be an early line from this place to Cleveland and Detroit, the same as last season, while the Toledo and Michigan railroad line will run daily, starting from Buffalo, and connecting with the express trains here, both ways. This line will consist of new and magnificent boats, built at Buffalo the present season, expressly for the line."

Railroad Subscriptions in Virginia

The city of Norfolk has just made the following subscriptions to railroads, with which she is to be connected, viz; $30,000 to the Raleigh and Gaston, $50,000 to the Weldon and Gaston railroad, and $45,000 to the Clarksville and Ridgeway railroad. These are in addition to a subscription of $75,000 recently made to the Seaboard and Roanoke railroad.

The city of Wheeling has just subscribed $50,000 to the extension of the Cleveland railroad from Wellsville to that city.

Erie Railroad.

It is stated that the Erie railroad company have contracted for a sufficient quantity of iron to lay 100 miles of double track to be paid for in the stock of the company. This purchase will carry the road up to $25,000 000.

South Carolina.

South Carolina Railroad.—The following gentlemen have been elected directors of the road at the late meeting of stockholders in Charleston:

Wade Hampton, Andrew Wallace, C. M. Furham, G. J. Shannon, W. C. Dukes, Henry Gourdin, John Caldwell, John Bryce, A. Burnside, Alfred Huger, Ker Boyce, W. B. Pringle, G. A. Trenholm, H. W. Conner, L. J. Patterson.

At a meeting of the Board of directors, Henry W. Conner was re elected President.

Railroad Decision.

At the late term of the Orange county court, Hoel Sayre recovered damages against the Connecticut and Passumpsic railroad Co., for the burning of his buildings in Thetford last April, occasioned by the alleged negligence of the company in suffering wood, chips, bark, etc., to remain on their ground where it exposed the buildings. Verdict $1017, exclusive of the insurance of about $500.

Western Vermont Railroad.

We learn from the 2d annual report of the directors that this road is nearly finished. All the masonry and bridging on the entire line has been completed in a substantial manner. A small portion of the grading remains to be done, near the south end of the line, and it is believed that the whole road will be in running order by the 1st of April next.

The estimated cost of the road, when completed, is $973,579,98. The amount of work done during the past year was $332,942,48, leaving an amount of $640,637,50 to be performed. Of this amount $357,997,50 will be for the superstructure; $67,840,00 for land damages and fencing; $154 000,00 for equipment; and $60,8.0 for miscellaneous expenses.

The length of track laid up to the 1st of January, was 37 miles, leaving 21 3-10 miles to be laid, including the branch. The alignment of the road is favorable, the grades easy, and the cost per mile less than that of any other railroad in New England.

As the Western Vermont road runs nearly north and south, connecting with the Troy and Boston railroad at Bennington, and the Rutland and Burlington, at Rutland, it will form an important link in the chain of roads, extending from New York to Montreal, 380 miles. This will ensure to it a large amount of through travel, especially during the summer months. The vast agricultural and mineral resources of that part of Vermont through which the road runs, will give to it a local traffic, not exceeded by that of any other portion of road of the same length.

Stock and Money Market.

Money continues to be abundant, with a fair amount doing in railroad securities. There is a good demand for such as meet the requirements of the purchaser. There have been large investments recently in convertible bonds of roads that are just commencing operations, under the belief that the stocks of such roads will soon go up to par. and that the bonds will be in demand at the same figure for conversion. The anticipated profits of many new roads, have turned public attention to their securities in preference to those issued by municipal corporations or States. The latter, of course, are looked upon as being, in the long run, the safest, but the high prices asked for them do not allow a sufficient margin for profit to suit the buyers. For these reasons, therefore, railroad bonds may be regarded as the favorite securities offering, and are more in demand than any other.

The prices realized to the sellers, of roads in progress, range all the way from 80 to 90 per cent.—Ninety cents on the dollar, may, as a general rule, be put down as the highest price asked, from which a commission of from 2 to 5 per cent is to be deducted. Upon these terms there is no difficulty in obtaining money by such companies as are entitled to credit; that is, for such as are able to put into their road a sum equal to what they wish to borrow.

The iron market rules low. Rails can be purchased on as favorable terms as for a long time past.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK FEBRUARY 28, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	105¼
U. S. 6's, 1862	112
U. S. 6's, 1862—coupon	112
U. S. 6's, 1867	116¼
U. S. 6's, 1868	116¼
U. S. 6's, 1868—coupon	120
Indiana 5's	83
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	71
Illinois 6's—interest	43
Kentucky 6's, 1871	107
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	98
Maine 6's, 1855	103
Maryland 6's	102
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	104½
Ohio 6's, 1860	106¼
Ohio 6's, 1870	113
Ohio 6's, 1875	114
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	90
Pennsylvania 6's, 1847-'53	—
Pennsylvania 6's, 1879	104½
Tennessee 5's	84
Tennessee 6's, 1880	199
Virginia 6's, 1886	105¾

CITY SECURITIES—BONDS.

Brooklyn 6's	105½
Albany 6's, 1871-1881	104
Cincinnati 6's	94½
St. Louis	93
Louisville 6's 1880	92
Pittsburg 6's, 1869-1871	95½
New York 7's, 1857	106½
New York 5's, 1858 '60	101
New York 5's, 1870-'75	101½
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	103
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	109½
Erie 2d mortgage, 7's, 1859	105
Erie income 7's, 1855	92½
Erie convertible bonds, 7's, 1871	88½
Hudson River 1st mort., 7's, 1869	102
Hudson River 2d mort., 7's, 1860	93
New York and New Haven 7's, 1861	102½
Reading 6's, 1870	76½
Reading mortgage, 6's, 1860	79
Michigan Central, convertible, 8's, 1860	103½
Michigan Southern, 7's, 1860	97½
Cleveland, Col. and Cin. 7's, 1859	102½
Cleveland and Pittsburg 7's, 1860	92
Ohio and Pennsylvania 7's, 1865	92
Ohio Central 7's, 1861	87½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Feb. 18	Feb. 25.
Albany and Schenectady	97	98½
Boston and Maine	104½	104½
Boston and Lowell	109	109
Boston and Worcester	99½	100
Boston and Providence	85	85
Baltimore and Ohio	64	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112½	112½
Eastern	96½	95½
Erie	78½	79½
Fall River	98½	97½
Fitchburgh	102½	103
Georgia	—	—
Georgia Central	—	—
Harlem	66	67
" preferred	108	108
Hartford and New Haven	123	125
Housatonic (preferred)	38	36
Hudson River	63	64
Little Miami	—	—
Long Island	18½	19
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	95	95½
Michigan Southern	101	101½
New York and New Haven	107	109
New Jersey	125	125
Nashua and Lowell	104½	105
New Bedford and Taunton	116	117
Norwich and Worcester	50½	49½
Ogdensburgh	26½	26½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	67	67
Rochester and Syracuse	109	110
Stonington	50	51½
South Carolina	—	—
Syracuse and Utica	128	122
Taunton Branch	115	113
Utica and Schenectady	125	125
Vermont Central	23½	22½
Vermont and Massachusetts	21½	21
Virginia Central	—	—
Western	101½	102½
Wilmington and Raleigh	56	56½

Lowmoor Iron.

We invite attention to the Advertisement of W. B. Lang, Agent for the sale of this celebrated iron

Railroad in the Provinces.

We regard the construction of a line of railroad, extending from Halifax to Quebec, and connecting with the railroads of the United States, by a branch from St. John's, as no longer a problem. Our readers are probably aware that the plan upon which the Provinces of Nova Scotia and New Brunswick, and Canada had argued for the construction of a road connecting the above points, was recently abandoned, in consequence of Lord Grey's refusal to recommend the granting of aid to any other, than what was called the *Great Intercolonial* line. This decision cut off the Portland branch, to secure which, was the chief reason that induced New Brunswick to enter into the contract. Mr. Howe, the Provincial Secretary of Nova Scotia, it turned out, entirely misconceived the views of the British Government, and for nearly the whole of the past year, the three Provinces have been acting under a misapprehension. Upon a more explicit statement of these views, the adoption of some new plan which should fulfil the condition upon which the British government would aid the project, and at the same time secure the concurrence of New Brunswick because necessary. For this purpose, the representatives of the three provinces have recently had a conference at Fredericton, which has resulted in the adoption of the route following the valley of the river St. John, instead of the route surveyed by Major Robinson, which skirted the gulf of the St. Lawrence and the bay of Chaleurs. The main route, as now agreed upon, will run from Halifax, around the head of the bay of Fundy, via the city of St. John, and up the left bank of the river of the same name, and passing round the territory of the state of Maine, will strike off to Quebec. Of the cost of this route, Canada is to assume 5½ New Brunswick, 4½ and Nova Scotia, 3½. We do not doubt that the Home Government will readily loan the Provinces the money for the construction of the amended scheme. On the whole, we regard the abandonment of Mr. Howe's project as a very fortunate circumstance. It has led to the adoption of the only feasible route for the road. It will now follow the direction that will command the trade and accommodate the business of the two Lower Provinces. No good reason whatever could be urged in favor of the more eastern line by way of the gulf. The new one will follow the route of commerce and travel, and will be shorter and cheaper than the other. By the change which has been adopted, the proposed road may be said to be founded upon commercial business, and not merely upon political considerations. All things considered we believe the project to be well worthy the support of the Provinces.

We have more hope of it, from having read the speech which Mr. Hincks the Canadian *Premier* delivered on the occasion of his recent visit to Halifax. It was sensible and business like throughout, and contrasts most favorably with the impassioned and extravagant harangues of Mr. Howe, who having selected his object, assumed as proved, any argument necessary to accomplish it. All his arguments are drawn from his imagination. One would suppose that he had never seen a railroad. Mr. Hincks on the contrary talks like a man who has not only seen, but managed them. With such a man to direct affairs, success can hardly be problematical. The road, should the new line be finally adopted, would be a great benefit to the State of Maine. It would open to settlement her frontier, which is now covered with dense forests. It would make her the thoroughfare for travel between the old world and the new, and would at once secure to her everything she needs in the shape of railroad accommodations.

For the American Railroad Journal.

H. V. Poor, Esq:

Your correspondent in the last Journal, Mr. R. E. Dibble, treats the subject of coal for locomotives as if it were a new idea. He is perfectly correct in his theory, and it is a wonder that railroad companies do not in this section of the country give some attention to the facts he states. The stockholders of a vast number of railways would find their dividends increased by the election of practical men to manage their affairs, instead of the present method of selecting men to *control machinery*, whose qualifications consist in having achieved large fortunes by tape and bobbins, tea and coffee, oranges and lemons.

The establishment of Ross Winans, of Baltimore, is quite famous for turning out coal burning engines, and so far from its being an experiment, he has for years built engines, which, for speed, power and economy, are unequalled, and this is daily and *hourly* proved on the Baltimore and Ohio railroad, in more than 40 coal burning engines, also on the Baltimore and Susquehanna railroad in coal in daily use—the President of which informed the writer that Mr. Latrobe's estimate of economical value of coal was too small. Mr. Magraw contends that one ton of Cumberland coal was equal to three cords of best southern pine. These statements are still further corroborated by the experience of Capt. Mitchell of the steamer "Osceola," plying between Washington and Norfolk. He usually consumed 42 cords of pine wood per round trip, which cost $2 25 the cord, or $94 50.

He now uses 16 tons of Cumberland coal at $3 per ton, or $48 00. He saves the wages of 10 men, by the use of coal, which is $10, making a saving per trip of $56 50!

Mr. Dibble will confer on the stockholders of railroads a great benefit if he can succeed in producing any impression on the directors' minds in favor of coal—as it only wants a trial to show how much the running expenses may be decreased. If they do not wish to incur the expenses of a trial, Ross Winans, of Baltimore, will furnish engines that will perform exactly as stipulated. He can show what has been done under his own eye.

Yours, B.

Allegheny Valley Railroad Election.

The stockholders of the Pittsburg, Kittaning and Warren railroad met yesterday, says the Pittsburg Gazette, at the St. Clair Hotel, in that city, and elected the following officers:—

President.

Wm. F. Johnston, of Pittsburg.

Managers.

Geo. W. Jackson, of Allegheny county.
Lyman Wilmarth, " "
Felix R. Brunot, " "
John T. Logan, " "
Joseph Buffington, of Armstrong.
Thomas M'Cullough, of Clarion.

Governor Johnston was elected unanimously.—For managers there were a considerable number of scattering votes, but no serious opposition to the above ticket. We congratulate the company upon having made the choice of a board upon whose energy and discretion they may repose the fullest confidence. The board, we understand, will organize to day, and proceed immediately to business.

Boardman's Steam Boiler and Furnace.

Report of the Committee of the American Institute.

Below we give some testimonials in favor of Mr. Boardman's steam boiler, to which we beg leave to call attention. Upon Mr. Boardman's plan, the whole interior of the boiler is used as a fire box or furnace, the tubing passing down from the bottom of it into the smoke chamber. The draft is created by forcing air into the furnace by means of a blower. Mr. Boardman's boiler has effected a remarkable saving of fuel, as will be seen by the following certificates:—

The committee beg leave respectfully to report, that they have examined one of Boardman's Patent Improved Steam Boilers in operation, and have had before them full drawings and explanations of the same. A careful experiment to test the evaporating power of the boiler was made, which resulted in the evaporation of twelve pounds of water at 212 deg. to the pound of Red Ash Peach Mountain coal, including the ashes and non-combustible matter; and excluding non-combustible matter, the evaporation was 13·29 lbs. water to the pound of fuel. When it is considered that the duty of a locomotive boiler, as usually estimated, is an evaporation of 7½ lbs. water to the pound of fuel, the comparative value of Mr. Boardman's boiler will be readily appreciated.

This improvement in result has been effected by disposing of the fire surface in the boiler so as to obtain the greatest result of the heat, retaining the heat when generated in contact with the boiler, reducing the temperature of refuse gases in the chimney to the lowest point possible; and more than all other means, by a perfect consumption of the fuel within the fire chamber, so that neither smoke nor sparks can escape combustion.

Mr. Boardman, in this arrangement, seems to have had in view the fact, that the oxygen of the air, when properly distributed and applied with other fuel, becomes fuel itself; and he has so disposed his blast as to get the highest effect of it in the perfect combustion of the gases which usually pass off and are lost.

This boiler occupies but small space, is simple in its operation, of a form which insures strength, and is not liable to be out of repair. Its setting is cheap, and a high smoke stack is unnecessary.

The committee would conclude their report by recommending this boiler to the notice of the Institute, and through them to the public, having found that its utility and economical results are obtained by a practical application of the laws of combustion and heat, in a manner superior to any other with which they are acquainted.

Wm. H. Calkin,
H. A. Harvey,
J. W. Ayres.

New York, Nov. 7, 1850.

The undersigned, members of the firm of Goulding Green & Conro, certify that about the first of September last, we made one of H. Boardman's Patent Improved Steam Boilers, and for the purpose of experiment, attached the same to our foundry engine which does duty as a ten horse power engine. Mr. Boardman's boiler was made to expose the same fire and flue surface as is exposed by the boiler in common use at our establishment.—He got up a working head of steam in his boiler in about thirty minutes after starting his fire, and then drove the said engine, doing its ordinary duty, 12 hours, and using only one half cord of hard wood for the whole time, including the time of getting up steam.

We have, since that experiment, and for the purpose of comparing results, connected the foundry boiler with the same engine, doing the same duty, and run it with the best Norway pine wood with the following results. It required two hours and nine minutes to get steam up to working head, and we used seven-eighths of a cord of word to run the engine six hours, or at the rate of one cord and three quarters in twelve hours, to perform the same labor done by Boardman's boiler with one half a cord.

Our boiler is one of the ordinary cylinder boilers, and from the above experiments which were carefully made, we have no hesitation in saying that

Mr. Boardman's boiler will do duty with one-third of the fuel required by a common cylinder boiler to perform the same duty.

This saving of fuel has been effected by a new form of the boiler, and by such a combination of the furnace with it as to produce the following results: First, a perfect combustion of the fuel in the fire chamber; (no sparks can pass from the furnace.) Second, the combustion of the smoke and combustible gases. Third, dispensing with a draft, and retaining the heat, when generated, in contact with the boiler, until the temperature of the combustible gases, as they pass off, is reduced below that of boiling water, so low that the hand may be placed without harm or inconvenience in the flues, at a distance of four or five feet from the fire chamber.

We would further say, that the form of Boardman's boiler is convenient for setting, and, in our opinion, is well adapted for use either upon steamboats or locomotives, or as a stationary power.

JOSEPH GOULDING,
HENRY GREEN,
ALBERT CONRO.

Keeseville, N. Y., Nov. 21, 1849.

We fully concur in the statement of facts given above, having assisted in making both the experiments above set forth, and noted accurately the amount of fuel and the time of performance.

RON'T. SHELDON,
JOHN WAKE.

Keeseville. N. Y., Nov. 21, 1849.

I have had one of Mr. H. Boardman's Improved Steam Boilers in constant use in my Foundry for the last eighteen months, driving an engine of 12 horse power, with an average consumption of five-eigths of a cord of wood for 11 hours. It continues to perform as well as when first put in operation, and requires no more attendance than ordinary boilers. I consider it the best and most convenient boiler with which I am acquainted.

W. C. SMITH.

St. Albans, July 17, 1851.

Ohio.

Dayton and Western Railroad.—This road, though a portion of a great central route through Ohio and Indiana, has not attracted so much attention as other portions of line, from the fact of its being one of its shortest links. It is however none the less important than the others in proportion to its extent and cost. It extends from Dayton to the Indiana State line, where it will connect with the Indiana Central road, running west, and the Richmond and Newcastle road running northwest. In the east it will be connected both with the Mad river and the Xenia roads and thus be brought into communication with all the roads with which the former are connected.

As a through route, the best idea may be formed of its importance, from the fact that Dayton is nearly on the same line of latitude with Wheeling, Columbus, and Indianapolis. Between Columbus and Indianapolis the two great converging points for the roads of the states of which they are the capitals, it will form one of the shortest routes.—On the east it will connect with the Mad river, the Little Miami, the Xenia and Columbus roads, and through these, with all the lines of central and eastern Ohio. The travel collected by these roads at Dayton, going west, will pass over the Dayton and Western. The converse of this proportion will be equally true of travel going east. An examination of a map of Ohio and Indiana will convince any person of the correctness of the above statements.

As the road traverses a portion of the Miami country celebrated the world over, for its fertility and productiveness, and filled with a dense and wealthy population, its local traffic must compare favorably with any road in Ohio. It will also be the through route of a very large through freight traffic from Indiana which will take the above route to the Miami canal. The road occupies a strong position, both in reference to its through, and local traffic. A road that can form a part of a through line between the Atlantic cities and the Mississippi, cannot fail both to be good stock, nor to stand high in public estimation.

The grading of the Dayton and Western road has been completed, with a considerable portion of the iron already laid. The balance is ready to be placed upon the track, upon the opening of the spring. It will be one of the cheapest roads in the west, costing only about $12,000 per mile. Its affairs are safely and prudently managed and both its stock and bonds offer a good opportunity for profitable investment. The latter particularly so, as they are convertible into the stock, and can be purchased probably at something less than par value.

As we remarked in the outset, this line has not attracted so much attention as some other portions of the line of which the above is a part, but it is one of the cheapest, and we have no doubt of its being one of the most profitable, and there can be no good reason why its securities should not command the highest prices going.

Illinois.

Peoria and Oquawka Railroad.—We have received the report of Col. Morgan, the Chief Engineer of this railroad, giving an account of the route of the proposed line, and the resources of the country through which it will pass.

The route adopted passes from Peoria to Farmington; thence to Knoxville and Galesburg; from Galesburg to Monmouth; and from Monmouth to Burlington and Oquawka. The whole distance from Peoria to Burlington is 93 miles, and to Oquawka 90. Something over three-quarters of the whole line is straight, and the greater part of the curves have radii from 2800 feet up to 5730 feet. The highest grades used are 25 feet per mile, and an aggregate distance of 25 miles is level ground.

In reference to the cost of construction, fifty miles on the western division have been let to responsible persons for $12,000 per mile. For that sum they have agreed to put the road into complete running order, with a T rail of fifty pounds to the yard. It is the opinion of Col. Morgan that this average will not be exceeded in the construction of the entire line, with the exception of the Mississippi bottom, which will cost something more, including piling, and the levee for the protection of the ferry.

The district through which the road passes possesses great natural advantages, and is rapidly increasing in population. The inexhaustible beds of coal which lie contiguous to the line of the railroad, will contribute largely to its profits, besides offering a plentiful supply of fuel to the locomotives.

The population of the counties subject, directly, to the influence of the Peoria and Oquawka railroad, is 147,000. Of this population, a portion might look elsewhere for a market, but it is estimated that 100,000 persons will take this road as their principal route for business and travel. The district through which the Chicago and Galena railroad passes, contains a population of only 71,000. Yet on 54 miles of this road the number of passengers during the last year was 69,782, who paid to the company $56,472. At three cents per mile, each passenger must have been conveyed, on an average, 27 miles, or half the length of the road. Assuming for the Peoria and Oquawka railroad 60,000 passengers, carried 93 miles, at 3 cents per mile, the receipts would amount to $167,400. The amount of receipts on freight is estimated at $135,000, which, added to the $167,400 for passengers, will form a total of $302,400. Assuming the proportion between the gross receipts and the net earnings of the Chicago and Galena railroad, which is as $126,000 to $78,000, the annual profits of the Peoria and Oquawka railroad would be $187,119, which is rather more than 15½ per cent on $1,200,000, the capital required to build and stock the road.

As the Peoria and Oquawka railroad is nearly in a straight line between Philadelphia and Council Bluffs, it will form, at no distant day, a link in the great chain connecting Iowa with the Atlantic cities. The through traffic which will then result to this road will be very great, and together with the local traffic will yield to the company a large annual income

Virginia Internal Improvements.

In the Virginia House of Delegates, Mr. Segar, from the Special Committee of Twenty-one, made a report concluding with the resolution which is subjoined. This resolution contains the practical recommendations of the committee, and embraces appropriations for the completion of the present leading improvements of the State, and others which are not so regarded. The appropriations, thus provided for, amount to the sum of four millions three hundred and sixty-two thousand dollars—not more than one-half of the appropriation for each work to be expended in a single year.—The resolution is as follows:

Resolved, That it is expedient to complete as early as practicable, the following public works: The James River and Kanawha canal to Covington, the Central railroad to the head of steamboat navigation on the Kanawha river, the Richmond and Danville railroad, the South Side railroad, the Virginia and Tennessee railroad, the Orange and Alexandria railroad, the Manassas Gap railroad, the Norfolk and Petersburg railroad, the Richmond and York River railroad, and the improvement of the lower James river, by removing the bars therein; and that the following sums be appropriated for the said works respectively:—For the James river and Kanawha company a loan of $300,000 to discharge existing arrears, and $405,000 for the extension of the canal to Covington. For the extension of the Central railroad from Covington to the head of steam navigation on the Kanawha, $1,000,000. For the completion of the Richmond and Danville railroad, a loan of $600,000. For the completion of the South Side railroad, $360,000. For the completion of the Virginia and Tennessee railroad, $450,000. For the completion of the Orange and Alexandria railroad, $252,000. For the completion of the Manassas Gap railroad $400,000. For the construction of the Norfolk and Petersburg railroad, $480,000. For the Richmond and York River railroad, $300,000; and for the improvement of the lower James River, $115,000, of which said appropriations, not more than one-half of each shall be expended in a single year.

Great Western Railroad of Canada.

The Syracuse Star states that John T. Clark, Esq., late division engineer on the Erie canal has been appointed commissioner on the part of the United States stockholders, and Engineer in Chief of the Great Western railway, and will soon assume the duties of that station. Mr. Clarke is an Engineer of large experience and great ability.—Under his supervision the work will be rapidly pushed forward to completion, and the interests of the stockholders carefully guarded.

Wisconsin.

Her Progress and Resources.

We gave a short time since a brief account of the operation of the Milwaukee and Mississippi railroad company, which is now engaged in the construction of a road from Milwaukee, following a generally western direction, to the Mississippi river. As few who have not visited that thriving State have but little idea of the progress it has made both in population and wealth, or of the vast elements of commercial, agricultural, and mineral greatness which she possesses, we think that a brief account of her progress and resources cannot but be acceptable to our readers.

The portion of Wisconsin now occupied, embraces about 9,900, say 10,000 square miles. It lies mostly south of the Wisconsin and Fox rivers. Other portions of the State are fertile, but the above is the only part of it that has received much attention from the eastern emigrant.

By the census of 1840 Wisconsin had 30,000 inhabitants; in 1850, 305,000. Increase in five years, 275,000 or about 900 per cent. She has exhibited the most rapid gain of any State in the Union, as will be seen by the following table of population of western States at different periods.

	1800.	1810.	1820.
Ohio.....	45 363	230,760	581,434
Indiana....	4,875	24 520	147,178
Illinois....	.....	12.282	55,211
Michigan..	.....	4,762	8,896
Missouri...	.....	20,845	66,586
	1830.	1840.	1850.
Ohio.....937,903		1,379,467	1,980.486
Indiana....343,031		685,866	988,16
Illinois....157,455		476,183	851,470
Michigan.. 31,639		212,167	397,654
Missouri...140,445		383,702	594,62
Wisconsin.		30,945	305,19

Ohio is always pointed to as showing the most rapid progress of any of the Western States. Yet neither in the ratio nor in the absolute amount of her increase can she bear comparison with Wisconsin. It will be borne in mind that Ohio contains 40,000 square miles, and that nearly every part of that State filled up pretty uniformly, while in Wisconsin the whole population thus far have confined themselves to a territory equal only to one quarter of the area of Ohio.

From 1800 to 1810 Ohio increased at the rate of about 18 per cent., with an absolute increase of 185,397; while Wisconsin, occupying in 1810 about the same position in regard to settlement as Ohio in 1800, has increased at the rate of nearly 27 per cent., with an absolute increase of 275,000 in ten years, against 185,397 of Ohio, making the ratio as 30 to 19 in favor of Wisconsin, and the actual increase much greater. These facts show how immensely Wisconsin has outstriped all her older sisters in the great race of progress, which has rendered them the marvel of the world.

As we stated above, the present inhabitants of Wisconsin occupy at most only about 10,000 square miles. That settled has an average of 30 inhabitants to the square mile. In 1840 the population of Ohio averaged 38 to the square mile. Vermont averaged 36, and New Hampshire 35 to the square mile. The dense filling up of Wisconsin in so short a time, with population which, with the exception of Milwaukee, is almost entirely composed of farmers, shows the extraordinary fertility of its soil, attractiveness of climate, and capacity for future growth.

The increase of the population of this State great as it is, is much exceeded by the more rapid increase of her products and her commerce. Wisconsin did not begin to export produce to any am't until 1845. Below we give a table of the exports of wheat from the city of Milwaukee for a period of five years commencing at that time. We copy from a report upon the business of that city, made to the Board of Trade by Alex. Mitchell and E. D. Holton, Esqrs.

1845.....	133,310	bushels
1846.....	292,228	"
1847.....	668,211	"
1848.....	1,076,134	"
1849.....	2,208,517	"

This increase is at a rate of more than 100 per ct. per annum. We are not informed as to the relative amount of exports of Milwaukee compared with other parts of that State, nor of the whole amount of exports. Racine, Southport, and many other places export a large quantity of wheat; and we know no reason why they have not enjoyed the same rapid relative growth as Milwaukee. The annual growth of Milwaukee since 1840 has been as follows:

1810.....	17,000
1812.....	27,000
1846.....	9.655
1847.....	15,071
1849.....	18,071
1850.....	20,061
1852.....	24,000

The above exhibits a rapidity of growth without a parallel in this country. We copy the following statistics of the trade of Milwaukee, for the year 1849, from the report referred to.

IMPORTS.

		Value.
Tons merchandise.....	16,012	$3,202,400
Barrels of salt.....	35,000	43,750
Bbls. bulk furniture.....	17.500	140,000
Coal, water, lime and plaster.....		18,000
Fruit—dried and green.....		11,500
Lumber, lath, shingle bolts, shingles and timber.....		375,000
Miscellaneous.....		38,000
		$3,828,650

EXPORTS.

Bushels wheat.....	1,148,807	$1004,642 79
Barrels flour.....	201,942	945.088 50
Do. pork and beef.....	5,527	44,216 00
Tons lead and shot.....	810	53,000 00
Hides.....	10,281	23,132 00
Sundry manufactured articles.....		28,390 00
		$2,098,469 26

VESSELS OWNED.

There were in 1847 thirty nine sail vessels owned in, and sailing out of this port, of which the total tonnage is 5,542—also stock in steamboats and propellers of 3000 tons, making the total tonnage owned in the port 8,542.

Sixteen sail of vessels are engaged exclusively in the lumber trade, and the remainder in freighting produce and merchandise.

ARRIVALS DURING THE SEASON OF 1848

Steamboats.....	498
Propellers.....	248
Barques and brigs.....	119
Schooners.....	511
	1376

We have not the means of giving a statement of the trade of the city for the years subsequent to 1849. We do not doubt, however, that it has kept pace with the growth of the entire State. The arrivals at the district of Milwaukee for the year 1851 were 4579, showing a very active and extensive commerce.

The above State, with all its population, cities, commerce, shipping, etc., etc., is the growth of ten years! With the progress now made, and with all he means now at command, what will not the next en years accomplish? In 1860 she will become one of the leading States in the Union in every respect.

Wisconsin possesses great commercial facilities. Her western boundary is washed by the Mississippi river, and her easte.n by Lake Michigan; while her interior is penetrated by the Wisconsin and Fox rivers, which with some improvement can be made navigable to a very considerable extent.—The two rivers are now being connected by a canal, so that steamboats can pass from one to another—thus forming a direct line of steamboat communication between the lakes and the Mississippi.—The length of the canal is to be only about two miles.

But the great want felt in Wisconsin is of good roads; in other words, of *railroads.* The soil of hat State, like that of all of the Western States, is poorly adapted to the formation of a good road bed. McAdamized roads are very expensive from the absence of suitable rock formations, while railroads can be built at the lowest cost, from the level nature of the country, and the abundance of all the necessary material but iron. A good railroad penetrating any section of it, would at once double its exportable products. And if railroads in N. York and New England, costing $50,000 per mile, pay a fair income upon their cost, what would a Wisconsin road pay which would not cost a quarter as much, and at the same time, running through a country of vastly greater resources. In addition to the superiority of Wisconsin in these respects, it must be borne in mind that the pursuits of her people at present are entirely agricultural; and that consequently they must export over their roads all their surplus, and import over them all they consume, that their own farms do not produce.

Ohio.

State Auditor's Report.—The following is the substance of the late report of the Auditor of this State.

The receipts into the Treasury during the year 1851, amounted to $2,878,656, excluding fractions, which exceeds the estimate by the sum of $120,087. The disbursements during the same period amount to $2,696,369. Balance in the Treasury the 15th Nov. 1851 was $323,699. While the receipts from all sources exceed the estimates, the expenditures fall short.

The following table shows the value of the taxable property exclusive of bank stock, for the last three years.

Property.	1849.	1850.	1851.
Lands.....	$264,661,957	266 751,103	269,010 542
Town.....	71,177.351	74,637.736	77,330,691
Personal....	93,836,318	97,209,189	104,495,278
Joint Stock Co's.....	1,173,756	1,278 313	1,821,197
Total.....	$430,849,385	439,876,340	452.657,708

The increase of taxable property since 1847, has been at the rate of $10,000,000 a year. The increase in 1852 under the new constitution is estimated at $25,000,000. The State tax in 1851 was $179,159 more than it was in 1850, that of counties, schools and townships $424,942. The amount received from the sale of canal lands is greater than was anticipated.

The Auditor recommends a reduction of the tax for 1852 of a tenth of a mill on the dollar.

The whole debt of the State on the 1st of January 1852, exclusive of the School and other trust funds amounts to $15.584,893. The whole of the 7 per

cent. loan $1,427,981, has been cancelled during the past year.

The Auditor concludes his report as follows:

A review of the financial affairs of the State affords much cause for gratification. But a few years since the energies of the State, its industry, improvements, and general prosperity, were depressed by the accumulating debt, which amounted, in trust funds, to more than twenty millions of dollars. The credit of the State was seriously affected; its public securities were sold at auction in New York for about fifty cents on the dollar, and general distrust and apprehension of the future prevailed.

The condition of our affairs is now entirely changed. With the restoration of the State credit, caused to a great extent by the adoption of an efficient revenue system and the levy of taxes adequate to meet the demands upon the State Treasury, the industry and enterprise of the people have received a new onward impulse.

The stocks of the State have been for several years above their par value, and those having the longest time to run, have for more than a year past stood at a premium ranging from twelve to seventeen per cent.

On the first of January, 1852, the whole balance of the principal of the seven per cent stock of the State, issued in 1843, was paid, and the certificates of bonds of the State taken up and cancelled. The amount of principal and interest paid in the city of New York during the past year, is as follows:

Principal of seven per cent stock....	$1,429,981 52
Interest on foreign debt.....	996,553 23
Total amount of principal and interest, paid during the year ending January, 1852.....	$2,426,537 75

Notwithstanding this large disbursement, when the taxes, levied and collected in 1851, shall be paid into the treasury, there will be still a surplus of more than half a million of dollars.

While the revenues of the State derived from our public works are increasing the indirect tax upon the productions and commerce of the State imposed by high tolls upon the canals and public improvements of the State, has been greatly reduced; and it is now apparent that the heavy direct taxation which has for several years been cheerfully borne by the people, will from this time forward be gradually reduced.

Although the State no longer increases its debt and the public burdens for the construction of turnpikes, canals, or railroads, the encouragement extended to important public improvements by liberal charters and acts of incorporation, has secured contributions of individual capital and local credit, which will secure to the people of the State all the advantages of these improvements, without subjecting them to an onerous State debt.

It is gratifying to know that this improvement in the finances of the State, does not more than keep pace with the growing wealth and individual prosperity and happiness of the people.

JOHN WOODS, Auditor of State.

Cleveland and Pittsburg Railroad.

The last rail was laid down on this road, between Cleveland and Wellsville, last Saturday, and cars came through to this place, from Wellsville, the same evening. Notwithstanding all the assertions to the contrary, this important line of railroad, connecting the Ohio river with Lake Erie, at the nearest point, is now completed. The most energetic action and the best of management on the part of the President and directors of this company has secursd this result. They deserve and receive all commendation.

The connection is made, and the prospects to stockholders of a profitable investment are most flattering. This road passes through some of the richest portions of Ohio, both as regards agricultural and mineral wealth. The coal business of the road will alone prove to be an enormous trade, and a great source of revenue to the company.—The immense quantities of produce raised along and in the immediate vicinity of the line, that will find points of shipment on this road, is sufficient to employ all the capacity of the road, in this department, and cannot be otherwise than profitable. As to the passenger business, this, as the past has proved, will be very great.—*Portage County Whig.*

Wheat Crop of Ohio.

The Cincinnati Gazette publishes some interesting statistics of the wheat crop of Ohio for the year 1850, obtained under a law requiring the assessors to make returns of the quantity of wheat produced in each county in the State. From these it appears that the total number of bushels produced in 1850, was 34,176,420. The crop of 1851 was nearly, if not quite, as good. The counties which raised the largest amounts were—Wayne, 1,071,380 bushels; Stark, 1,071,177; Muskingum, 1 003,096; Tuscarawas, 883,071; Coshocton, 862,809; Licking, 849,116; Seneca, 836 824; Montgomery, 788,784; Richland, 795,219; Knox, 762,267. Total in ten counties, 8,923,743 bushels. The largest average crop was in Huron county, where, from 45 acres, 1300 bushels were produced, an average of 29 bushels per acre. The Gazette says: The relative proportion of *land*, *wheat* and *averages* are as follows:—Acres planted, 1,957,105; bushels produced, 34,176,420; average per acre, bushels 17½

About *one-thirteenth* part of the land in the State is in wheat cultivation. This fact, connected with the large crops of all sorts, may serve to exhibit the extraordinary fertility of Ohio, and its adaptation to the best kinds of agriculture, and its means of supporting an immense population.

In the meantime, let us see how far the actual population has the power to consume its own crop and how much must be exported, in order that it should not be wasted. *Six bushels of wheat per annum* [about a pound per day.] to *each person*, large and small, is a large allowance for actual consumption. Then the consumption and surplus will be thus:

Population, 1851.....	2,050,000
Six bushels each one.....	12,300 000
Crop.....	34,176,420
Surplus for export..... bush.....	21,876,420

More than twenty millions of bushels of Wheat were produced in Ohio in 1850 for export, after deducting the amount required for consumption.—Great as this is, there can be no doubt that it is very nearly accurate.

We may say, in conclusion, that the crops of the three last years have been in round numbers as follows:

Wheat crop of 1849.....bushels.....	15 000,000
" " 1850.....	34,000,000
" " 1851.....	30,000,000
Three crops.....	79,000,000
Average crop.....bushels.....	26,300,000

Ohio and Pennsylvania Railroad.

We have the pleasure of informing our readers says the Pittsburg Gazette, that contracts have been made for furnishing all the iron necessary for the completion of the Ohio and Pennsylvania railroad to its terminus at Crestline. The contract is for 5000 tons—2000 tons to be furnished by the Brady's Bend Iron Works, to be used between Wooster and Loudonville, and to be delivered at Pittsburg, and carried out on the line by the machinery of the company—and 3000 tons to be furnished by an English house, to be imported by way of Canada, delivered at Cleveland or Sandusky, and sent out by railroad to Mansfield and Crestline. The iron being thus secured, there is now every probability that the entire work will be finished during the present year, and the cars running from Pittsburgh to Crestline, a distance of 185 miles.

It is expected that the road will be opened to Massillon in about two weeks. Massillon is 108 miles from Pittsburgh. It is situated on the Ohio canal, in the centre of a wheat-growing country, and is a place of considerable trade. When the road is opened to that point there will be a large addition to its business. Between Massillon and Wooster, the track is ready for the superstructure, the iron is provided, and the timber is mostly on the ground. The laying of the track will be pushed forward with all the celerity possible, and the line will doubtless be opened to Wooster during the spring months. Between Wooster and Crestline, the work is in a state of such forwardness that it can be urged to completion as fast as the company's means will permit.

We are glad to learn, that the success of the road now in use is of a very gratifying character. The receipts during the month of January last, were as follows:

From passengers and express goods.....	$9.999·75
From freight.....	2.058·88
Total.....	$12,058·63

Number of passengers carried, 10,298.

Considering that the line was not finished until the 5th, and that the weather has been so severe as to deter travel, the success of the road is equal to that of any new work in the country. There is now more freight offering than the company has machinery to carry, as a portion of the motive power is necessarily employed in the construction of the road. Several additional engines have been ordered, and will be placed on the track early in the season. We doubt whether greater and more rapid results, in railroad enterprise, have been witnessed in this country, and they reflect the highest honor upon the officers of the company, who have accomplished these wonders while constantly laboring under the disadvantage of the want of adequate means.

Alabama and Mississippi Railroad.

We hope the effort that is now making to secure the balance of stock to be taken in this road, will be successful at once. We want to see the work commenced. In order to get the road over the Cahaba river in eighteen months, and to Union Town in two years or less, which can certainly be done, the subscriptions should be general now, instead of leaving it all to the present stockholders. That the stock will be good, there can now be no question, with the bonus in the loan of $100,000 five years without interest, and five years at five per cent.

Before the last five years arrives, it will be a through road to the Mobile and Ohio, and the Southern railroad from Jackson; so that the tide of travel and through business will enable us to put freights at very low figures, and at the same time have a good paying road. This road too will give greater strength to the Alabama and Tennessee road, as everybody interested in the one will be more or less deeply interested in the other. There are many persons in our vicinity who are amply able to take one or two thousand, if not five. Some out towards the Cahaba river, and on the other side, who have not yet subscribed, and we presume will now readily do so, as they are greatly interested in the building up of our town, accommodating themselves at the same time.

The results of the surveys will be published as quick as the estimates can be made up. Suffice it now to say, that the lines surveyed make the road two third miles shorter than was anticipated, being 30-31 miles, and the grades can be got within 40 feet to the mile, and no sharp curves—three-fourths or more of the line being straight. We congratulate the stockholders upon this result, of having a road that will work cheaply.—*Selma Reporter.*

Burlington and Missouri River Railroad.

At a meeting of the stockholders of the above company held in Burlington on the 5th inst., the following gentlemen were elected a board of directors for the ensuing year:—

Charles Mason,	Wm. F. Coolbaugh,
Lyman Cook,	J. F. Tallant,
Henry W. Starr,	F. J. C. Pearsley,
Thomas Hedge,	T. L. Parsons,

A. W. Carpenter.

On motion of Mr. Corse it was

Resolved, that the board of directors be requested to have a survey, location and right of way for the first thirty miles of road procured, at the earliest practicable period.

After the adjournment of the meeting the board elected the following officers:—

Charles Mason, President.

Joseph Fales, Secretary.

W. Wallace White, Treasurer.

The St. Louis Railway Commenced.

The ceremony of breaking ground on the Ohio and Mississippi railway, at Illinoistown, opposite St. Louis, was celebrated on Saturday, 7th inst., in a suitable manner. The arrangements were ample and well conceived. Professor Mitchell addressed the mass of people present. The ferry companies placed their boats under the direction of the railway board, to transport free all who chose to attend.—We are yet without the particulars of the opening celebration, but doubt not they were appropriate and imposing. The St. Louis Republican of Saturday morning says:

On many accounts, the past year has been an eventful one in the history of St. Louis. It has witnessed the commencement and steady prosecution of that iron track which, in the course of time is inevitably destined to connect the Mississippi Valley with the Pacific Ocean, and to-day we are called upon to take part in the ceremony of forging the link which is to unite that to the Atlantic.

But a few short years ago, and the idea of such a work as will be this day commenced, the thought of riveting the last link in the iron girdle which should bind New York to St. Louis, would have been deemed visionary, and its entertainers branded enthusiasts. The march of improvement, however, is onward, and time and space must give way before its resistless career. Magnificent farms now stud the plains which but a short while since were one uninterrupted wilderness, and thriving villages now deck the river which but a few brief years ago reflected nought save the majestic trees that shadowed its bank. With the rapid increase and growth of the country arise other and artificial wants. Steam and lightning are called into requisition, and made subservient to man's will; a network of railways and telegraph lines must intersect the entire country, bringing all their advantages and luxuries; the arteries and veins of commerce must all bear their tribute of wealth to the heart, to be thence diffused throughout the frame, carrying life and prosperity to every part of the body.

In the furtherance of this great work, we are invited to assemble to-day and witness the auspicious commencement of that work which is to make St Louis the terminus of the eastern road, as she has already been made of the western. The centre of the Mississippi valley, the emporium of its trade, shaped by the hand of nature as the first inland city of the world, who can foretell her destiny when science is forced to swell her resources? This is a bright and glorious theme—one which speculation itself is almost afraid to touch.

The Route East.

Last year we knew, for we found out by experience that the New York and Erie railroad was the only route that our citizens went east upon They could travel quicker that way, could receive their freight, and altogether they consider it the fastest road. So far as our information goes, and we mix *some* among the people, the New York and Erie railroad has gained a reputation with the western people that is bound to be lasting. When such pains are taken by the officers of any public conveyance, to afford all the comforts possible to passengers, these same passengers are bound to speak loudly, both of those officers and the conveyance.

The arrangements made by the agents of this road, in connection with the Cleveland, Columbus and Cincinnati road, on the opening of lake navigation, will be made so as to afford even greater facilities to the travelling public than were extended last year. Our city was recently visited by M. B. Spaulding, the general agent of the road, whose office is No. 2 Courtlandt st., New York, who informed us that the conveniences of the road were such that passengers, as we said before, when navigation opened, can be carried through, from this place to New York, in *forty hours*, being something less than last season, and without loss of sleep.—Facilities for the increase of business have been amply provided for at Dunkirk and other points on the route.

The arrangements for the transit of merchandize are perfected in such a manner as will insure dispatch at all times. For passengers and for freight also, the hours for the different trains to leave New York and Cincinnati, are not yet fixed, but soon will be, and then it will be announced to the public through Mr. L. S. Etliot, the agent in this city. —*Cincinnati Enquirer.*

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with auspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, bnt in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent.
Motive Power for N. J. R.R. and Trans. Co.

CAUTION.

India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co, No. 104 Broadway, New York. 7tf.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named. J. B. BASSINGER,
Chief Engineer.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

New York and Canada.



The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.



The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tuscumbia and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, *including* all the materials. And also for the mechanical work, *excluding* timber *only*.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boated down) 3 miles above the bridge site, and Clay of a good quality is found convenient, Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. McKETHAN,
J. D. WILLIAMS,
D. G. McRAE, } Committee.

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30. 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon. for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary..

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

Machinists' Tools.

THE subscribers have on hand and are constantly manufacturing at their MACHINE WORKS, LOWELL, MASS., a superior class of Machinists' Tools, among which are

ENGINE LATHES PLAINING, DRILLING AND SLOTTING MACHINES

of various sizes, designed particularly for Railroad Shops.

ALDRICH, TYNG & CO.

Lowell, Jan. 1, 1852.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20. 1851. 3m.

LOWMOOR LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co, is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.
Bosto November 29th. 1m

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next. for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER, President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.
By his Attorney, G. M. KNEVITT.
New York, 1851.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 10] SATURDAY, MARCH 6, 1852. [WHOLE No. 829, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

What will Good Credit Abroad do for our Railroads.....145
Cincinnati and Marietta Railroad.....146
Speed of Ocean Steamers.....147
Statistics of New York Railroads.....147
Michigan Southern Railroad.....156, 148
Railroads in Virginia.....148
Atlantic and St. Lawrence Railroad.....150
Statistics of Kentucky.....151
Mississippi and Atlantic Railroad.....151
Mobile and Ohio Railroad.....151
Extension of the Harlem Railroad.....151
New Route from Quebec to Montreal.....152
Toledo, Norwalk and Cleveland Railroad.....152
Cleveland and Wellsville Railroad.....152
European and North American Railroad.....153
Stock and Money Market.....153
Halifax and Quebec Railroad.....154
Sparta Railroad.....155
Rock Island and Chicago Railroad.....155
Southwestern Railroad.....155
Kentucky Railroad Securities.....156
Lafayette and Indianapolis Railroad.....157

American Railroad Journal.

Saturday, March 6, 1852.

What will a Good Credit Abroad do for our Railroads?

The great want of this country is *capital*; not that we have not an abundance of food and clothing, and commodious shelter; not that the great mass are not in possession of everything necessary to a high degree of personal comfort; but because, favored as we are, we still lack the means to avail ourselves of a tithe even of the resources, of the future wealth, which lie in open view before us. We are the richest nation on the globe, measured by the true test, that of the amount of the aggregate comfort enjoyed by our people. We might become *apparently* the richest, were we to imitate the example of our European neighbors, and collect the capital of the country into a few hands, and convert the mass into dependents upon these few, to serve for the pittance of a bare subsistence. In such an event, capital would become abundant, and the rate of interest low, for the reason that the few would hoard what the many produce, but what with *us* the many consume. We can have the same abundance of available capital, and the same low rate of interest which prevails in England, only upon the terms which that country pays, to have money down to 3½ per cent.

But to our subject. There never was a period in the history of our country, when we were in such need of money as at the present time; never a time when money would accomplish such results. It is easy to illustrate this want. An isolated section of country has commenced the construction of a railroad, the object of which is to open an outlet to a market for its produce, which is at present nearly worthless, from the cost of transportation. The cost of the road is to be, say $1,500,000. The road, when built, it is admitted, will more than quadruple the value of the propeity of the district traversed. Still the people interested in the work are not able to complete it, for the reason that their means will not become available until after it is built. They can furnish one-half of the means, but unless they can borrow the balance, they must fail in their effort. This single statement is applicable to hundreds of lines now in progress in the United states, making an aggregate of more than 12,000 miles. *All* the roads that make up this immense aggregate must suspend their operations if they cannot borrow money. In this age of improvement, money has acquired a new significance. It means railroads, steamships, and all the new contrivances which enable us to subject the material world more completely to our use.

We want more money. Of the cost of the 12,000 miles in progress, *one-half* at least must be *borrowed*. By common consent, railroad companies are considered as entitled to borrow to this extent upon their works in progress. But there is so little money in the country where these works are located, that those engaged in their construction prefer to resort to our commercial capitals, and offer high rates, to drawing the amount wanted from their own means, at the risk of interfering with their ordinary business affairs. What is true of the country is true, though to a less extent, of our cities. There is but little capital accumulated in them for investment in the *results* of which the capitalist is not directly interested. Almost every monied man in the United States has too many opportunities for investment in projects that offer a much greater return than the ordinary rates of interest, to allow his means to be idle. He can invest in his own line of business at better rates than borrowers can afford to pay. The only way, therefore, that railroad companies can get money, is to offer such rates as shall tempt capital from an already lucrative employment; rates which often appear ruinous.

Our railroad companies then are at the present time compelled to pay from 7½ to 9 per cent on security which the *lenders* pronounce unquestioned, and this too, for periods of from 10 to 20 years, for no other reason than that the demand upon capital is greater than the supply. While such are the facts here, we have only to go to Europe, where we find money a drug, seeking investment at rates not much exceeding one half the amount paid in the United States, and upon security no better, nor in fact half so good. As a people, our *credit* should be the *best* in the world. We have more means than any other. We are the only people in the world that have a system of government which every citizen, high and low, rich and poor, regard as best adapted to promote the particular advantage of each; a government which every person believes is better fitted to promote his good than any other system he can conceive. No man among us can imagine a radical change, which shall be for the better. All, therefore, from choice, are conservitors of existing state of things, while in Europe, a vast *majority* in nearly every State, are discontented, and plotting the overthrow of all existing institutions which they regard only as instruments of oppression. With us, obedience is the result of good will toward our institutions; in Europe it can only be secured by immense standing armies, the support of which saps the very means of the people, which armies are to check and restrain.—But in Europe force is far from bringing quiet and confidence, for it is by no means a settled question which side is to prove strongest in the coming contest. The order of things which exist to-day, may be swept away to-morrow, and with it all the securities for past contracts. We have in the United States no such distracting elements, threatening the safety of our investments. Neither are our means absorbed by standing armies, nor by customs and institutions, which have only the sanction of time for their authority. American securities, for the reasons stated, in fact offer the safest investments in the world, and such in fact, we are happy to state, is beginning to be the view taken of them by intelligent foreigners who have been examining into their character, and who have been watching the progress of our public works. The sums that are now daily coming here for investment are proofs of the favorable feeling that exists upon the other

side of the Atlantic, and which is rapidly extending itself, as is proved by the steady increase of foreign orders.

There is an abundance of capital in Europe, sufficient to meet all our legitimate wants. This capital is looking to the United States for investment. Our railroad companies can command it if they will, and the importance of taking the proper steps to do so, is what we wish to impress upon them. The only way in which this can be done, is to maintain all the issues of State, city, county and railway bonds without a *blemish*. If this can be done for a few years longer, the amount of foreign capital attracted to the country, not only by our high rate of interest, but by the excellence of the security we offer, will be enormous. If, on the other hand, any bad case of repudiation should occur, the supply which we are now receiving would not only be cut off, but all the securities we have sent abroad would be immediately returned to us, to be sold, and the proceeds transmitted to Europe. A more calamitous result cannot be imagined. Were the supply of money that we are receiving from Europe be cut off for a single month, a disastrous panic would ensue. If such are to be the consequences of a temporary check, what would they be were the fountains to be dried up, and were we in addition called upon to make good the balances that already exist against us?

A small cloud has already appeared in the horizon, which is exciting a very considerable anxiety abroad. We refer to the questions raised as to the constitutionality of the Ohio county bonds. Our opinion upon the validity of these issues is well known; but we are compelled to state the fact, that the question of the constitutionality is raised, which is *to be tried*, and of course no one can speak *definitely* as to the result. In our own minds, the question of constitutionality would have no effect whatever. It will have no perceptible effect in this country, except so far as the foreign market is concerned; but it does exert a very decided influence in Europe. Let us change places. Suppose our own citizens to be large holders of securities issued by municipal corporations in *Prussia*, which were purchased under an idea of their perfect validity. Suppose that the question should be raised and entertained in the courts of that kingdom, that these securities were all issued without any legal authority; what would be the feeling of the American holder? Would it not put an effectual check upon all further sales here, and would not instant steps be resorted to, to return them at once to Prussia, and would not our people say, "this is the last time you will ever catch us again in such a scrape," would not the affair create a disgust with all foreign investments of the kind? Certainly it would, and justly so. We would never again place ourselves at the mercy of a people whose acts might be repudiated at will, without any remedy on our part. Now the reverse of the case we have supposed is strictly and exactly true. We have told the people of Germany that we had some excellent county securities of the Ohio counties. That nothing could be better or safer; and having sold a large quantity, we gravely call in question the right of the counties to make these issues, and should the objection be sustained, the unlucky purchaser would be without remedy.

Now we wish to say distinctly to our Ohio friends that they must put this matter of the constitutionality of their county issues at once at rest. So long as it shall remain an open question, so long will it be an incubus upon their securities of every kind. For foreign investment, it will stop the sale of all county securities, and without this outlet, the domestic purchaser will buy only sparingly. It is no use to assert the fact, that all will come out right. We believe it in this country already. The foreigner cannot be made to believe it, till he sees the decision. If, on the other hand, contrary to all belief, the decision should be *adverse* to the constitutionality of the county issues, such an event would be the severest blow ever inflicted upon American credits in Europe. It would at once put a full stop to three fourths of all our works in progress in the United States, and would cause a monetary panic equalled only by that of 1836–7. It would at once bring back from Europe all our securities which are now held there for investment, and in its effects upon our works in progress, and upon the ordinary business operations of the country, it would inflict injury upon the country fifty times greater than the whole amount of the county issues of the State. The effect of repudiation *of* Ohio *upon* Ohio, would be most disastrous. It would bring to a dead stand all of her 2000 miles of road in progress, and which now promise such benificent and profitable results, from which they could not move for years.

We were induced to write this article, from the tenor of several letters (which we have been permitted to read,) from leading foreign houses, largely engaged in the negotiation of American securities. The writers have become alarmed at the movement which has already taken place in Ohio, and should it be repeated there, and in other quarters, we may certainly look for the return of a large portion of the securities which we have already sent abroad; those of western counties in particular. Our people cannot wonder at the anxiety and distrust manifested. It is exactly what they would feel in a change of circumstances. The recent disposition manifested by the directors of the Vermont Central railroad, to repudiate some of the acts of their late treasurer, was also severely commented upon, and we really believe attracted more attention in Germany than in the United States. We have become so accustomed to the peculiar manner in which that company have for years conducted their affairs, that nothing they may be led to do, can with us excite either astonishment or surprize. No act of theirs can be construed as showing any disposition toward repudiation on the part of any other company. The Vermont Central railroad company is *sui generis*, in every particular, and appears like an exotic in our general system. Still foreigners cannot make the distinction, and the fact that this company seemed for a time disposed to repudiate some of the acts of its authorized agents, has just as much significance abroad, as would a similar act on the part of the New York and Erie railroad company.

The foreign capitalists say to us, and with good reason, "that having once parted with our securities for a satisfactory equivalent, we are forever esstopped from urging in future, any reason against their validity. That is a question which the *seller* is in good faith bound to know all about before he offers them, and one which the purchaser, living in Europe, cannot examine if he would. In all sales, the *right* to make the issue is of necessity taken for granted. The only open questions upon which we are competent to decide, are those of price and apparent security." For us therefore to raise questions upon points which are presumed to be settled by the *act* of *offering* the securities, is the grossest kind of fraud, which certainly cannot be perpetrated without the most disastrous results upon our whole class of securities held not only in Europe but in the United States.

In what we have said we would not be supposed to intimate an idea, that any of our railroad companies interested in county securities have the slightest suspicion of their validity, or that a single bond has been sold, but under the conviction of their perfect legality. But foreigners only look at our acts, not at our opinions; and if we would continue to maintain the ground in their confidence which we have already gained, and to enlarge it to such an extent as shall make it the means of a still further supply of money, we must lay it down as a sacred maxim, that our obligations to pay a debt honestly contracted, can *never* be questioned under *any* circumstances. If our companies will take and maintain this position, there can be no doubt of their being able to borrow all sums, to which they are really entitled, and which are necessary to carry forward their works. If, on the other hand, this wholesome rule should ever be violated, the departure from it would involve the destruction of the whole system of credits upon which our railroads are based. Credit is a delicate plant, requiring years to mature, but liable to be destroyed in an instant by a single act.

Our railroad companies can hardly appreciate the importance to them of the foreign market for their securities, and they will excuse us for writing so long an article in reference to this subject. They may rely upon it, that we have not overstated the matter. We have indicated the correct course to be pursued. When we commenced, we had in view only the cases of the Ohio county bonds, and the recent act of the Vermont Central railroad, but we wish to make what we have stated in reference to the cases cited, applicable to every act of railroad companies, that comes within the sphere of their legitimate duties.

Ohio.

Cincinnati and Marietta Railroad Company.—We are glad to find that this company has not been idle, but is moving forward in its grand enterprise, and furnishing us with a thoroughfare to the East. There is no work more important to Cincinnati.

We are credibly informed that a million and a half dollars of stock have been taken by subscribers of undoubted solvency. A large portion of it consists of corporate subscriptions made by the counties along the line. Seventy-seven miles of the road have been put under contract, extending from Blanchester, a point on the Hillsborough road, to the coal region, which is some twenty miles beyond Chillicothe, and the contractors are at work. One hundred and fifty thousand dollars have already been expended. No aid has yet been received from Cincinnati. The loan of her credit for $150,000, which was voted by our people in the fall of 1850, has not been called for till now. The managers and the company, who are men of business, experience and substance, have chosen to delay asking for the bonds of the city until they were able to give assurance, not only of the payment of the debt and interest, but of the speedy completion of the work.

No company has brought better security or more weight of character in its managers than this. We trust that the city Council will be prompt to make available the loan which has been voted by the people. Although this company is the last to receive its share of the millions, it is not likely to be the last to fulfil its obligations to the city by opening a thoroughfare across the State, in the latitude of Cincinnati. We are advised that if this loan is consummated without delay, the whole line from the Hillsborough road to Marietta will be put under contract within three months, and in two years completed. Let no small obstacles be allowed to defeat or delay this grand design. Let the small share of our city's contribution be promptly paid

and the work prosecuted with energy.—*Cincinnati Commercial.*

Collins' and Cunard Lines of Steamers.

The following is a statement of the comparative speed of the Collins' and Cunard lines of steamers, as shown by the average of a given number of trips between Liverpool and New York and Boston:—

Fourteen Trips of the Collins' Line from Liverpool.

	Days.	Hours.	M.
Total time occupied	158	21	15
Average time per trip	11	8	00
Quickest trip since July by the Baltic	9	13	40
Longest trip since July by the Atlantic	13	17	30

Average number of passengers, 106.

Thirteen Trips of the Cunard Line from Liverpool.

Total time occupied	161	4	15
Average time per trip	12	9	00
Quickest time since July by the Africa	10	6	00
Longest trip since July by the Europa	16	20	00

Average number of passengers, 101.

Thirteen Trips of the Cunard Line to Boston.

Total time occupied	151	10	00
Average time per trip	11	15	00
Quickest trip since July by the Asia	10	4	30
Longest trip since July by the Canada	13	12	00

Average number of passengers, 74.

Thirteen Trips of the Collins' Line to Liverpool.

Total time occupied	142	10	45
Average time per trip	10	23	00
Quickest trip since July by the Baltic	10	4	45
Longest trip since July by the Baltic	12	9	00

Average number of passengers, 63.

Fourteen Trips of the Cunard Line to Liverpool.

Total time occupied	160	18	45
Average time per trip	11	11	00
Quickest trip since July by the Africa	10	9	30
Longest trip since July by the Europa	14	3	00

Average number of passengers, 69.

Thirteen Trips of the Cunard Line to Liverpool from Boston.

Total time occupied	140	22	30
Average time per trip	10	20	00
Quickest trip since July by the Asia	9	20	45
Longest trip since July by the Cambria	12	21	00

Average number of passengers, 35.

Specie shipped by Collins' and Cunard steamers from New York, July 1st to Jan. 1st..... $19,069,089

Specie shipped per Cunard steamers from Boston, July 1st to January 1st..... 2,431,632

Illinois.

Aurora Branch Railroad.—The annual meeting of the Stockholders in the Aurora Branch railroad, was held at Aurora on Saturday last, at which the following Board of Directors was unanimously elected:—Stephen F. Gale, I. H. Burch, Allen Robbins, E. S. Wadsworth, John Frink, E. C. Larned, Chicago; J. Van Nortwick, Batavia; B. Hackney, L. D. Brady, Aurora; J. W. Brooks, Detroit; Gilbert C. Davison, Albany, N. Y.

We are informed that it is the intention of the new board to push the road through to its connection with the Galena branch of the Central railroad, with all possible despatch. The surveys have been completed, a highly favorable route selected, and, the entire road will probably be put under contract at an early day.

Statistics of Railroads of the State of New York, 1851.

NAME.	Length of road—miles.	Length of road laid.	Length of double track, including sidings.	Length of branch owned by company.	Length of double track on branches.	Weight of rail per yard on main road—lbs.	No. of engine houses and shops.	No. of engines.	No. passenger cars, 1st class.	Do. 2d class and emigrant cars.	No. baggage, mail and express cars.	No. of freight cars.	Speed in miles per hour of ordinary passenger train, including stops.	Do. do. when in motion.	Speed in miles per hour of express train, including stops.	Do. do. when in motion.	Speed in miles per hour of freight train, including stops.	Do. do. when in motion.	Weight in tons of passenger trains, excluding passengers & baggage.	Weight in tons of freight train, excluding freight.	Rate per mile charged. Passengers. 1st class. cts.	2d class. cts.	3d class. cts.	Total tonnage carried.	Product of forest.	Product of animals.	Vegetables.	Other agricultural products.	Manufactures.	Merchandize.	Other freight.	Number of persons killed.	Number of persons Injured.
Albany and Schenectady	17	17	17	2		60	3	7	36	32	43	45	25	25	30	30	17			21	3	2½	1½	92,058	1,880	29,415	8,873	1,124	4,801	32,240	13,726	no report	3
Albany and W. Stockb.(1)	38½	38½				56	2	4	8	5	15	28									2½	1½	1	185,119	7,032	19,883	84,825	3,773	33,288	8,331	27,987	no report	20
Buffalo and Niagara Falls	22	22				57	2	4	8	5	15	28	20	20	27½	30	13½	16	64	120	2	1½	1	3,402	165	2,972	253	288	796	796	617	....	1
Buffalo and Rochester	76	76		6	1	62	5	15	28	20	27	40	23	23	27	30	8	10	60	113	2½	1½	1	48,880	4,409	11,238	7,034	1,063	8,003	14,122	1,448	10	3
Cayuga and Susquehanna	35	35	1½			58	1	4	8	2	2	40	23	23	27	30	8	10	60	113	2½	1½	1	13,898	357	2,703	2,089	107	1,957	1,017	1,586	....	....
Hudson River.....(2)	144	144	3			70	8	25	64	14	14	75	26½	25½	30	40	19	28	45	69	1½ &2			12,915	357	2,585	334	1,539	4,965	1,624	1,611	18	3
Hudson and Berkshire	31½	31½	11	2		56	2	4	16	24	5	90	20	20	25	30	11	12	45	45	3	2½	1½	37,145	....	....	....	....	....	....	....	no report	4
Long Island	95	84	11	34	14	56	14	24	61	21	5	349	21	21	30	35	10	14	30	45	24	2½	1½	32,000	....	....	....	....	....	....	....	27	20
New York and Erie	464	464	58½	184	56 &60	58	9	18	28	6	8	144	25	25	30	35	12	18	35	179	2	1½	1	250,096	58,358	53,991	26,125	1,374	45,562	37,918	26,768	no report	20
New York and Harlem	131	96	18	1		64	5	20	46	....	12	355	24	24	35	35	12	20	50	75	2½	1½	1	47,904	255	18,194	6,655	1,659	1,800	19,020	321	no report	7
N. York and N. Haven.(3)	61	61	17	14	1	58	6	23	14	....	6	435	26	26	30	30	10	12	60	100	2	1	1	60,535	3,288	7,158	1,975	1,193	17,750	15,354	no report	no report	5
Northern	118	118	14	11	1	57	1	5	5	2	2	30	23	23	30	30	12	15	46	82	3	2	2	109,700	37,064	3,992	41,187	6,595	3,957	8,617	8,299	7	5
Oswego and Syracuse	35	25	1½	1		58	6	23	14	....	6	435	26	26	30	30	10	12	60	193	1	....	....	19,992	12,609	408	3,864	113	444	1,599	955	....	....
Rensselaer and Saratoga	25	25	1½	1	....	57	1	5	5	2	2	30	23	23	30	30	12	15	46	82	3	2	2	27,194	1,908	879	1,567	452	2,470	6,051	13,907	no report	9
Rochester and Syracuse	104	104	1	10	....	65	2	7	25	8	4	154	25	25	31	34	12	15	72	119	2	1½	1	83,569	2,146	21,275	12,604	2,954	9,590	33,042	11,958	11	9
Saratoga and Wash'n..(4)	52	52	3	13	1½	56	3	5	8	4	2	53	20	20	25	30	13	15	45	120	2	1½	1	23,906	308	2,035	34	116	2,088	4,455	14,784	....	....
Schenectady and Troy	20½	20½	6	1	....	56	3	7	11	9	5	28	20	20	25	30	13	15	45	120	2	1½	1	15,898	417	6,008	2,972	293	1,610	2,735	1,310	....	....
Syracuse and Utica	53	53	14	....	....	56	2	6	14	23	3	122	21	30	33	35	14	18	64	135	2½	1½	1	86,849	5,130	33,972	17,574	1,389	6,903	9,566	13,015	5	6
Troy and Greenbush ..(5)	6	6	....	....	....	61 &70	6	14	23	....	....	122	21	30	33	35	14	18	64	135	2½	1½	1	37,211	2,710	7,407	10,245	76	5,297	590	10,883	1	..
Utica and Schenectady	78	78	88	....	....	56	1	3	22	7	4	154	25	25	30	35	12	15	72	119	2	1½	1	115,751	4,849	44,105	16,527	1,460	7,923	30,553	10,234	4	..
Watertown and Rome	97	72	6	6	1	65	4	22	7	11	9	306	22	25	28	35	12	15	62	141	3	1½	1	34,307	2,708	1,633	900	92	1,633	7,030	292	1	..
Buffalo & Conh'n Val. (6)	134	13	1	....	....	56	2	6	9	5	2	95	20	20	25	30	12	15	62	141	3	1½	1	21,652	....	....	....	....	....	....	....	....	....
Buffalo and State Line (6)	69	9	....	....	....	58	1	4	7	2	1	75	20	20	25	30	12	15	62	141	3	1½	1	....	....	....	....	....	....	....	....	....	....
Canandaigua & Corn'g (7)	46½	46½	2	....	....	58	1	4	7	2	1	75	20	20	25	30	12	15	62	141	3	1½	1	....	....	....	....	....	....	....	....	....	....
Chemung ..... (8)	17½	17½	....	....	....	57	1	4	7	2	1	75	20	20	25	30	12	15	62	141	3	1½	1	....	....	....	....	....	....	....	....	....	....
Plattsburg & Montreal.(6)	52	52	....	....	....	58	1	4	7	2	1	75	20	20	25	30	12	15	62	141	3	1½	1	....	....	....	....	....	....	....	....	....	....
Sackett's Har. & Ellisb.(6)	17½	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Roch., Lockp. & N. F.(9)	76	76	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Saratoga and Schen'cy(1)	22	22	....	....	....	56	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

1. Leased road. 2. Opened through 30th September. 3. Road chiefly in Connecticut. 4. Road partly in Vermont. 5. Leased after 8 months. 6. New. 7. In use through—operated by Erie company. 8. Leased to Erie company. 9. Re-organized,

Michigan Southern Railroad.

The Michigan Southern railroad company have issued a brief statement of the condition of that company and its business the past year. The earnings for the year 1851 were as follows:—

	Passengers.	Freight.	Mails & miscel.
January	$1,820 31	14,683 75	
February	1,869 73	13,676 32	595 25
March	2,810 99	9,546 43	20 88
April	4,016 10	17,632 40	45 50
May	5,404 44	19,649 08	7 95
June	5,350 96	17,624 77	170 57
July	5,058 04	16,680 13	
August	5,027 81	19,776 66	327 38
September	8,612 39	27,762 84	
October	9,596 83	40,895 59	
November	6,134 89	26,419 50	502 50
December	4,759 60	18,757 68	
Mails for the year.			8,167 35
	$60,462 09	$243,105 15	9,837 38

Total.....$313,404 62

Recapitulation for 1851, as compared with 1850:

	1850.	1851.
Passengers	$25,779 22	$60,462 09
Freights	109,253 81	243,105 15
Mails and Miscellaneous.	4,504 94	9,837 38
	$139,537 97	$313,404 62
		139,537 97

Increase about 125 per cent.....$173,866 65

The earnings tor 1851 were upon a longer line than was open for use in 1850; 25 miles of new road having been opened in March, and about 20 more in September, 1851.

The expenses for repairs and operating and managing the road, including taxes and rents of the Erie and Kalamazoo road for the year 1851, were $137,404 19.

Earnings as above	$313,404 62
Expenses	137,404 19
Net earnings	$176,000 43

Two dividends, of 7 per cent each, upon the amount of capital stock paid in, have been declared as follows:—

1st July, 1851, upon $712,600, being amount paid in upon stock at that date	$49,882 00
2d January, 1852, upon $902,020	63,141 40
Total	$113,023 40

The total amount expended in construction and for equipment to 1st January, 1852, was.....$2,378,082 05

The indebtedness of the company at that date was as follows:

7 per ct. mortgage bonds due in 1860. Total amount issued	$1,000,000 00	
Less amount unsold	94,000 00	
		$906,000 00
Balance of debt due to the State of Michigan, payable $50,000 per annum, with interest at 6 per cent		200,000 00
Eight per cent bonds, due in 1853		31,614 00
All other indebtedness, after applying cash and available means on hand.		187,068 79
Capital stock subscribed	$992,700	
Less amount unpaid	90,500	
		902,200 00
Due to income account for amount expended in construction		151,199 26
Total		$2,378,082 05
Mortgage bonds on hand, unsold 1st Jan		$94,000 00
Amount payable on stock subscriptions at same date		90,500 00
Total		$184,500 00

The main line of the road is all built with a heavy rail, except about 20 miles at the eastern end, the iron for which is now at Dunkirk, and which will be laid down early in the ensuing spring.

The equipment of the road on the 1st January, 1852, consisted of 25 locomotives, (including 4 purchased and delivered at Buffalo, which cannot reach Michigan until the opening of lake navigation,) 16 passenger cars, 426 freight cars, equal to cars of four wheels, and 92 repairing and lumber cars.

The preceding statement is exclusive of the Northern Indiana railroad, the expenditure upon which up to 1st January, 1852, for all purposes of construction and equipment, had been $1,553,133 38. This road was opened for use to Laporte (187 miles from Lake Erie) in December last; and from Michigan City to Chicago on the 20th ult. A continuous line is thus formed by the Michigan Southern and Northern Indiana roads from Lake Erie to Chicago, with the exception of 13 miles between Laporte and Michigan City, which is now supplied by a plank road. It is expected that the entire line will be completed in April next, when the trains can pass without interruption from Lake Erie to Chicago.

Further expenditures will be required for completing the stations and depot accommodations, and for covering advances by the company for their steamboat connections upon the lakes. The work of construction upon the road will be substantially completed previous to the issuing of the annual report in June next, by which time the cost of the work can be definitely settled.

Richmond, Feb. 9th, 1852.

To Col. E. Fontaine:

Dear Sir:—You seem to have re-considered your resolution to say no more in this controversy, and I will beg leave to follow your example. Indeed, I thought that, if you really felt satisfied that you had proven the formidable array of positions claimed in your previous letter and the accompanying one from Mr. Shaw, you could not possibly find occasion to say anything more; but it seems that you found it necessary, a second time, to remind the public that you had proven all your positions. Now, it seems to me that one who considers it necessary so frequently to declare to the public that "he positively has the best of an argument," must feel some little doubt on the subject. It looks very much like whistling to keep one's courage up.

Now, I will once more ask the indulgence of the public, and make a few brief remarks on your letter of the 4th inst.; and then, profiting by your example, sum up the evidence in my case. It is right to be taught by our opponents, and your example has suggested to me the importance of telling the public what I have proven. As to your argument, founded on the expressions of opinion of the Governor, the Board of Public Works and the Committees of the House, while they are entitled to our respectful consideration, they certainly should not be urged against the introduction of new evidence. Two of these opinions were published before the results of the survey made down New river were communicated to the board. Not until my letter of January 26th, was anything definitely known about the character of the line between Covington and Staunton. There had been the singular phenomenon of a company asking the Legislature to make theirs the great channel of trade between east and west, and to pay out millions of dollars for its extension and completion, without presenting the facts on which the feasibility of the scheme depended. Whether it was by accident or design, I will not undertake to say; but, from no official document of recent date, could anything be known of the *grades* (on which mainly depends the practical utility of a road,) between Covington and Charlottsville, a distance of 108 miles. Not until I called your attention to these facts, obtained, in part, from a public document of 1849, which very few men would ever have looked into, and part from a private letter, which unfortunately found its way into the Staunton paper; not until I brought out these facts, one by one, did you in any manner notice their existence.

Now, I say the opinions to which you allude, have been formed without a knowledge of all the facts in the case. Indeed, it has only been within the last year that much was known by any one of the merits of this case, and I do not think we now possess all the data which are desirable in the formation of a correct opinion.

Your argument, that, because Richmond has now to go to Baltimore to buy bacon, lard and butter, it must necessarily follow that Richmond will hereafter be the best place to export these things from, is simply *a non sequitur*.

It happens that Boston is the chief owner of the Boston and Albany road, and that Baltimore is the chief owner of the Baltimore and Ohio road, and those cities will in some cases, make the railroad carry freight under cost to benefit their city and their business. It seems that you think it will be necessary for the Central railroad to make similar sacrifices for the benefit of Virginia cities. I do not know how your country stockholders and the tax payers of the State will relish this doctrine. Now, whether the canal takes away your freight at Covington or you bring it over your road at a rate below cost, I see not much comfort for your stockholders in the result.

It is but to a small extent, and under peculiar circumstances, that a railroad ever carries tonnage under cost, and unless a railroad can be made capable of carrying tonnage from the Ohio river to Richmond at remunerating rates, it would be folly to attempt it. Hence the absolute necessity that Virginia should construct the very best road that can be made.

The competition of Baltimore, through the Baltimore and Ohio road, of Pennsylvania, through the Central railroad of Pennsylvania, and of New York, through the Erie canal, Lake Erie and the Ohio canal, are to be met on the Ohio river.

There is another consideration, which I would urge in this connection. The more trade a road has within its capacity, the cheaper it can transport tonnage. The line, as proposed by me, joins another grand trunk more than 200 miles west of Richmond. The large and valuable trade of that trunk will warrant the lowest rates of freight charged on railroads.

The single item of gypsum for the Kanawha and Ohio country will furnish this road with an amount of freight which would have the most powerful influence on the economy of its operations.

I will now very briefly recapitulate the question we have been arguing and the points which have been established.

The people of Virginia, not this section of the State nor that section, but the whole people, for the common welfare, wish to construct a railroad, connecting the waters of the Ohio river with the Chesapeake bay. From the Ohio river to the mouth of Greenbrier there is no difference of opinion as to the route. From the mouth of Greenbrier to Richmond two routes are proposed. This road, as its friends believe, is to have a trade which will infuse life and vigor into every pursuit, develop the mighty resources of the State and render our Eastern cities the markets of an Empire. The object is one which should deeply interest every citizen of the Commonwealth. There should be but one desire in reference to the location of such a road. It should be the best possible road that could be made, and the one best calculated to secure to Virginia the great ends of such an improvement.

These considerations must have the more weight, as there are many dangerous rivals striving for the same goal. Nothing within the range of possibility should be left undone in our efforts to furnish a safer, cheaper and more expeditious mode of transportation, than those offered by our rivals.

There are two routes proposed between the mouth of Greenbrier and Richmond—the distance being the same.

I will first describe the route passing through Covington and Staunton: Beginning at the Ohio river, in the distance of 203¼ miles, there is no grade exceeding 20 feet per mile; of the remaining 24¼ miles, reaching Covington, two ascending eastward, are at the rate of 92 4-10 feet per mile; five, descending eastward, are at the rate of 105 feet

per mile; and 17¼ miles have a limit of 40 feet ascending eastward, and 50 feet descending eastward.

Between Covington and Staunton, there are numerous high gradients of 70 feet ascending eastward, and 80 feet descending eastward. Again: Between Staunton and Charlottesville, there are at least 11¼ miles of grades of 70 and 75 feet.

On the other line proposed, (through Christiansburg, etc.:) Beginning at the Ohio river, in 213 miles, and probably more there would be no grade exceeding 20 feet per mile, and after that, there would be numerous grades of 60 feet per mile rising eastward, and 68 feet per mile descending eastward.

The following calculations illustrate the effect of these grades: The power of a locomotive on a grade of 60 feet per mile, is about 46 per cent. greater than on one of 92 4-10, and the power of an engine on a grade of 68 feet per mile, is about 50 per cent greater than on one of 105 feet.

The power of an engine on a grade of 60 feet per mile, is 14 per cent greater than on one of 70 feet per mile. The power of an engine on a grade of 68 feet per mile, is 16 per cent greater than on one of 80 feet per mile.

It has therefore been established.

1. That on the Christiansburg route the grades are best.

2. Mr. Shaw has conceded that the broad guage gives the Christiansburg route an advantage of 18 per cent.

3. Virginia must expend from one and a half to two millions more to perfect this improvement by the Staunton route than would be required by the Christiansburg route.

4. The road by Christiansburg could be made on the three-fifths principle, while the friends of the other route would require it to be made on State account.

5. The route by Christiansburg avoids all risk of competition from Baltimore, while the route by Staunton would certainly endanger the wholesale business of this whole back country, and probably its export trade.

6. It would take several years more to complete the Central road continuation to Greenbrier than to finish the road by Christiansburg to the same point, and consequently the latter plan would sooner become a dividend-paying stock.

The proof of these propositions may be found in the letters I have published.

Now, it rests with the tax payers, or rather their representatives, to choose between these two plans. It is a question for the State at large, and not for any section of the State.

The interest which the Virginia and Tennessee railroad have in the decision is as nothing compared with that which the whole people have. I, for one, am entirely willing that the question should be settled without regard to the interests or opinions of the people living on either line.

I am, very respectfully, your ob't servant,

CHAS. F. M. GARNETT.

Virginia Central Railroad Co.,
Richmond, Feb. 4, 1852.

To COL. C. F. M. GARNETT:

Dear Sir—The correspondence between us seemed to be brought to the desired conclusion, at the date of my last, by the establishment of the most important points embraced in the discussion, and what I regarded a concession on your part of two material issues involved, viz: the inability of your road to get western travel, and that Baltimore could not draw from the Central line the cheap agricultural tonnage. You have thought it proper to endeavor to relieve yourself of the effect of that concession by an explanation, which induces this brief answer.

You still admit that "corn, wheat and flour would not be apt to go to Baltimore;" but apprehend that bacon, lard and butter would. I believe no fact is better established, than that Richmond is a better market for these articles than Baltimore; a large portion of the bacon sold in this market is first carried to Baltimore from the west, for want of a direct channel to Richmond, and is then brought here and sold at a profit. Flour, which you concede will not be taken from Richmond, exerts a great influence in giving direction to other subjects of trade. Being the most prominent article of agricultural production, where that seeks a market, the groceries and dry goods must be procured in return. For this reason, flour is transported from Albany to Boston, 200 miles, at the unprofitable rate of 25 cents per barrel; other trade which follows in its vortex, remunerating the railroad and enriching the city of Boston. Give us the wheat, corn and flour, and the rest will follow.

That yourself and other friends of the New River line should persist in thinking it the best connection with the Ohio, in spite of the many decisions of high authority against you, is one of the most remarkable instances of self-delusion I have ever known.

1st. The present Governor of the Commonwealth in his first message to the Legislature, although recommending a very extended system of internal improvement, altogether omitted to notice it.

2d. The Board of Public Works, through their President, Gov. Floyd, who is distinguished for his patriotic devotion to an enlarged and liberal scheme of improving the State, has made a report on this subject, and although specially enumerating the great works of the State, which ought to be made, has merely mentioned the *Christiansburg and Greenbrier railroad* as a branch that is feasible. In each of these, the Central railroad occupies a prominent place, Gov. Johnson placing it before all others.

3d. At an early period of the present session of the Legislature, a committee of twenty-one, taken from the body of the State, was appointed to consider what works were entitled to the countenance and support of the commonwealth. They, too, it seems, have been unable to appreciate your road as you do, and recommend no appropriation for it, while they give pre-eminence to the Central line, by recommending that portion from Covington to steam navigation, on the Kanawha, to be made on State account,

4th, and last, but not least. The petition of the Virginia and Tennessee company for aid to make the New River branch, was referred to the regular standing "Committee on Roads," who rarely ever refuse to report to the House any bill which its patrons may prepare, though they may intend to vote against it; but in this instance they declined doing so, being unwilling, I presume, that it should have even the slender basis of such indirect sanction on which to rest, without intrinsic merit.

In this state of public sentiment, it is to be regretted that the friends of the Virginia and Tennessee road should expect the claims of the Central road to be surrendered, or even postponed, to let the Christiansburg and Greenbrier take precedence.

On whatever line Virginia adopts to connect her commercial cities with the great west, much of the heavy tonnage will have to be carried with very small profit, if not without profit, to insure that trade. Most railroads in this country, which are designed to sustain commercial cities, are constrained, by the force of competition, to transport heavy staple productions at rates so low that they would gladly transfer them to some friendly co operating line, which is capable of transporting them at cheaper rates. The Baltimore and Ohio railroad would gladly give up the transportation of coal, (I presume) but the city of Baltimore needs the coal trade. The Boston and Albany road would not carry flour 200 miles for 25 cents, but the road is owned mainly by Boston merchants, and they require that sacrifice for the benefit of their city; and I think the interest of Virginia cities will require a rate of charge on heavy tonnage, lower than the New River branch can afford, without the aid of the Ohio travel which it cannot get.

The Central road will not only have a heavy travel to Washington, and the Springs travel, still more profitable, to supply revenue, but its connection with the canal 90 miles west of yours, with its ruling grades of 40 feet to that point, against yours of 60, gives it an advantage of controlling importance as a channel of cheap transportation. Just at that point, where the interest of commerce might demand a rate of toll on heavy tonnage, too low for profit on a railroad, the canal is ready to receive it.

The mutual influence of the Virginia Springs and this line of railroad on each other is not easily over-estimated. Thirty thousand will not limit the number of persons who will annually seek to enjoy the unrivalled and unnumbered attractions of these retreats of health and pleasure. $300,000 to $500,000 annually expended in that region would give an irresistible impulse to its now dormant agricultural and manufacturing capacities, and these being developed, would again swell the profits of the road, by the natural results of increased population and production.

When this road is built it may be relied on as one of the certain sources of relieving the State from taxation.

Very respectfully,
E. FONTAINE.

Pennsylvania.

The State of Pennsylvania is a joint owner in the stock of 53 incorporated companies, most of them turnpikes, in which she has invested..... $1,632,996 62
Invested in her canals and railroads. 30,006,324 76

Total value of improvement interest..... $31,639,321 38

Funded debt on the first day of December, 1851..... $39,216,707 54
Unfunded debt..... 897,528 85

Total liabilities..... $40,114,236 39

This does not include the temporary loan of $98,000 for improving the curves on the Columbia railroad, and the loan authorized the present session, to meet the accruing February interest of $300,000. To which may be added $600,000 of indebtedness on adjudicated claims, the payment of which is deferred for want of available means.

The revenue of the commonwealth for the fiscal year ending on the 30th November last, from all sources, was..... $4,570,393 93
Available funds from 1850..... 754,252 81

Total means..... $5,324,646 74
The expenditures were..... 4,780,667 53

Balance available Nov. 30, 1851.... $543 979 21
To which add depreciated funds.... 41,032 00
Unavailable deposit in U. S. Bank.. 280,000 00

$865,011 21

The revenue from canal and railroad tolls for the year, was..... $1,719,788 54
The expenditures for public improvements..... 1,823,709 92

Excess of expenditures over receipts. $103,921 38

In these expenditures, however, it should be remembered, are included appropriations that do not legitimately belong to the actual current account of expenditures, as, for instance, it embraces appropriations—

For North Branch extension..... $442,169 00
To avoid Allegheny inclined planes... 25,390 10
" Schuylkill inclined planes.. 90,590 00
For straightening and improving Columbia and Philadelphia railroad... 158'171 75
Rebuilding Conestogo bridge..... 20,000 00
Rebuilding Clarke's Ferry bridge.... 21,869 30
Building new depot at Columbia..... 10,200 00

Total..... $768,300 15

Out of an indebtedness of $40,114,236 39, incurred in public improvement investments, there are but five that are at all productive, viz:—

Main line, from tolls the past year.. $1,229,062 85
Susquehanna, North Branch, from tolls the past year..... 234,513 17
Delaware division, from tolls the past year..... 256,212 52

Total receipts from 5 improvements..... $1,719,788 54

The State has had some hard bargains. Out of the 53 corporations named above, of which the State became the purchaser of stock, to the extent of $1,632,996 62, there are scarcely six that have ever been a source of revenue. The State is at the

present moment paying interest on $20,000,000 that have been entirely wasted.

Boardman's Steam Boiler and Furnace.

No. 319 *Fifth St., New York, Jan.* 25, 1852.

One of H. Boardman's improved steam boilers has been in use in my machine shop for the last eighteen months, and I think that in economy of fuel, strength and durability, it is superior to any other form of boiler before the public. I have no doubt, from my experience so far with the boiler, that a ton of good anthracite coal is sufficient to run an eight horse engine, doing full duty, eleven hours per day for a week. It occupies a smaller space, and the setting is less liable to be out of repair, than that of any other boiler with which I am acquainted. The fuel is thoroughly burned, and the arrangement for burning the gas is as nearly perfect as can be—the combustion being so close that the refuse gas passing off by the chimney will not support combustion, but extinguishes flame or sparks instantly; and at the same time, the heat is so fully applied to the water that the temperature in the chimney does not exceed 140° when the boiler is doing full duty. Another advantage of this form of boiler is, that by using a blower, the expense of a high smoke stack may be avoided.

I take pleasure in recommending this improvement to public notice, believing it to be the best fuel-saving aparatus in use.

JOHN MILLS, Machinist.

—

New York, Aug. 13, 1850.

Having examined one of H. Boardman's patent improved boilers, and made a careful experiment to test its evaporating power, I consider it one of the best arrangements for making steam that has come under my observation. The boiler which I saw at the factory of John Mills in Fifth street, is perfectly practicable in its form, not liable to be clogged in the flues, may be easily cleaned of saline or other deposits, and I am satisfied that it is well adapted for use either as a marine boiler, or for locomotive or stationary purposes. It is about equal in weight to a locomotive boiler of like power, but occupies much less space. The evaporating power of this boiler, as shown by the experiment above mentioned, is unsurpassed by any other boiler with which I am acquainted. It saves about 40 per cent of the fuel used by the best locomotive boilers, and about 50 per cent of the am't required by the best cylinder boilers with return flues. The combustion of the gas is most perfect, and the heat, when generated, seems to be mostly taken up by the water. The temperature in the chimney during the experiment was at no time higher than 140°; and so far from any combustible matter being passed off, the gas extinguished burning matter introduced at the top of the chimney; and it would therefore be impossible for sparks to pass through the chimney. The form of this boiler is such as to give great strength and durability; and I recommend it to the public, believing it to be a decided improvement on account of its economy of fuel and space, and its convenience in use. THOS. H. FARON,

Chief Engineer, U. S. Mail Steamer Arctic.

—

Chelsea Iron Works, 28th St..
N. Y., Aug. 20, 1850.

We have built several of Boardman's patent improved boilers, and have no hesitation in saying, that we believe his plan one of the strongest forms of boiler which can be constructed; and that for convenience, safety and durability, it has no superior. The fire surface is very large in proportion to the space occupied by the boiler, while its arrangement is such as to secure the highest effect of the heat when generated. We consider the method of securing a full combustion of the fuel including the combustible gasses, the best with which we are acquainted, while the very low temperature of the refuse gas in the chimney, is sufficient evidence of the full application of the heat. We have seen the certificate of Mr. Thomas H. Faron, as to the performance of the boiler in use by Mr. Mills, and from our long acquaintance with Mr. Faron, and our confidence in his competency as an engineer, and his candor as a man, we place full reliance on his statement in the matter, and believe with him that this boiler is unsurpassed in its evaporating power. The expense of a boiler on Mr. Boardman's plan is about equal to that of a locomotive boiler of the same power, while its principle and arrangement are such as to adapt it for convenient use as a marine boiler, or for locomotive or stationary power.

MOTT & AYRES.

—

New York, Jan, 20, 1852.

Mr. H. Boardman—Dear Sir—Since expressing our views in regard to your patent boiler, August 20th, 1850, we have built a number of them for stationary purposes; also three for steamers on the lakes, and we have to say that we have seen no cause to alter our former views in relation to it, having uniformly given entire satisfaction.

Yours truly,
MOTT & AYRES.

Chelsea Iron Works, 26th St., N. Y.

—

Franklin Forge, cor. 1st Av. and 25th st.,
New York, Jan. 20, 1852.

We have had one of Boardman's patent improved steam boilers in operation at our works for about fifteen months, and are much pleased with it on account of its economy of fuel and space. We cheerfully recommend it to the public, believing from experience, that it fully justifies the statements in the foregoing certificates of Mr. Mills, Mr. Faron, and Messrs. Mott & Ayres.

TUGNOT, DALLY & Co.

—

One of H. Boardman's patent steam boilers has been in use in the Fancy Dying Establishment of Barrett, Nephews & Co., under my immediate supervision, for the last year. A long experience in the use of steam boilers of different construction enables me to compare the boiler now in use in our establishment with others of the most improved form heretofore introduced. I have no hesitation in giving Mr. Boardman's boiler a decided preference, on account of its great economy of fuel, and convenience in attendance. I consider the introduction of air at the top of the furnace an important improvement, as it effects a perfect combustion of the fuel, and avoids the inconvenience and risk from sparks and smoke. This boiler is compact in form, does not foam, or clog in the flues, and I consider its construction such as to give it great durability.

NATHAN BARRETT.

—

New York, Jan. 20, 1852

One of Boardman's patent improved steam boilers is now and has been for the last ten months in operation at my Laundry. It is always ready, without the least trouble or expence. It is convenient in form and use. Its economy in fuel and space surpasses any boiler I am acquainted with. I would cheerfully recommend it to the public, believing, from my experience, it to be the best arrangement for making steam that has come under my observation. JAMES B. HERVEY.

Foot of 71st St., North River.

—

New York, Jan. 21, 1852.

I am happy to inform the public that I am acquainted with H. Boardman's patent improved steam boiler from practical experiment and use, sufficient to guaranty my saying that for economy of fuel and space in the generating of steam, its equal has not come under my observation. I have had a good deal of experience in the generating of steam. I assisted Mr. Thomas H. Faron in making the experiment with Mr. John Mills' boiler in August, 1850, which is as he stated. I have also put in operation a boiler for Mr. J. B. Hervey for a Laundry, whih has now been in use for the last ten months, giving entire satisfaction to all parties.

T. H. BENNETT,
Eng. and Machinist.

278 Fifth st. and 261 and 263 Third st.

The Sherbrooke (Canada) Gazette says that an arrangement has been effected between the authorities in the United States and this Province, by which foreign goods are allowed to pass over the railroads in the United States, under lock, and without the intervention of Custom regulations until they arrive in Canada, through the United States, for exportation.

Atlantic and St. Lawrence Railroad.

The citizens of Portland have once more done themselves honor by lending the credit of their city to the amount of $500,000, to enable the Directors of the Atlantic and St. Lawrence railroad to complete it. We published the state of the vote yesterday, from which it appears that out of 888 votes thrown, there were only 22 (that is 2½ per cent. of the whole number,) in the negative. The vote was not a full one, because the people were ready to carry the measure. as it were, by acclamation. Hence, many did not think it necessary to leave their business to attend the meeting. This additional half million will make the whole amount, for which the city is responsible, two millions of dollars.

There is sometimes an advantage in taking a glance at the past, with a view to note the progress, that has been made. We propose to do so. In the fall of 1844, John A. Poor, Esq., then of Bangor, but a native of Andover, Oxford county, passing through this city on his return from an excursion to his native town and Canada, stated publicly to some of our people here, that *Canada was all alive* to the subject of a railroad communication with the Atlantic, through the eastern townships—that attention was directed to Boston, but they would prefer coming to this place, if the people of Portland would second their views—at the same time urging our people to do so. The idea of such a connection was not new at all—it had long been a favorite idea with many of our more intelligent citizens. Money had been actually expended from the city treasury years before in aid of explorations and surveys, with the view to such a connection. Mr. Poor therefore found ready listeners; the more so as Portland at that time was in a state of great depression—her stores, and houses, many of them, unoccupied—her business and commerce at the lowest ebb—her resources of trade in a great degree cut off or dried up—real estate and wharf property a drug, and rents some 2 or 3 per cent. only of the prime cost of the property rented. The suggestion of Mr. Poor therefore, held out the prospect of relief to a people, who *felt the need* of relief.

There are two classes of railroad improvement men. 1. We have those, who feel and manifest a great deal of zeal in the cause, but have little or no means to contribute in aid of it. As these people have nothing to lose, they are generally the most prompt to advocate any project. 2. We have those, who, having accumulated more or less by persevering industry and attention to business, are slow to jeopardize the fruits of their toil, by embarking in doubtful and hazardous undertakings. It is particularly difficult to get men of property, who are advanced in life, to venture upon new experiments, entirely out of their line, and about which they know little or nothing. Now, when we consider the course that has been taken by our monied men of this class, our elderly men, our octogenarians even—nay, our very women, in regard to the Atlantic and St. Lawrence railway, we must contend, that Portland is entitled to a high degree of credit and praise for her enterprise.

There is another view of this matter, which ought not to be passed unnoticed in this connection—it is the progress and increasing confidence of public opinion here and elsewhere, in the utility and success of the undertaking. When the agent of our citizens returned from Canada in March, 1845, and reported in the Town Hall the result of his mission, and urged upon our citizens to advance boldly and resolutely to the work, one of our most judicious, elderly men of property exclaimed in vexation, "Judge Preble would mortgage the city of Portland to carry through that project." Seven years have passed over his head since then. Now mark the progress of opinion. Although the city had already loaned its credit for one million, and again for half a million of dollars, that same man was an open and most decided advocate for mortgaging the city for the other $500,000. And here, in justice to our elderly men of property, we take occasion to say, that it was under the superintendence and efforts of our elderly men, that this great enterprise of the Portland and Montreal railway was got up. It was they who brought it into being—gave it its form and complexion, and vigorous constitution, and breathed into it the breath of life.

Some may, and no doubt will, say, that the pic-

ture, we have drawn, of the state of things in Portland in the fall of 1844, is overcharged. We are no new comer into this city; nor are we careless observers of the course of things about us. Now we boldly maintain, that there is not a single lineament in that picture, which we could not sustain by irrefragable proof in a court of justice. Compare this former state of things, as we have described it, with the state of things, as it now exists, beginning at Fish Point, and following up Fore river to Vaughan's bridge, and from every part of the shore of Fore river within the limits mentioned, to Back Cove and the boundary of the city! cast an eye also across to Cape Elizabeth side! We appeal, then, with confidence to our fellow citizens throughout the State, to say, whether the people of Portland, in "*mortgaging*" their city for $2,000,000, in aid of the Atlantic and St. Lawrence railroad, have not acted judiciously and wisely? In the beginning, the question was tauntingly asked, "*Where are you going to get your money*? Boston won't help you." The answer was, "We will find it." And the people of Portland have found it!

Kentucky Statistics.

Mr. Kennedy, commissioner of the census, has reported to the Secretary of the Interior, an abstract of the Seventh Census, (1850) from which we condense the following facts in reference to Kentucky:

Area in square miles, 38,680; population, 982,405; number of inhabitants to the square mile, 26·07.

Slaves manumitted, 152; fugitives, 96.

Number of deaths, 15,206; ratio of deaths to the number living, 64·60

Agricultural Productions.—Number of acres, 6,068,633; value of farming implements and machinery, $5,388.092; value of live stock, $29,898,386; bushels of wheat, 2,184,763; bushels of Indian corn, 58,922,788; pounds of tobacco, 55,765,259; ginned cotton, 1,669 bales of 400 lbs. each; pounds of wool, 2,246,168; gallons of wine, 4,202; pounds of butter, 10,115,267; pounds of cheese, 228,744; tons of hay, 115,296; tons of dew rotted hemp, 27,168; tons of water rotted hemp, 2,685; bushels of flax seed, 80,458; pounds of maple sugar, 288,525; value of home made manufactures, $2 487,493.

Population Decennially.—In 1790, 73,077; 1800, 220,955; 1810, 406,511; 1820, 564,317; 1830, 687,917; 1840, 779,828; 1850, 982,405.

Cotton Manufacture.—Number of establishments in operation, 8; capital invested, $239,000; bales cotton used, 3,760; value of raw material, $180,907; number of hands employed, males, 181, females, 221; average wages per month, males, $14 62, females, $9 36; value of entire products, $273,439; yards sheeting, etc. etc., 1,003,000; pounds yarn, 725,000.

Woolen Manufacture.—Number of establishments in operation, 24; capital invested, $249,820; pounds of wool used, 673,900; value of all raw material, $205,297; number of hands employed, males, 256, females, 62; average wages per month, males, $15 29, females, $11 11; value of entire products, $318,819; yards of cloth manufactured, 878,034.

Pig Iron.—Number of establishments in operation, 21; capital, $924,700; tons ore used, 72,010; tons mineral coal, none; bushels coke and charcoal, 4,576,269; value of raw material, fuel, etc., $260,152; number of hands employed, 1,855, average wages per month, $20 23; tons pig iron made, 24,245; value of products, $604,037.

Castings.—Number of establishments in operation. 20; capital invested, $502,200; tons pig iron, 9,731; tons mineral coal, 2,649; bushels coke and charcoal, 432,750; value of raw material, fuel, etc., $295,533; number of hands employed, 578; average wages per month, $14 89, tons castings made, 5,888; value of entire products, $744,316.

Wrought Iron.—Number of establishments in operation, 4; capital invested, $176,000; tons of pig metal, 2,000; tons blooms used, 1,600; bushels coke and charcoal, 280,000; value of raw material used, $180,000; number of hands employed, 183; average wages per month, $22,06; tons wrought iron made, 3,070, value of entire products, $299,700.

Population and Representation in 33d Congress.—Whites, 761,688; free colored, 9,736; total free population, 771,424 slaves, 210,981; total population, 982,405; representative population 898 012; number of representatives, 10.—[*Maysville Eagle.*

Mississippi and Atlantic Railroad.

The Cincinnati Gazette furnishes us with the following statement of the proceedings of a meeting of the directors of this company held at Marshall, Illinois, on the 16th ult.:—

The President, Wm. L. Wait, tendered his resignation, which the board consented to receive, after mature deliberation; whereupon Jno. Brough, of Madison, Indiana, was unanimously elected President. Mr. Brough was conducted to the chair, and before he took his seat, addressed the board in relation to the great importance of the enterprise which had brought them together, as well as the certainty of success which prompted him to assume the control of the work. He urged upon the directors the most energetic and efficient action, and assured them of his determination to bring his utmost energy and ability to their aid in consummation of the work—a work involving public interests of the highest magnitude, and for which it is ascertained the means will be provided in abundance, as soon as the line is permanently located and ready for letting contracts.

The company have an efficient, practical and experienced President, who will proceed with the work as fast as any one with the means placed under his control. They are fortunate in securing the services of so efficient an officer.

The office of Vice President was created, and Mr. Wait, the late President, unanimously elected to the office.

The President and Vice President were ordered to place suitable corps of engineers in the field at as early a day as practicable, to re-examine the line, make estimates, etc., to be accompanied by persons to obtain releases of the right of way, or contracts for the same. Interest was also ordered to be paid at the rate of 6 per cent per annum upon all payments for stock from the time of payment until the road shall be completed, payable in stock. The stock was made assignable by endorsement on the certificate, and filing the same with the Secretary. Commissioners were urged to procure additional subscriptions to the stock.

The board expressed an opinion favorable to the construction of a branch road from Marshall to Sullivan and Decatur, there connecting with the Northern railway, and make, when completed, a continuous line of railway from St. Joseph, by way of Quincy or Hannibal, through Springfield to Terre Haute, as a work of great public utility, and a strong auxiliary to the line of the company, and the roads east of theirs.

We do not know whether Mr. Brough is to leave his place at Madison, or to take charge of both roads. If he leaves the Madison and Indianapolis road, the directors will find it difficult to fill his place.

Kentucky.

Lexington and Big Sandy Railroad.—This proposed road is to run from Lexington through Clarke, Montgomery, Bath, Carter and Greenup counties, to the mouth of Big Sandy. This distance is assumed to be only 120 miles, and the whole cost is estimated at $2,000,000.

The Mount Sterling Whig makes the following exhibit of expected resources for constructing the road.

We set down as probable the following sums as the amount which may be taken, to wit:

Louisville	$100,000
Lexington	100,000
Louisville and Lexington railroad	100,000
Fayette county	200,000
Clarke county	200,000
Montgomery county	150,000
Bath county	50,000
Fleming county	50,000
Carter county	50,000
Greenup county	50,000
Individual subscriptions	350,000
Contractors	400,000
	$1,800,000

This sum will grade the road, and come within $200,000 of completing it with the rails laid down, locomotives and cars on the track all the necessary depots built and in order, and indeed every thing in a perfect finish.

Susquehanna Railroad Convention.

The Harrisburg papers contain the following notification:—

Susquehanna Railroad Convention at Baltimore.—It is proposed to hold a convention in Baltimore on Saturday evening, March 13th, to be composed of delegates representing the districts and localities interested in the construction of the contemplated railroad from Harrisburg to Williamsport. It is hoped that the several cities, towns, counties, railroad, canal and coal companies, interested in the immediate construction of this important work, will be fully represented.

William F. Packer, Robert Faries, William Cameron, John B. Packer, Robert M. Frick, Eli Slifer, Israel Carpenter, Jacob M. Haldeman, Simon Cameron, Henry Buehler, R. M. Magraw, James H. Carter, John C. Brune, Patrick H. Sullivan, and others, Commissioners.

Illinois.

Savanna and Freeport Railroad.—The prospect of a speedy completion of the Galena branch of the Central railroad, and of the Galena and Chicago railroad to Freeport is awaking the citizens of Savanna to the importance of constructing their contemplated road from that point to Freeport. A liberal charter for this road was obtained from the Legislature, at its last session, and it is thought that money enough can be obtained along its proposed route, and in Iowa, directly opposite, to complete the bed ready for the iron. If so, the company will find no difficulty in procuring the latter on its bonds.

Savanna is the nearest point on the Mississippi to Chicago, and there can be no question but that a branch road from Freeport to that place would pay well and add greatly to the importance of the towns as a shipping point. It would also secure a large amount of travel, both to and from the West. If the citizens of that flourishing town shall be able to secure the completion of this work, we think they will have reason to congratulate themselves on not getting their place made a point in either the Galena and Chicago, or the Galena branch of the Central road.—*Chicago Weekly Tribune.*

The Mobile and Ohio Railroad.

The success of the Mobile and Ohio railroad is no longer doubtful. For fifteen miles the rails are laid and the cars are running, and they soon will be running thirty-three miles. On Saturday last, by an act of the Legislature, the real estate owners of Mobile voted upon the proposition to tax their property two per cent. per annum, for five years, to be applied to the construction of the road and to receive the stock of the company for the money so paid; it was carried by a vote of eight hundred and thirty-one to seven. This insures to the road more than one million of dollars. Soon, then, Chicago and Mobile, the North and the South, will be bound together with an iron band. Northern enterprise in canals and railroads, and the very risky and doubtful transportation on Southern rivers have drawn and frightened much trade from the Southern cities. In New Orleans many of the stores this year are tenantless. These things and the low state of the water in the rivers, keeping back a great deal of produce from market, have waked up the South-Western States to the necessity and usefulness of railroads, and they have determined that they can and must be built.

New York.

Railroad from Ghent to Troy.—A company for the purpose of building a railroad from Ghent on the Harlem railroad, to Troy, about thirty miles, has been organized, with Mr. James Morris for president. To-day the directors had a meeting with the directors of the Harlem road, and an agreement made, by which the Harlem road have leased the new-road to Troy, perpetually, for $70,000 per annum, which is 7 per cent. on the cost.—This extension will prove a very important one for the Harlem, as it will give them a connection, entirely under their own management, with all the

Northern and Western roads. The increase of traffic must be very large when the new road is completed, and the prosperity of the Harlem may be considered as now secured beyond contingency.

American Railroad Journal.

Saturday, March 6, 1852.

To Railroad Companies, Engineers, Contractors, etc.

Our Advertising Department is well worth the attention of all parties interested in railway property, or engaged in railway employment, in any one of its departments—whether in building or managing roads, or in the manufacture of rails or machinery. To the business man in every department of industry, the practical results of experience are worth more than all the theories or speculations of the most enthusiastic inventors, or projectors of new and untried experiments.

Railroad from Quebec to Montreal.

A meeting of the citizens of Quebec was held on the 21st ult. to consider the project of constructing a railroad from that city to Montreal. The road is to run along the north side of the river St. Lawrence, and will be 150 miles in length. It his hoped that government will assist in the construction of this route, since it has lent its aid to other projects of much less importance—it might guarantee the funds to complete half the road. There would then remain 75 miles to be completed by the subscription of private individuals and corporations. The probable cost of the road would be £3,000 per mile, at which rate the cost of 75 miles would be £225,000.

The corporation of Quebec, it is expected, would contribute	£100,000
The divers parishes and corporations between Quebec and Montreal	90,000
Individual subscriptions at Quebec and elsewhere	35,000
Total	£225,000

The population on the north side of the river between Quebec and Montreal, that of the two cities included, is estimated at 250,000 at least. According to statistical information generally admitted, it has been found that each individual comprehended within the territory intersected by a railroad, contributed on an average about ten shillings annually to the total revenue derived by the conveyance of merchandise and travellers over such railroad. Therefore, 250,000 persons would occasion traffic to the amount of £125,000. The expense of working the railroad, is estimated at one half the gross receipts, which would leave the sum of £62,500 as interest and profit upon a total expenditure of £450,000, being equal to about 14 per cent.—Even if the cost of the 150 miles should be over £600,000, the interest would be more than ten per cent.

It is supposed that the Imperial government will be as favorably disposed towards this enterprise, and will extend to it the same facilities which it intends to accord to the Quebec and Halifax railroad, that is to say, money at 3½ per cent.

One argument in favor of this road is that it will form an important link in the grand chain of railroads running through the Canadas, and extending from Halifax to the great lakes. This will secure to it a large amount of through travel and traffic. Since it will form a much shorter communication between the cities of Quebec and Montreal than that afforded by the Quebec and Richmond railroad, there is no doubt it will be esteemed a preferable route, and that it will attract a great deal of the travel that would otherwise pass over that road.

The prospects of success seem to be favorable, and it is to be hoped that the scheme will be carried through.

Ohio.

Toledo, Norwalk and Cleveland Railroad.—This road, which extends from Toledo, at the head of Lake Erie, the terminus of the Michigan Southern railroad, to Gratton, on the Cleveland, Columbus and Cincinnati railroad, a distance of 87 miles; and, by virtue of a contract made with the latter company, forms a continuous line from Toledo to Cleveland, on Lake Erie, in extent, 111 miles.

The road runs along the lake at the distance of 10 miles from the shore, in order to lessen the expense of crossing the streams, which increase in size as they approach the lake, and forming deep ravines would require heavy and expensive structures, thereby unnecessarily increasing the cost of the road. The present route, for directness of line, economy of construction, and low grades, is the best that could be adopted.

Nine-tenths of the whole road is composed of straight lines. The aggregate length of curved line is less than nine miles, and the total curvature is 341 degrees. The maximum grade is 30 feet to the mile, and the highest elevation attained above the lake is 330 feet.

The western division of the road, from Toledo to Fremont, a distance of 30 miles, was put under contract in January, 1851. The work is rapidly progressing, and was to have been ready for the iron in the month of February. The remainder of the line, extending from Fremont to the junction with the Cleveland, Columbus and Cincinnati railroad, at Grafton, was put under contract in July last, and it is expected that the whole road will be completed early in January, 1853.

The entire cost of the work is estimated at $1,390,312 40, at the rate of about $16,000 per mile.

To meet this expenditure, the company rely upon the following means:—

Reliable subscriptions to the capital stock by individuals and municipal corporations, and amounts agreed to be taken by contractors in part payment for their work	$475,000 00
Second mortgage bonds to be issued to contractors in part payment for work	175,000 00
First mortgage bonds of the company, having a priority of lien on the road over all others, issued for the purchase of the iron, and being the bonds now offered for sale	525,000 00
Total	$1,175,000 00

Which deducted from the foregoing estimate of the cost of the whole road $1,390,312 40, leaves $215,312 40 to be provided for.

It is believed by the company that additional subscriptions to the capital stock will be obtained to the amount of $25,000, and the balance of $190,000 can be met by a further issue of second mortgage bonds, the first mortgage lien being upon the average of $6,000 per mile.

The prospects of the road are very encouraging, for it will form the last link in the chain of railroads extending from Rock Island and Galena, to the Atlantic cities. This chain will be completed by the commencement of another year, and a traveller can then pass from Chicago to New York in 34 hours, or from Rock Island in 42 hours.

Although the line runs along the shore of the lake, there is no danger but that it will be able to compete with the lake steamers, for there are only four months in the year when the latter can make their trips with safety and regularity, viz:—from the middle of May to the middle of September.—During the remaining eight months, the steamboats are subject to unavoidable delays and detentions, and any person wishing to travel with safety and dispatch, will choose to continue in the cars, rather than expose himself to the dangers and hindrances attendant upon lake navigation.

The same is true with regard to freight. All valuable articles, and those requiring dispatch, will be sent by way of railroad to New York, in preference to the lake route. The cost of transportation is but little more, and most any owner would rather pay the difference, and have his property carried to its destination in three days, than suffer a delay of three weeks by sending it via steamer and canal. Heavy articles of freight may continue to seek their way to an eastern market by the lakes but all others will take the route of the railroad.

It can be easily seen from this that the through traffic of the Cleveland, Norwalk and Toledo railroad will be very large. The local traffic will be no less important. The country through which the road passes is very fertile, and abounds in all the agricultural productions of the west. The counties along the line of it have a population of 139,684, who annually produce a large amount of grain, horses, cattle, sheep, etc., for exportation.—The business of the road will be enough at the very least to ensure it a profit of 10 per cent on a cost of $16,000 per mile.

Ohio.

Cleveland and Wellsville Railroad.—This important line of railroad, which connects Lake Erie and the Ohio river, by the shortest and most practicable route, and by a line of 798 miles, has been completed and opened for traffic. From the connections it makes it is certainly one of the most important railroads in the country. It traverses a remarkably fertile and well settled region of country, filled with an enterprising and wealthy people, who alone will supply to the road a lucrative local traffic. The southern portion of the road traverses the great Ohio coal field, and will supply Cleveland with fuel from this source. As a through route, it cannot fail to have a very large travel and business, which must always exist between two such important water courses as the lake and the river.—The road has been built at a low cost, and in our opinion cannot fail to be one of the most remunerative works in the United States. This opinion which generally proceeds in relation to it, has caused its bonds to be eagerly sought for at high rates for investment, and they are now we believe all taken from the market.

The project owes a good part of its success and the high estimation in which it is held to its president, C. Prentiss, Esq., of Ravenna, Ohio, who has been indefatigable in his efforts to advance the interests of the company, to whose capacity, good management, and high standing at the east as well as at home, companies are very largely indebted.

There are various independent lateral roads connecting with the above, which will add very largely to its business. The extension of the main trunk to Wheeling, to meet the Balt. and Ohio, the Hempfield and the Ohio Central roads will be completed, we presume, during the year. This extension will constitute the main trunk for the roads named to Lake Erie.

European and North American Railroad.

The Portland Advertiser states that the Hon. Mr. Hincks, Inspector General of Canada, sailed for London on the 3d inst., as agent of the three Provinces, Canada, New Brunswick and Nova Scotia, to arrange for the money for the building of the Great Trunk Line from Halifax to Quebec. At Halifax Mr. Hincks will receive the final decision of New Brunswick in regard to the scheme, and be clothed with all the powers needful to consummate any arrangement required.

As now arranged, the line of the European and North American railway is to be adopted to a point of connection with the St. Lawrence and Quebec line, within eight or ten miles of our frontier, and thence in the line of the St. Andrews and Quebec road, crossing the river St. John at the Grand Falls.

Canada is to build from Quebec to the Grand Falls, or one-third the distance. New Brunswick from Grand Falls to the Bend of Petticodiac, five-twelfths of the entire line. Nova Scotia from the Bend to Halifax, three-twelfths only of the whole route

Knoxville and Lexington Road.

The people of East Tennessee are attempting to secure the aid of the State to the proposed railroad between Knoxville and Lexington, Ky. The length of line of the above road in Tennessee is only about 45 or 50 miles. The above road was not embraced in the internal improvement bill, which recently passed the Legislature of that State, but is certainly as important as many of those proposed to be aided.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York. March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc.
OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Mobile and Ohio Railroad.

The city of Mobile has voted to assess two per per cent annually upon the property of that city in aid of the above road. It is estimated that the subscription will produce $1,000,000. This additional aid will give a renewed impulse to this great work, and will result in putting the whole line under contract at once.

Stock and Money Market.

The stock market continues very buoyant, having risen rapidly since our last issue. The principal advance is confined to the *fancies*, though nearly every kind of security shares in the improvement. Money is very abundant, and as a consequence, there is beginning to be an increased inquiry for good railroad bonds for investment, which is rapidly taking the first class bonds out of the market. The favorites are convertible bonds of western roads, that are on the eve of going into operation, with a view to their conversion. The bonds of new projects now coming into market are received with more favor than for many months past, and negotiations are effected with much greater ease. On the whole, the condition of the market is favorable, and justifies the opinion, that railroad companies will be able to supply their wants during the coming season with comparative ease; those companies, we mean, that can show a good basis for a credit.

The following is a statement of the business done at the United States Mint for the past month:

	Deposits.	Coinage.	Payments.
Gold	$1,280,500	$838,838	$874,327 29
Silver	2,060	19,093	3,057 25
Total	$1,282,560	$857,931	$877,384 54
Previously reported.	1,526,260	1,651,945	1,705,384 80
Total	$2,808,820	$2 509,876	$2,582,769 34
January	4,178,150	4,239,615	
Total	$6,986,970	$6,719,491	

The following table showing the amount of gold exported from San Francisco during the year ending Dec. 30, 1851, was taken from the books of the custom house, and may therefore be relied upon as strictly correct:—

To New York	$30,861,400 40
New Orleans	401,294 11
London	3,392.060 78
Panama	151,293 64
San Diego	5,000 00
Valparaiso	441,482 00
Rio de Janeiro	15,000 00
Talcahuana	15.750 00
Hong Kong	2,554 00
	$35,291,831 93

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 6, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	105½
U. S. 6's, 1862	112¼
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	117⅜
U. S. 6's, 1868	117⅜
U. S. 6's, 1868—coupon	120
Indiana 5's	85
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	71
Illinois 6's—interest	43
Kentucky 6's, 1871	106½
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	98
Maine 6's, 1855	103
Maryland 6's	102
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	104½
Ohio 6's, 1860	109½
Ohio 6's, 1870	113
Ohio 6's, 1875	114
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	101½
Tennessee 5's	84
Tennessee 6's, 1880	100
Virginia 6's, 1886	105½

CITY SECURITIES—BONDS.

Brooklyn 6's	105½
Albany 6's, 1871-1881	104
Cincinnati 6's	94½
St. Louis	93
Louisville 6's 1880	92
Pittsburg 6's, 1869-1871	95½
New York 7's, 1857	106½
New York 5's, 1858-'60	101
New York 5's, 1870-'75	101½
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	103
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	114
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	94
Erie convertible bonds, 7's, 1871	91
Hudson River 1st mort., 7's, 1869	102
Hudson River 2d mort., 7's, 1860	95
New York and New Haven 7's, 1861	102½
Reading 6's, 1870	76½
Reading mortgage, 6's, 1860	78½
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	97½
Cleveland, Col. and Cin. 7's, 1859	102½
Cleveland and Pittsburg 7's, 1860	92
Ohio and Pennsylvania 7's, 1865	92
Ohio Central 7's, 1861	87½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 3.	Feb. 25.
Albany and Schenectady	99½	98½
Boston and Maine	104½	104½
Boston and Lowell	108½	109
Boston and Worcester	100½	100
Boston and Providence	85½	85
Baltimore and Ohio	62½	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112½	112½
Eastern	96½	95½
Erie	82½	79½
Fall River	98	97½
Fitchburgh	103½	103
Georgia	—	—
Georgia Central	—	—
Harlem	67½	67
" preferred	108	108
Hartford and New Haven	123	125
Housatonic (preferred)	36	36
Hudson River	65½	64
Little Miami	—	—
Long Island	21	19
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97½	95½
Michigan Southern	101½	101½
New York and New Haven	109	109
New Jersey	126	125
Nashua and Lowell	107	105
New Bedford and Taunton	117	117
Norwich and Worcester	53½	49½
Ogdensburgh	27½	26½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	71	67
Rochester and Syracuse	110	110
Stonington	54	51½
South Carolina	—	—
Syracuse and Utica	125	122
Taunton Branch	115	113
Utica and Schenectady	127	125
Vermont Central	23½	22½
Vermont and Massachusetts	22½	21
Virginia Central	—	—
Western	103	102½
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

For the American Railroad Journal.

The Halifax and Quebec Railway.

"A power which"—in that celebrated passage of the greatest of American orators—"has dotted over the surface of the whole globe with her possessions and military posts, whose morning drum beats, following the sun and keeping company with the hours, circles the earth daily with one continuous and unbroken strain of her martial music." ought to have some experience and knowledge of colonial administration.

The indomitable energy, perseverance and courage of the English race have acquired for their government those vast tracts of territory known as colonial appendages.

We are not wrong in stating that the most, if not all the really profitable possessions of her colonial empire have been acquired and held by the courage and industry of the *subjects* of Great Britain, while those territories whose acquisition has accrued by special interposition of governmental action, have been purchased at a cost overbalancing the advantages consequent on their possession.

But to come at what we intend as the gist of this article, while it would be exceedingly interesting to enter into many other particulars, we wish to direct attention to the conduct of the British government with respect to the Halifax and Quebec railway. It may be that many of your readers are unacquainted with this enterprise, and for this reason permit a very brief outline of the *project*.

The slightest acquaintance with the history of the numerous colonies of Great Britain will warrant the assertion *that they are all misgoverned*. Every colony of Great Britain has always been misgoverned, wronged, and this too is owing not so much to the fault of the Minister, or politics, *as to the system*. Let the Colonial Secretary be Lord Stanley or Grey, by the colonies and colonist both are denounced. Lord Glenelg was perhaps the most fortunate exception. Lord Grey the most unfortunate, the most unhappily and culpably unfortunate.

England has had a great deal of difficulty with her North American possessions. "Westward the star of the empire takes its way," so might sing the poet of the star of intelligence. The Anglo-American sees too quickly and resents too strongly every attempt at impesture or humbug to allow it long to exist.

Good old King George, whose intelligence to save his life could never suggest to him how the apple got into the dumpling, at the instigation of men, who could as indefinitely perceive how the spirit of liberty and intelligence could get into the colonies, lost to his kingdom the most magnificent heritage of the world. They have latterly improved slightly upon King George, but not much, and every body believes Earl Grey wishes to get back to King George's system. Let him beware; and retire upon his present blundering renown. The Cape, India, Australia, Canada, the Lower Provinces, to say nothing of the West Indies, and other innumerable possessions have their eyes upon him, sufficiently fixed to be pleasant to the reputation of any statesman.

But the Halifax and Quebec railroad is his most Louis Napoleon-like style of humbug. His latest "*coup d'etat*" with regard to this enterprise has swallowed more principle than the violation of all poor Louis' oaths. The Frenchman has the excuse of interest and ambition, but Lord Grey is committing murder and suicide, sacrificing and murdering the interests and ambition of the colonist, and cutting the throat of his own reputation, as one whose fame is to rest upon their success.

In the commencement of 1850—though by the ardor shown in the sacrifices made by the British North American colonies to procure means to build a railroad from Halifax to Quebec, any man could see across the ocean how dearly cherished to them the object was maintained—Lord Grey refused all countenance of imperial aid to that project. Early in that year, the enterprising spirit of *New* England, perceiving how desirable it had become to push her railway travel to the nearest point to Europe, called a convention at Portland, Maine, invoking citizen and colonist to unite in connecting Halifax with the nearest terminus of American railway.

The convention met, laid down, digested, and pledged itself to carry out such design.

The province of Nova Scotia standing so pledged, sends home the Hon. Joseph Howe, then Secretary of that province, to ask for imperial aid, or failing in that, to procure capital for the enterprise, from such other sources as he could.

Now for my Lord Grey's manœuvres. It would be too bad to allow the province to enter into such community of interests with a rival power. The old project for uniting the provinces among themselves, by direct railway, from Halifax to Quebec, is revived, aid is promised, *and it is allowed to be understood* aid could also be given to connect this line with another extending towards it from the United States. This was the only construction put upon Earl Grey's reply through Mr. Hawes, then under Secretary of State, to Mr. Howe's application. So understood the contractors to whom was submitted the proposal for building the road; so understood Mr. Howe, so understood the Colonial Legislatures, officers and governments of all the provinces interested; and Maine, and everybody else that read it; such Earl Grey himself must have understood could be the only construction his despatch could bear; that is, that the imperial guarantee of three per cent, (on which the money would easily be forthcoming) would be given to aid *both* lines of railway, the one connecting Halifax and Quebec, the other Portland with such road.

The Colonial Legislatures are especially convened, they meet the conditions of the proposal, pass bills, expect the money, but are repulsed with the arrogant assurance by Earl Grey in effect that the British government could never assist the colonies in connecting their interest by a line of railway with so formidable a rival as the United States.

How stands the enterprise at present? Canada and New Brunswick have hit upon another scheme—for such it can only be considered—and that is, to divert Earl Grey's attention, by proposing to carry the Halifax and Quebec line by a different route up the valley of the St. John river along the borders of New Brunswick and Maine, instead of along the borders of the St. Lawrence. The moment Earl Grey perceives the route, the enterprise is quashed.

What should the colonies have done? They should have stood upon Earl Grey's dispatch, thro' Mr. Hawes, in answer to Hon. Mr. Howe's application. They should have pressed the natural interpretation to be put on that despatch, to wit:—*that the imperial guarantee of three per cent would be given to complete both lines of railway, viz., one from Halifax to Quebec, and another connecting therewith the nearest point to the borders of Maine*, and thereby connecting Halifax, the nearest convenient seaport town to England, on the Atlantic coast, with all the great cities connected by railway on this continent. Had the colonies stood upon this ground, had they challenged investigation, had they demanded the fulfilment of Earl Grey's pledge, the British government would have been compelled to see the matter carried out, *or in default thereof, the colonies should have turned to the United States of America*, and mortgaged their whole value, Crown revenues and all, to connect their interests with that country by railway communication.

This would have been an alternative not altogether tasteful to Great Britain, but on *her* shoulders would rest the responsibility.

The Lower Provinces, Nova Scotia, N. Brunswick, and Prince Edward's Island, have resources little dreamed of by most men. Once admitted to a reciprocity of interests with this country, and their magical increase will rival all historical record. In countries like these it is seldom that you see combined *so many* elements of wealth.—Take first their population—hardy, frugal, industrious, patriotic to a fault, and honest. The timber of New Brunswick—once the restrictions which this country impose on it as British, being removed, would build a navy for the world at one-half the present cost, while in the same country are found in abundance every description of mineral useful to complete any nautical equipment. Some parts of this country too, can rival in agricultural productiveness the most fertile portions of America. Nova Scotia, in addition to all these advantages, possesses fisheries and facilities for naval transportation unequalled in the world.

Can these countries long linger under British misrule, misunderstanding and being misunderstood?

The time has arrived when Great Britain must contract and concentrate her power, for European struggles. Her principles and her existence are incapable of the indefinite expansion which appertains to the principles and government of this country. The principles and government of the former are founded on the exigencies of the times, and must continually alter or be disrupted—those of the other are laid deep in our nature, and are as eternal and universal as that. The former, while with jarring discord by the mere force of its power, it encircles under one dynasty the vast extent of territory and hostile elements of our race, only more palpably sets off the facility with which under one united empire, the Irish, Scotch, German Gaul, English, and in fact all nations can be governed, where the principles round which they rally find responsive echos in their intelligence and affection.

J. W.

New York, March 1, 1852.

Plattsburg and Montreal Railroad.

The Montreal and Lachine, and the Lake and St. Louis, and Provine line railroad companies, have been consolidated, under the title of the Montreal and New York railroad company. The Canada portion of the Plattsburg and Montreal road is also in a forward and promising condition. It is expected that the cars will be in operation over the entire line, from Plattsburg to Caughnawaga, by the 1st of August next.

The rails of the Plattsburg and Montreal railroad have all been contracted for, and will be delivered by the 1st of July. The tracks will be laid on the first of May, commencing at Plattsburg.

Sparta, Tenn., February 16, 1852.

H. V. Poor, Esq.,

Dear Sir—Your very welcome reply of 28th ult. came duly to hand. Being away from home just now, I cannot send you a copy of the proceedings of our convention. We have since appointed a committee to confer with some engineers, to make a survey of the route, which we intend to have made, and then we think the battle will be over.—Since my former letter, I have learned that a company, having a separate charter for a railroad from Winchester to McMinnville, in this State, are commencing operations for its construction. This shortens our proposed line about 30 miles, leaving 150 miles, one half, or about one half, of which is in this State. There is as yet no company organized to build our part of the road. This has been delayed till we could ascertain somewhat certainly the practicability of our plan. One will doubtless be organized at our next convention.

As to domestic statistics, for the reason once given of being away from home, I cannot be as precise nor as full as I could wish. Large numbers of live stock—horses, mules, cattle and hogs—are raised here. Indian corn, being our staple, is raised in the greatest abundance. Buckwheat and rye also grow finely. For the variety, size and quality of its timber, this country is unsurpassed, if not unrivalled. Black and white maple, white, black, post and spanish oak, white and black walnut, chestnut, the poplar or tulip tree, hickory, ash, gum, beech, cherry, white and yellow pine, cedar, and several other species. They would form a great article of export as lumber, and for firewood also, to less timbered regions.

As stated in my former communication, iron ore and coal abound here. The ore is as good as any in the United States, and an outlet only is needed, to set furnaces and forges in operation, and another important article of transportation furnished. The coal of this region is all bituminous. The late and eminent Dr. Troost analyzed specimens, and pronounced it of the best quality. Dried fruit, wool, feathers, tar and turpentine are also exported by us.

As to the route, it would be over a very level country. The bluffs of Obey's river, and bridging the Cumberland, will form the greatest objects of expense in the proposed enterprise. From the face and nature of the region traversed, a proper yet not costly construction of the road, would prevent all injury from freshets. This is only of the section in this State. I could give some interesting information in regard to the Kentucky part, if it would be acceptable.

The State of Tennessee has adopted our proposed line among those lines she will aid. She has granted seven hundred and twenty thousand dollars to the Tennessee section. You may call that nine thousand dollars per mile. We could not ask any thing more. The engineer of the Nashville and Chattanooga railroad, in his report, says the Shelbyville branch cost seven thousand dollars per mile. We feel confident most of our road can be built for what the State allows. We are also confident that our proposed road, thoroughly and excellently equipped, cannot exceed a cost of twelve thousand dollars per mile. We are not speculating nor exaggerating. We aim at truth. The Irishman was an excellent woodcutter, but, faith, he could not strike twice in the same place. Every blow of ours has struck the same spot, only sinking deeper.—From all the statistics we can gather, and from just deductions on all data, allowing for error, ignorance and human fallibility, we come to the above conclusion, as to the probable expense of our proposed link of railroad.

The State has acted so handsomely, we shall not need a great loan—say two or three hundred thousand dollars. And that, because we have been, and still are, in the condition of central New York farmers prior to the construction of the Erie canal; also, the little capital we have is so invested, as to be generally unavailable for this enterprize.

Truly yours, Jas. E Manning,
Cor. Sec. of the Sparta R. R. Co.

Illinois.

Rock Island and Chicago Railroad.—The work on this road, as we learn from a recent report of the directors is steadily progressing. Operations were commenced on the 1st of October last, and by the 1st of December work was done to the amount of $19,000. It is the expectation of the contractors that the road will be completed to Joliet by the 1st of August next, to Ottawa by the close of navigation, to Peru during the following winter, and to Rock Island in the course of another year. It is intended to open the road in sections as it is completed, instead of opening the entire line at once. This circumstance will tend to develop the general resources of business, and prepare a much larger traffic for the first year than could otherwise be expected.

The estimated cost of the whole road is $4,219,438, or nearly $23,608 per mile. The estimated receipts for the first year are $708,064; from which deduct operating expenses and interest on $2,000,000 bonds, and there is left $284,839.

This amount will allow a dividend of 12 per cent on stock, and leave a surplus of $14,839.

This is the lowest estimate, but judging of the business of the Chicago and R. Island railroad, from that of the Illinois Central road, which is at the rate of $4,636 per mile, the receipts for the first year would be $834,480. Deduct from this amount operating expenses $333,792, and interest on $2,000,000 bonds $140,000, as before, and there remains $360,688, which will allow a dividend of 16 per ct. on stock. If this estimate is correct, the business prospects of the road are very favorable.

With regard to the alignment of the road, nearly 70 miles are level, and over 100 miles can be constructed without grades exceeding 10 feet to the mile. The maximum grade used is 25 feet per mile for a distance of nearly 10 miles. There are about 28 miles of curves, two of which have a radius of 11,460 feet. The remaining 152 miles are right lines.

The Chicago and Rock Island railroad, like the Peoria and Oquawka, passes over the coal fields of Illinois, and as the demand for coal is constantly increasing, this article alone will form an important item of freight. Taking into consideration the other sources of business along the line of the road, the local traffic must be very great.

The favorable situation of Chicago as a commercial city, will attract to it a large amount of western produce which now passes down the Mississippi river. A great part of this produce will take the route of the Chicago and Rock Island railroad; and travellers to the great commercial emporium of the United States will take the same route, as it is the most direct one between Iowa and New York. When the road is completed, the whole distance between that city and Rock Island can be traversed in 42 hours.

The favorable point at which the road strikes the Mississippi, gives it an advantage over its rivals. At that point the great river is narrowed by an expansion of the island to 1800 feet, while at any other point of projected road it is at least 4800 feet. As the banks on both sides are of solid rock, a bridge can very easily be constructed across the river; the approach to which on the Illinois side will be made with a grade of only 10 feet per mile, and on the Iowa side with a grade not exceeding 30 feet.

The rapid settlement of the northwestern States, and the great amount of travel that will result therefrom, will ensure to this road a profitable business, notwithstanding the parallel lines that may be built to compete with it.

Georgia.

Southwestern Railroad.—We have just received the 4th annual report of the directors of this road, containing an exhibit of the operations of the company for the year ending 1st of February, and the condition of their affairs at that date.

At the date of the last report there remained to be done about 25,000 cubic yards of excavation and embankment, and nearly 20 miles of superstructure to be laid, besides various turn-outs, freight-houses and other fixtures. The grading was completed and the track extended to the Oglethorpe station, so that the first train ran through to that point on the 4th of July last.

The "Junction Line" connecting this road with the "Central, and Macon and Western" roads, has been so far completed as to permit the transit of freight trains from the stations of these respective roads to each other.

The entire cost of the road up to the present time, has been $705,569,27—being at the rate of $13,442 per mile, including the junction line which has cost $19,000. Further expenditures will be required during the present year to complete the junction line, and also to erect depots, engine-houses, and furnish the road with engines, cars, etc. For these purposes the board have authorized the issue of bonds to the amount of $50,000, in addition to $100,000 already issued.

The capital stock of the company consists of 5,563 shares, of which 4,289 are owned in the city of Savannah. The amount of stock owned in Southwestern Georgia is equal to $68,800. To this may be added the sum of $30,283, paid on forfeited shares, and we have the sum of $99,083, as the amount contributed by the planters of Georgia to the work.

The total earnings of the road, since the commencement of business, have been $76,532,33. The current expenses during the same period have been $26,922,51; leaving a balance of $49,609,82 for net profits. Of this amount there remains on hand about $25,000.

The directors state that they might have declared a dividend of four per cent from the earnings of the past six months, but they deemed it more advisbale to wait the result of the whole year's operations, in order to judge better of the amount which could with propriety be divided among the stockholders. They think from present indications, they shall be able to declare a dividend of eight per ct. at the close of the year's business.

An amendment to the charter of this company, transferring that part of the Muscogee railroad, comprising the 21 miles from Fort Valley westward, to them, and making the same a part of the Southwestern railroad, was passed by the Legislature of the State, at its last session. The work is

now rapidly progressing upon all the parts of the line between Fort Valley and Columbus. A distance of 20 miles of the western end of the Muscogee railroad is in operation, and connected with the Southwestern railroad by a daily line of stages to Oglethorpe.

The company have not been able to make the proposed extension of their road, because they have not received the necessary aid from the Legislature. There seems to be some disposition on the part of the inhabitants of those counties that would be benefitted by the extension, to carry the project through. The amount of benefit they would receive from it would amply repay them for their exertions. It is hoped that the desired extension will be made on account of its great importance to the cotton growing regions of southwestern Georgia.

At the election of officers of the Southwestern railroad, for the ensuing year, the following gentlemen were unanimously chosen, viz:

PRESIDENT—L. O. Reynolds.

DIRECTORS—R. R. Cuyler, John W. Anderson, Savannah; A. H. Chappell, W. S. Holt, Macon; Wm. A. Black, Sumter county.

Hubbuck's Patent White Zinc Paint.

The test of time has unanswerably demonstrated the great superiority of oxide of zinc, over that of lead, when used for the general purposes of painting. Independent of the increasing esteem in which it is held in the dock yards and shipping, we are happy to observe that since our last notice of this material, its use has rapidly spread in this country, and particularly among the British mercantile marine. Nor can we wonder at it, when practical seamen observe the strange contrast of the two after a prolonged sea voyage, and particularly, when exposed to the continuous action of carburetted hydrogen in a close ship's hold, as is ever the case with ships laden with sugar from the East or West Indies or the Mauritius. While the lead paint is blackened to the deepest dye, the zinc paint retains its primitive purity and richness of appearance, and there is no doubt but that its preserving qualities are very great. Recommended for these qualities, as having a richer appearance, and as being more economical, as less likely to be adulterated, and as readily mixing with all other colors, we shall undoubtedly live to see it supersede lead paint entirely; and when we consider the deadly influences exercised by the latter upon those who constantly use it, we do say, this consummation is most devoutly to be wished. We regret to learn that the extraordinary success attending the sale of this paint has given rise to a host of imitations, manufactured from zinc ores, containing arsenic, lead, and other poisonous materials; we would therefore put the public on their guard against purchasing of pretended agents. The patent white zinc paint sold by Mr. Hubbuck, opposite the entrance of the London docks, is well known to the mercantile and shipping community for its purity; it is adapted to all ships' purposes, and more especially valuable as an article of export, particularly to tropical climates, where the maintenance of a pure white color is at all times most desirable. We have seen numerous testimonials in its favor from captains and others, which may now be scarcely said to be necessary, the value of pure zinc paint being now pretty generally known.

We clip the above from a leading English paper, in order to call the attention of our ship and railroad owners to the fact, that, for all their painting purposes, zinc paint is immensely superior to any other known. In the first place, it is cheaper, in the second, more brilliant and durable, and in the third, it is free from all the noxious qualities of other paints. The black and brown zinc paints of the New Jersey Zinc Paint Company, who have a wholesale and retail warehouse at 45 Dey street, have been tested on our ocean steamers, and found to resist the corrosive action of salt water and weather, so destructive to other paints. They form, almost immediately, on wood, brick, iron, and other metallic surfaces, a solid coating, nearly impervious to fire even. The white zinc paint, for inside use, is in every respect, and for all places, far superior to all other whites. The consideration of this subject is richly worthy the attention of railway companies, ship owners, and the public generally. Zinc is fast driving lead and other pigments from the market, and from use.

Galena and Chicago Union Railroad.

The following is a comparative statement of the business of the Galena and Chicago Union railroad for the month of January, 1851 and 1852:

EARNINGS 1852.		
AURORA BRANCH—Freight.	$1,315 09	
Passengers	567 91	
Total		$1,883 00
ST. CHARLES ROAD—Freight	155 58	
Passengers	76 08	
Total		231 66
MAIN LINE—Freight	11,297 09	
Passengers	4,998 49	
Mails	257 14	
Total		16,552 72
Grand Total		$18,667 38
EARNINGS 1851.		
Aurora branch		$1,345 00
St. Charles branch		330 54
Main line		8,242 19
Grand total		$9,917 73
Receipts 1852		18,667 38
" 1851		9,917 79
Increase of 1852		$8,749 59

At this rate, the earnings of these roads the present year will be $224,008 56, and the increased earnings over last year about $100,000.

Kentucky.

County Securities.—The President of the Maysville and Lexington railroad is preparing to offer some county securities of that State, issued in aid of the above road. The legality of their issue was lately decided in the Supreme Court of that State. The bonds are those of the counties of Mason, Bourbon and Fayette, than which nothing can be better. Below we give an extract from the recent exhibit of the company, which contains some interesting statistics in reference to the counties named:—

The counties of Bourbon, Fayette and Mason are all populous and wealthy. The soil is not surpassed, I presume, in any country, and the population is intelligent, industrious and substantial. The Auditor's report for 1852 exhibits the following statistics of wealth and population:

	Taxable Property.	Population.
Bourbon	$11,941,797	17,904
Fayette	17,756,785	25,172
Mason	9,154,648	24,083

Bourbon has 212,879 acres of land, and 365 town lots, valued at $7,804,125; horses and mules 12,136, cattle 13,231.

Fayette has 357,627 acres of land and 1,176 town lots, valued at $10,589,733; horses and mules 11,132, cattle 13,834.

Mason has 176,932 acres of land and 1,374 town lots, valued at $5,909,015; horses and mules 6,986, cattle, 7,744.

The principal exports of Bourbon and Fayette are cattle, hogs, horses, mules and hemp; of Mason hemp, tobacco, barley and hogs.

The city of Maysville has a population of about 5,000, and taxable property to the amount of $1,600,000. It is the point, on the Ohio river, in the county of Mason, of transhipment for the whole Northeastern section of Kentucky, of merchandise and produce going inward and outward—and under the influence of the system of roads now converging upon it, and forming connections with all the rich central regions of Kentucky, and with the principal lines of railway running south and north, the city must rapidly rise in business, population and wealth.

Maysville owes now a debt of $70,000, but has means to the amount of $79,000, and a revenue of $22,000, exclusive of the tax for railroad purposes.

The counties are entirely out of debt, except on their recent railroad subscriptions. It is proper to say, however, that in addition to the subscriptions to the Maysville and Lexington railroad company, the county of Bourbon has subscribed $100,000, to the Covington railroad company; and the county of Fayette $200,000, to that company, and $200,000 to the Danville railroad company.

Thus the whole debt of the city of Maysville, and the counties of Bourbon, Fayette and Mason, will, when all the bonds are issued, amount to $40,453,230 as exhibited by assessment, which does not give more than two-thirds of the actual market value of the property. And for this $1,220,000 of debt, the city and counties will hold stock in the railroad companies to that amount.

Sackett's Harbor and Saratoga Railroad Company.

This company is now organized, and has complied with all the conditions imposed by the State, including the payment of $5000 into the Treasury. Otis Clapp, Esq., of Boston, is appointed President of the Board by the Directors, and E. Smith, Jr., of Boston, Treasurer. Hon. Charles E. Clarke of Great Bend, T. Somerville Stewart, of Carthage, Amos Blake of New York, T. T. Ballou of Utica, Robert Spier of Ballston, and L. R. Lyon of High Falls, are the New York directors. The Massachusetts directors are Messrs. Gilman, Crocker, Phillips, Odiorne, Peter Clarke, and Marshal Tukey of Boston—a board well calculated to carry out the enterprise.

We regard the above project as a very senseless one. The best possible route from Sackett's Harbor to Tide Water already exists in the Rome and Watertown road. No road can be built to supersede this, as the best outlet for the eastern portion of Lake Ontario. We believe the great object in getting up the Sackett's Harbor and Saratoga road is to effect for speculative purposes the value of the large bodies of wild land through which it is to run.

Michigan Southern Railroad.

The Detroit Advertiser of the 17th ult. says that this great road is completed from Monroe to Chicago, except about twelve miles between Laporte and Michigan City, which is traversed by a good plank road. The Advertiser adds:—

This gap is to be filled as soon as the iron can be received from Dunkirk. It is our purpose to start with a few friends to make the opening *through* trip, as it is called, from Monroe to Chicago, of which we shall hereafter speak. The energy and perseverance which have characterised the movements of the Southern railroad company during the past year, are worthy the strongest commendation, they having laid in working order, one hundred and seventy-five miles of T rail within that time, a feat in railroad building, never equalled.

When the Southern and Central roads shall have been completed to Chicago, a line of road from Detroit to Toledo, and a grand thoroughfare of one kind or another opened through the forests of Genesee, Shiawasee, Clinton, Ionia, Kent and Ottawa counties, to Grand Haven, in the north, (which is by no means impracticable or improbable,) verily we will say, Michigan is possessed of far greater natural and artificial means of communication than any other country of equal dimensions on the face of the globe.

The three great thoroughfares contemplated by the internal improvement system of 1837, and then deemed so visionary, bid fair, at no distant day, to be fully realized. The Southern and Central por-

tion of our State have already accomplished their ends, and the North is fully awake to the importance of her interests and rights.

Indiana.

Lafayette and Indianapolis Railroad.—The directors of this road, in their late annual report, state that the grading and bridging on the whole line is nearly completed. Ties have been delivered for the first division, from Lafayette to Lebanon, nearly equal to its wants, and the residue are in process of delivery. Ties have also been contracted for the remainder of the road, and are being delivered. The company have purchased from Wales 5,000 gross tons of T rail, of which 2100 tons have been delivered at Lafayette, and the remainder are on the way. It was the expectation of the company to have received some of their iron during the past summer, in which case 25 miles of track would have been laid before winter. As it happened, but 7 miles were laid before operations were suspended by the frost, but it is the intention of the company to resume the work early in the spring, and they are confident that in the month of September next the whole line will be ready for the cars.

The company have derived their means from the following resources:—

Individual stock	$234,750
7 per cent bonds of the city of Lafayette	120,000
7 per cent company bonds (negotiated)	350,000
Miscellaneous cash payments	4,075
Total	$708,825

Their present available means are $166,000.—The expenditures from the organization of the company to the present time, have been $488,197. The entire cost of the road bed and wooden superstructure was $170,187 50, or $2,729 11 per mile, which is considerably below the average cost of railroads.

The company base their estimates of the business of the road upon the character of the country through which it runs, and the important connections it forms with other roads. Lafayette is situated on the Wabash, at the head of steamboat navigation, and is the largest exporting city of domestic produce in the State. Indianapolis bids fair to become the largest inland capital in the Union, while the country lying between the two cities, and along the line of the road is unequalled in fertility; and is as thickly settled as the average of the State of New York, her cities included.

The Lafayette and Indianapolis railroad, by means of the various roads diverging from the capital of the State, will be placed in connection with the important cities of Louisville, Columbus and Cincinnati. It will also connect with the railroads extending east from the Mississippi to the Wabash. It will open a communication at once with Indianapolis and Chicago, and will become a link in the great chain extending from Iowa to the Atlantic cities.

From these connections the company expect to derive a large through traffic, which, together with the local traffic, will render their road a highly profitable one.

Georgia.

Railroad Meeting at Eufaula.—The citizens of Eufaula held a meeting last week at which it was resolved to unite with the citizens of South Western Georgia in constructing a railroad from Eufaula to Richland, in Stewart county, Georgia, "*leaving to time and circumstances the completion of the road between Richland and Oglethorpe.*"

Virginia.

North Western Railroad.—The Parkersburg Gazette of the 21st ult. says:—B. H. Latrobe, Esq., Chief Engineer of the Baltimore and Ohio railroad, and North Western Virginia railroad; Elwood Morris, Esq., Chief Engineer of the Hillsboro', Cincinnati and Belpre railroad, W. H. Small, Esq., and G. W. Hoffman, Esq., Division Engineers upon the North Western Virginia railroad, were all in town during the week.

Mr. Latrobe, we learn, is on business connected with the speedy location and construction of the North Western railroad, while Mr. Morris was about entering upon a reconnoisance for the route of his road, beginning at Belpre and extending thence westwardly to connect with that portion of the work already under contract.

The Gazette also states that Mr. Latrobe, Chief Engineer of the North Western Virginia railroad, is now in Parkersburg, engaged in preparing his report on the surveys which have been in progress since September last. We understand it will not be completed until next week, at which time it will be laid before the board, who will probably proceed to determine the route, so far, at least, as present circumstances may enable them to do so. We are able to state, that the length of the route will certainly be less than is stated in the pamphlet sometime since issued by the company, there being opportunity for choice within that limit. The surveyed routes are much more direct than the features of the country through which they pass, led many to suppose. The question of "practicability" is thus settled conclusively in our favor, while the maximum grade is one-fifth less than that of the Hempfield road.

Columbus, Piqua and Indiana Railroad.

A meeting of the Directors and Stockholders of this road met at Urbana, on Tuesday, the 17th inst., and elected the following directors for the ensuing year, viz:

Ira A. Bean, Wm. Dennison, Jr., Samuel Medary, Robert E. Neil, John R. Hilliard, Erastus Martin, James Fullerton, S. G. Brecount, Isaac Dukenrumcor, R. Walkup, M. R. Shellabarger and M. G. Mitchell.

The officers had not been elected when our informant left, but from the great satisfaction given by the officers of last year, we have no doubt they will be re-elected.

The prospect of an early completion of this road could not be more favorable. In one year from this time it will be completed to Piqua, if not to the Indiana State Line. We expect to see the locomotive commence its work on this end of the line by the last of June or first of July.—*Ohio Statesman.*

Railroad from Cincinnati to Lafayette.

The New Castle Courier states that this road is now a fixed fact, a finality. Some twenty-three miles of the work west of New Castle have just been let, and notice given to receive proposals for constructing the balance of the line, sufficient stock having been taken to warrant the contract, and the company have the assurance of the Cincinnati, Hamilton and Dayton company of aid in procuring the iron within a month from the time the road is ready for it. The construction of this road to the Bellefontaine road at Anderson, the Peru and Kokomo; the Wabash and Erie canal at Logansport and thence to Lafayette, and a connection there with the Northern Indiana road to Chicago, opens up one of the finest prospects for a paying road that can possibly be conceived. The Ohio gauge has been adopted on the entire line from Cincinnati to the Wabash, which will avoid all transhipment.

Ohio and Mississippi Railroad.

This road has been opened and is now in operation to Massillon, Ohio, 108 miles from Pittsburg. From Massillon to Wooster, some 30 miles further, the track is graded and bridged, the cross ties, iron rails, spikes, etc., on the ground, and will be laid down as fast as the weather will permit. The residue of the road to Crestline, where it strikes the Cleveland and Columbus railroad, is under contract for graduation and masonry; a portion of it already completed. The iron rails for this part of the line are purchased, to arrive in the course of the summer. It is expected that the entire line from Pittsburg to Crestline, a distance of 185 miles, will be completed and in full operation by the 1st December next.

This great work, since the first blow was struck, has been pushed forward with remarkable energy and success, which reflects the highest credit upon its managers. The ability displayed by them in carrying forward their work under all the obstacles with which they have had to contend, has secured the public confidence in their capacity; and the large business transacted by the road since its opening, gives a most flattering prospect for the future. The result is a rapid advance of its securities, which are now in demand on foreign account, at from 92 to 96 per cent. The early completion of the road and its triumphant success are now regarded as fixed facts.

To Montreal and Canada.

The parties interested in the various roads between New York and Montreal, by the Connecticut Valley route, have had several meetings during the week in this city, and have made complete arrangements to form a through line between the two cities. Passengers will be ticketed and baggage checked through, which will save much trouble. The passage will be made from Montreal to New York in a day. Another route has also been arranged via the Hudson River and Lake Champlain, by which passengers will be taken through for five dollars in rather longer time. These two routes will give travellers ample facilities for visiting Montreal with but small expenditure of time or money.

Valuation of Philadelphia.

The total amount of the assessed value of real estate in the city and county of Philadelphia, subject to taxation, for the year 1852, is $118,963,196; furniture, $1,819,477; money at interest, $18,954,162; occupations, $2,190 038; emoluments of office, $144,755; horses and cows, $473,238; carriages, $181,707; making a grand total of the assessed value of real and personal property, persons, trades, professions, emoluments of office, etc., of $142,726,573. The number of gold and silver watches subject to taxation are—gold levers 3,562, plain gold and silver levers 1,246, and plain silver 129.

Florida Railroad.

The stockholders in this road met in this city on Wednesday last, for the purpose of organizing by the appointment of directors. Without accomplishing the object of the meeting on that day, they adjourned until Thursday, at which time the company was organized by the election of the following gentlemen as officers and directors:—J. C. McGeehee, Esq., president; W. D. Moseley, Esq., Treasurer; Edward Houston, Esq., Secretary; and J. G. Anderson, B. Waldo, I. H. Bronson, G. E. McClellan, Richard Hayward, and R. A. Shine, Esqrs., as directors.—*Tallahassee Floridian, 14th inst.*

Plattsburg and Montreal Railroad.

The Plattsburg and Montreal railroad company have just negotiated their bonds in this city, and made a purchase of the iron for their road.

Alabama and Mississippi Railroad.

The State of Alabama has appropriated $100,000 of the two per cent fund, in aid of this work, which is sufficient to purchase the iron for the distance from Selma to Uniontown, 30 miles.

Ohio.

Little Miami and Columbus and Xenia Railroad.—Arrangements have been made by which the Little Miami railroad, and the Columbus and Xenia, will be made as one road, under one superintendence, on and after the 1st March 1852. It is stated that the stock of the two roads will be consolidated during the year, thus making but one corporation and one road from Cincinnati to Columbus, the seat of Government of Ohio, a distance of about 10 miles.

Ashuelot Railroad--A hard bargain.

Before the opening of the Ashuelot railroad, the Connecticut River railroad company took a lease of the former at the rate of $30,000 per annum, which lease has yet eight years to run. The Vermont Valley railroad has recently been opened, and has so completely superseded the Ashuelot, that the latter does not now begin to pay running expenses. This makes the amount paid by the Connecticut River road a dead loss, and deducts just so much from the amount of its dividends.

New York.

The Rochester, Lockport, and Niagara Falls Railroad.—The work upon this road has been prosecuted with energy during the present winter, notwithstanding the unfavorable weather. The track is laid almost the entire length of the road.—*Lockport Courier.*

Providence and Plainfield Railroad.

The long pending negotiations between the city and the Plainfield railroad company, relative to the issue of the bonds, has been brought to a close, and nothing remains but to sign the agreements. We presume that a portion of the road will be immediately put under contract. The surveys have have been pushed forward as rapidly as was consistent with the thorough and faithful performance of the work. Considerable progress has been made in negotiating for the land damages, and a part of the route is ready for location.—*Providence Journal, 11th.*

Mobile and Ohio Railroad.

At the recent annual meeting of the stockholders of this road the following gentlemen were chosen directors viz: B. E. Gray, of Ky; John W. Campbell of Tenn; James Whitfield, of Miss; Sidney Smith, Francis B. Clark, J. Emanuel, D. Stodder, Moses Waring, John Bloodgood, Charles Gascoigne, John A. Campbell, Geo. N. Stewart, John C. Hodges, Alabama.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.



The attention of Merchants, Tra-



ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named. J. B. BASSINGER,
Chief Engineer.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR - I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent.
Motive Power for N. J. R.R. and Trans. Co.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Notice to Railroad Contractors and Planters.

Memphis and Charleston Railroad.

PROPOSALS will be received at the Railroad Office at Huntsville, Alabama, until the first day of March next, for the Grading and Masonry of that part of the Memphis and Charleston Railroad comprehended between its eastern terminus and the town of Decatur, a distance of 83 miles.—Also for Grading and Masonry of that portion of the Railroad lying between Tuscumbia and the Mississippi line, a distance of nearly 23 miles.

The work now offered for contract will embrace about three million cubic yards of excavation and embankment; 7,500 perches of Bridge Masonry; 3,500 perches of Arched Culvert Masonry, and 4,500 perches of Box Culvert Masonry.

Profiles and specifications may be seen at the office after the 1st day of February. The whole of the work will be in the Tennessee Valley of North Alabama, a country of unsurpassed beauty and fertility, abounding in labor and provisions.

The commanding position of the Memphis and Charleston Railroad, designed to connect the Mississippi River with lines of Railroad terminating upon the Atlantic, must ensure for it a profitable trade and travel; in view of which the Directors have determined to offer a portion of the stock in compensation for work to be done. Bidders who may be willing to receive the stock of the Company in partial or full payment for their labor, will please therefore signify the same in their proposals.

By order of the Board of Directors.

JAMES F. COOPER,
Chief Engineer.

To Contractors.

OFFICE OF THE FAYETTEVILLE AND NORTHERN PLANK ROAD CO.
January 28, 1852.

SEALED PROPOSALS will be received at this office until the 1st of March next, for the Superstructure of a Plank Road Bridge over the Cape Fear River at Fayetteville, upon the plan known as Howe's Truss. There will be two spans of 200 feet each, with arch timber throughout for each span. The bottom chords will be 62 feet above low water mark, the depth of the river at low water being from 3 to 4 feet. The Bridge will be 16 feet in the clear, and the depth of the truss will be 18 feet. There will be a substantial wooden railing through the centre of the Bridge, 4 feet high, dividing it into two roadways, the whole to be roofed with shingles and covered in. The bids will be made for the mechanical work, *including* all the materials. And also for the mechanical work, *excluding* timber *only*.

Proposals will be received at the same time and place for the Masonry of the Abutments and Piers. The bids will state the price per cubic yard for Stone or Brick work laid in Hydraulic cement.—Stone can be obtained of a good quality (and boated down) 3 miles above the bridge site, and Clay of a good quality is found convenient, Steamboats navigate the river from Wilmington to Fayetteville, by which materials and fixtures of all kinds can be brought up. The Plans and Specifications can be seen at the Office of the Company.

A. A. McKETHAN,
J. D. WILLIAMS,
D. G. McRAE,
} Committee.

Railroad Iron.

THE undersigned are prepared to enter into contracts now at specific prices, to deliver Railroad Iron during the coming Winter and Spring, free on board at the shipping ports in Wales, or at ports in the United States.

CHOUTEAU, MERLE & SANFORD,
Sept. 30, 1851. No. 51 New st.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

Rosendale Cement.

THE NEWARK AND ROSENDALE LIME AND CEMENT CO. are now manufacturing at their works in NEWARK, N. J., and Ulster county, N.Y., a very superior article of *Hydraulic Cement*—also Lime Calcine Plaster, etc. Contractors and dealers will find it to their advantage to call or make application before purchasing elsewhere. All communications addressed to the subscriber, at Newark, N.J., will be punctually attended to.

1y*15 HENRY WILDE, Secretary.

RAILROAD SPRINGS. Fuller's India-rubber Springs.

THESE are now made in our own Factory, of the best materials. Each spring is guaranteed to perform the required work. Purchasers guaranteed against adverse claims.

Car Builders will save great expense by calling at the office of the Company.

23 Courtlandt St., New York.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

Machinists' Tools.

THE subscribers have on hand and are constantly manufacturing at their MACHINE WORKS, LOWELL, MASS., a superior class of Machinists' Tools, among which are

ENGINE LATHES. PLAINING, DRILLING AND SLOTTING MACHINES

of various sizes, designed particularly for Railroad Shops.

ALDRICH, TYNG & CO.
Lowell, Jan. 1, 1852.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

RAILROAD SPRINGS. Fuller's Patent India-rubber Springs.

PRICE reduced to 50 cents per pound. The owners of this Patent now manufacture the Springs in their own Factory, and guarantee that each spring shall perform its required duty.

Purchasers guaranteed against adverse claims. They may have full confidence in the working qualities of the springs.

The suits brought against Ray & Co., will soon be brought to issue, and we await the result with satisfaction, having full confidence in the pure administration of the Laws.

The long advertisements put forth by Ray & Co. about prior invention of the spring are worthless he has not proved prior invention, and cannot sustain his patent in a Court of Law.

For the owners of Fuller's Patent,
G. M. KNEVITT,
23 Courtlandt st., New York.

October 7, 1851.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

LOWMOOR LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.
Boston, November 29th. 1m

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next. for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER, President Phila. & Reading Railroad Co.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

—

Public attention is called to the advertisement of Mr. Day. He is now the only person authorized to manufacture and vend my patent in the United States.

W. C. FULLER.
By his Attorney, G. M. KNEVITT.
New York, 1851.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway
September 1, 1851.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 11] SATURDAY, MARCH 13, 1852 [WHOLE No. 830, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Gauge in Pennsylvania.....161
New Railroad Projects before Congress.....162
Wheeling Bridge Case.....167, 162
Public Works of Pennsylvania.....163
Pennsylvania Railroad.....166, 163
Susquehanna and Williamsport Railroad.170, 164
Western and Atlantic Railroad.....164
Mobile and Ohio Railroad.....165
Lake Superior Copper Mines.....166
Tolls on the New York Canals.....167
New Castle and Richmond Railroad.....167
Western Railroad Connections.....168
Great Western Railroad of Canada.....170, 168
Henderson and Nashville Railroad.....168
Stock and Money Market.....168
Milwaukee and Mississippi Railroad.....170
Coal Trade of the U. S.....171
Syracuse and Binghamton Railroad.....171
Railroad Projects in Kentucky.....172
Cincinnati and Dayton Railroad.....172
Terre Haute and St. Louis Railroad.....172
Statistics of New York Railroads.....173
Tunnel under the Hudson River.....174

American Railroad Journal.

Saturday, March 13, 1852.

Pennsylvania.

Railroad Gauges.—We learn from the Pittsburg Gazette that the Legislature of Pennsylvania has passed a law establishing an uniform railroad gauge through the State. The object of the movement is to prevent the six foot gauge of the New York and Erie railroad being extended into the State. The question was submitted as an amendment to the act incorporating the Catawissa and Towanda railroad company, and provides that the gauge of the track of said railroad shall be the same as the gauge of the track of the railroads built and owned by the State; and any and every railroad hereafter constructed through any portion of Pennsylvania, from any point east of a line running due south across the State from the State-line, beginning at the east line of Erie county, shall be of the same gauge as the railroads built and owned by the State, *and no other*—and if any company shall hereafter build or construct a railroad having a southern or eastern connection with any railroad leading to or towards Philadelphia or Harrisburg, of a different gauge from the gauge of the railroads built and owned by the State, then and in such case, all and singular the rights, powers and privileges conferred on such company by its charter, or by any supplement thereto, shall be adjudged null and void—provided, that nothing contained herein shall be construed to apply to the "New York and Erie railroad," to "the Tioga railroad," to the "Lakawanna and Western railroad," already constructed and in operation, nor to to the act fixing the gauges of railroads in the county of Erie passed the 11th March, 1851.

This gauge law has been secured through Philadelphia influence. A letter in the North American says:—

The section, it will be seen, keeps the New York influence outside of the State lines, and harmonizes the railroads of Pennsylvania into one complete system. It avoids transhipment within the State, and keeps our grasping neighbor within her own bonds; and, by binding together the interests of all counties, will foster everywhere a good feeling for Philadelphia. Where a difference in the gauge of railroads renders a transhipment at some point inevitable, it should be fixed near the boundary, for reasons so palpable and convincing as to require no comment. As every transhipment, forced by a change of gauge, is equivalent to fifty miles of road, it is quite apparent that it never should take place in the middle of Pennsylvania, for that would turn the trade of the northern half of the State away from us forever.

Philadelphia, to be strong over the whole western country, must first be strong in her own State. She must first be allied in interest and intercourse with all parts of the commonwealth, and thus acquire strength at home. Her ground plan of operation should cover the whole of the State of which she is the metropolis—her connections with the improvements of other States can then be made and *controlled* in such a manner as will fill her coffers and swell her commerce. Pennsylvania soil should not be used as a highway leading to and from her rival and competitor—it should be ramified by railroads uniting in Philadelphia, as the human body is coursed by arteries centering in the heart.

New York has long indulged the hope and expectation of running across eastern and northern Pennsylvania, to shorten her railroad distances to the Ohio and the lakes. It has been her aim to penetrate Pennsylvania on the north with the six feet gauge of track, and on the east with the New Jersey track of four feet ten inches gauge; and so, while running through the State, secure its local interior trade to the loss and injury of Philadelphia. But this cunning game has been effectually checked in the adoption of the gauge law above alluded to.

All this is great business. It remains for Philadelphia to demonstrate the fact, that the true way to build up a city is to throw obstacles in the way of freedom of trade. If she can thrive by pursuing this policy, she will be the first city that has ever succeeded in this way.

We ask our Philadelphia friends to contrast their exclusive policy with that of New York. A few years ago, Massachusetts took it into her head that if she could only get a road to the Hudson river at Albany, she could supplant New York in securing the trade of the west. Our people bade them God speed, and gave them all they wanted to carry out their schemes, and even authorized the city of Albany to subscribe largely to the Western railroad. Well, the Bostonians got their road, which has indeed proved a vast benefit to them, and they take over it some 200,000 tons annually, which otherwise would have passed through our own city, adding so much to the aggregate of our commerce, a matter by no means to be despised. This traffic, in the Pennsylvania acceptation of the term, New York has thrown away. But our imprudence did not end here. Our eastern neighbors, still possessed with the idea that they could make Boston the exporting city of western produce, and finding that the Western railroad did not give them that position, went in search of a "*north west passage*," around the head of Lake Champlain. This would do the business, certain. They first appealed for authority to build the Ogdensburg railroad. This granted, they next said, "we must bridge Lake Champlain." Very well, they have obtained and have used this privilege, though the right of the Legislature to grant it was gravely questioned by disinterested persons, who feared from such an act, the violation of the vested rights of a large body of our citizens. In fact, we may say that everything that our great eastern rival has asked, to carry out her plans, has been ungrudgingly yielded; and if there is a communrty in the world whose rivalry is to be feared and guarded against, it is these same Massachusetts people. But our liberality did not end here. After giving in detail all that has been asked of us, we have volunterily thrown off all restrictions upon the construction of railroads, and allow any body of men, with whatever object, to unite for the construction of a railroad, with the power to locate their line and determine its directions, without even making an application to the Legislature. Railroad construction

in New York is just as open to laudable or illaudable competition, as ship building; and what is more, the present law is universally approved.

Nor do we see any symptoms that New York is likely to fall a victim to the liberal policy. She is still the grand depot of the surplus product of every branch of our national industry, and the great entrepot of our foreign trade. She is the rendevous of our ocean steamers, and the centre of the monetary transactions of this continent. She is vastly superior in population to any of our other leading cities, and seems likely to maintain her pre-eminence in all the particulars named. All has been accomplished at the same time that she has extended the most generous policy towards all her rivals, pursuing the same objects with herself.

We think it can be demonstrated, that what was considered at the time as only a liberal policy towards our neighbors, was in fact the dictate of a wise self interest. The present prosperity of Massachusetts is in no small degree owing to the Western railroad. It supplied that State with food, and opened an outlet for her manufacturing establishments, by which their growth was stimulated beyond any former precedent. What is the result we now witness? It is, that New York is reaping the benefit of this growth of another State, which she so wisely fostered. The products of all these manufacturing establishments, the business developed by her innumerable lines of railroads is now centering in this city. New York has become the great point of distribution of her products, and is fast becoming the port of importation for her supplies of foreign merchandise. If then we parted with the handling of a few hundred thousand tons of merchandise, we have only sacrificed this, for a much larger amount now received in return, upon which we not only receive the cost of warehousing and transhipment, but a commission besides. Never was there a more perfect illustration that honesty is the best policy.

There are now over 5,000 miles of road in operation in New York and New England, and some 2,000 in progress. All these roads Philadelphia would cut off from all western connections, except those which should be made through her. Admit this principle to be correct, and our internal commerce is at once at an end. Every little town can exact equally onerous conditions, and impose upon railroad companies the burden of supporting them, when but for such a support, they would never have been heard of. We think that the greatest good of the greatest number should become the fundamental law of the land, and if a city or town cannot sustain itself without taxing commerce and travel, the sooner it goes down the better.

But what Philadelphia relishes so well by no means suits the stomach of other portions of the State. The city of Pittsburgh is now alive to the subject of a railroad from herself, to connect with the Erie railroad at Olean, to meet also at the same point, the Genesee Valley Railroad. From this road she expects to derive a large and lucrative trade, and over it to forward the produce of her mines, lumber, etc., etc. It is regarded as an exceedingly important project. But the guage of the Erie Railroad is 6 feet. To render the Alleghany Valley Railroad useful and profitable, it must have the same guage, as a transhipment at Olean is not to be thought of. Here there are the two great cities of Pennsylvania at loggerheads upon the question of guage. How the matter is to be compromised we do not know, but the present condition of things shows the endless difficulties and embarrassments which any but the *true* course is sure to involve States as well as individuals.

New Railroad Projects before Congress.

Below we give a list of the new railroad projects now before Congress for aid, by grants of land similar to that extended to the State of Illinois, by the last Congress. They make up an aggregate line of nearly 9000 miles. We have given the length of most of the lines, but we presume that our estimates are only approximately correct. We presume that a large number will be added to the above list before the adjournment of Congress:—

1. Railroad from St. Louis, Missouri, via Little Rock to Red river near Fulton. This road runs southerly half way across Missouri, and in a diagonal direction entirely across Arkansas from northeast to southwest, in all about 500 miles.

2. Road from Dubuque, in Iowa, near the north line of the State, to Keokuk in Iowa, in the extreme south part of the State. Its length is over 300 miles.

3. Road from Davenport on the east line of the State of Iowa, westward to the west border at Council Bluffs—a distance of 350 miles.

4. Road from Burlington in the southeast part of Iowa, northwesterly to Fort Desmoines, on the Desmoines river—about 150 miles.

5. Road from east to west across the north part of the State of Missouri, from Hannibal on the Mississippi, to St. Joseph on the Missouri river—225 miles.

6. Road across the centre of Missouri, from St. Louis to some point near Independence, on the west line of the State—300 miles.

7. Road from the east to the west line of Michigan, beginning at Lake St. Clair and terminating on Lake Michigan, points not yet determined, but road to be located where there are the best lands and the most of them of course—distance, 225 to 250 miles.

8. Road from Saginaw on the east side of Michigan, northerly along Lake Huron to the Sault Ste. Marie at the mouth of Lake Superior, thence along the south shore of that lake to near its western extremity at Montreal river—800 miles.

9. Road from Helena on the Mississippi river, midway of the State of Arkansas, to fort Smith, on the west line of that State, crossing the State from east to west—275 miles.

10. Road from the Mississippi river, opposite Memphis, Tenn., in a southwesterly direction across the State of Arkansas to the Texas line—about 350 miles.

11. Road from Selma, in the southerly half of Alabama, north through that State to the Tennessee river—about 175 miles.

12. Road from Gerard on the line between the States of Alabama and Georgia, southwesterly across to the south-west corner at Mobile—250 miles.

13. Road from Milwaukee on Lake Michigan, on the east side of Wisconsin, westward across the State to the Mississippi river, on "the most eligible route"—200 miles.

14. Road from the north line of Illinois, northwardly through Wisconsin to Lake Superior, varying according to route from 350 to 400 miles.

15. Road from Manitouoc on Lake Michigan in Wisconsin, westwardly across the State to the Mississippi river—250 miles.

16. Road from Milwaukee on the east line of Wisconsin, northwestwardly to Prarie La Crosse, on the west line of the State on the Mississippi river—250 miles.

17. Road from Fon du Lac, on Winnebago lake, in Wisconsin, southerly Janesville—100 miles.

18. Road from Green Bay in Wisconsin northwestwardly to Lake Superior—250 miles.

19. Road from Shawnectown, Illinois, on the Ohio river, westerly to the Mississippi river—150 miles.

20. Road from Warsaw, Illinois, on the Mississippi river, northeasterly to Peoria—150 miles.

21. Road from Warsaw to Rockford, near the line of Illinois—225 miles.

22. Roak from Oakland, near Detroit, northwesterly across the State of Michigan, to the mouth of Grand river—about 200 miles.

23. Road from Lafayette, Indiana, westerly across the States of Illinois and Iowa, or Missouri, to the Missouri river—about 600 miles.

24. Road from Springfield, Illinois, southwesterly to Alton—150 miles.

25. Road from Pensacola, Florida, northerly to Montgomery, in Alabama—150 miles.

26. Road from Brandon, Mississippi, easterly to the line of the State—100 miles.

27. Road from the Falls of the St. Louis river, at the western end of Lake Superior, in the Territory of the Mississippi river—200 miles.

28. Road from New Albany, Indiana, opposite Louisville, Kentucky, westerly through Indiana and Illinois to Alton, opposite St. Louis—325 miles.

29. Road from New Orleans to Jackson, Mississippi—200 miles.

30. Road from Toledo, on Lake Erie, in the State of Ohio, southwesterly to Springfield, in Illinois—400 miles.

31. Road from St. Charles, Missouri, near St. Louis, northwesterly to the river Des Moines, in Iowa—about 200 miles.

The Decision in the Wheeling Bridge Case.

The decision of the U. S. Supreme Court, in the case of the Wheeling bridge, we find published in the Pittsburg Journal. It was delivered by Judge McLean, as the opinion of the Court, Judge Taney and Judge Daniel dissenting.

After a statement of the history of the case and the manner in which it came before them, and declaring the grounds on which the Court had jurisdiction, the opinion proceeds:

The fact that the bridge constitutes a nuisance is ascertained by measurement. The height of the bridge, of the water, and of the chimneys of steamboats, are the principal facts to be ascertained. If the obstruction exists, it is a nuisance. To ascertain this a jury is not necessary. It is shown in the report, by a mathematical demonstration. And the other matters, connected with the case, as to the benefit of high chimneys, lowering them in passing under the bridge, and shortening chimneys, are matters of science and experience, better ascertained by a report than by a verdict. And the same may be said of the statistics which are in the case.

The opinion then goes on to state that the bridge does constitute an obstruction, as shown by the report of the commissioner, who was appointed by the Court to make the examination, and says that "the report having been the result of a most arduous and scientific investigation of the facts, is entitled to the full weight of a verdict."

After enumerating the delays which have been encountered by steamboats in passing the bridge, set forth in the report of the commissioner, and which delays, it was argued by the counsel for the bridge company, would be avoided by the boats using shorter chimney pipes, or by having them constructed on hinges, to lower them, the Court decide that this would involve a heavy expense and reduce the speed of the boats, and would both be wrong.

There are but seven boats of the two hundred and thirty running on the Ohio, according to the report of the commissioners, which carried chimneys so high that they could not pass under the bridge without lowering them; but these boats carry, it was in evidence, about one half of the goods in value and three-fourths of the passengers, between the cities of Pittsburg and Cincinnati. The obstruction to the seven boats the Court, therefore, decide to be sufficient to constitute the bridge a nuisance, which the law might be invoked to abate.

The Court notice the arguments of defendants' counsel that, in a few years at most, there will be a concentration of railroads at Wheeling, and at other places on the Ohio, connecting the eastern with the western country, which from their speed and safety must take from the river the passengers and a considerable portion of the freight now transported in steamboats; but they say, it does not follow from this that when these things come to pass, that the Ohio river will be deserted, or that the free navigation of it should not now be secured by prohibiting bridges or viaducts to be thrown across it, that will interfere with its free commerce.

The opinion thus concludes:

It is said that the interest of commerce requires

navigable waters to be crossed, and that in such a case the inquiry should be, whether the benefit conferred upon commerce by the cross route, is not greater than the injury done. In the case of the King vs. Sir John Morris, 1 Barn. & Adol. 441, it was held that the injury cannot be balanced against the benefits secured. And in the case of the King vs. George Henry Ward, 3, ib. 26. 384, it was held where the jury found an embankment complained of as a nuisance, but that the inconvenience was counterbalanced by the public benefit arising from the alteration, it amounted to a verdict of guilty.

If the obstruction be slight, as a draw in a bridge which would be safe and convenient for the passage of vessels it would not be regarded as a nuisance where proper attention is given to raise the draw on the approach of vessels. Of this character is the complaint of the plaintiff against the bridge, that it obstructs sea vessels built at Pittsburg Sails cannot be used to advantage on the Ohio or the Mississippi, consequently there can be no necessity to hoist the sails. Such vessels float down the river or are towed by steam vessels.

It is true the injury done to the State of Pennsylvania may seem to be small when compared to the magnitude of this subject. It applies to all our rivers, and effects annually a transportation of many millions of passengers and a commerce worth not less than six hundred million of dollars. It would be as unwise as it is unlawful, to fetter in any respect this vast commerce.

In all the charters granted for the construction of bridges, over navigable waters, it is believed all the States, not excepting Virginia, have provided that their navigation should not be obstructed.

The bridge company had legal notice of the institution of the suit, and of the application for an injunction to stay their proceedings, before their cables were thrown across the river. This should have induced them to suspend for a time their great work, alike creditable to the enterprise of their citizens, and the genius and science of the Engineer who planned the bridge and superintended its construction. It is a matter of regret, that by the prosecution and completion of the bridge, they have incurred a high responsibility.

For the reasons and facts stated we think that the bridge obstructs the navigation of the Ohio, and that the State of Pennsylvania has been, and will be, injured in her public works in such a manner, as not only to authorize the bringing of this suit, but to entitle her to the relief prayed.

Believing from the estimates in the case, that the obstruction to the navigation of the river may be removed by elevating the bridge, at an expense, which when added to the original cost will leave a reasonable profit to the stockholders, on the entire capital expended, we have endeavored to ascertain the lowest point of elevation which will secure this object. And on a full view of the evidence, we are brought to the conclusion, that an elevation of the lowest parts of the bridge, for three hundred feet, over the channel of the river, not less than one hundred and eleven feet from the low water mark, will be sufficient—the flooring of the bridge descending from the termini of the elevation, at the rate of four feet in the hundred—this will give a level headway for boats of three hundred feet in width, and will enable those whose chimneys are eighty feet high to pass under the bridge, when the water is thirty feet deep, from the ground, leaving the tops of the chimneys two feet below the lowest parts of the bridge. If this or some other plan should not be adopted which shall relieve the navigation from obstruction on or before the first day of February next, the bridge must be abated.

We do not deem it necessary to provide against the floods, which seldom occur, and which when at the highest, overwhelm the lower parts of our cities and towns on the banks of the Ohio, and necessarily suspend for a short time, business on the river.

After the opinion had been delivered, Mr. Johnson, of counsel for defendants, suggested to the court, that the engineer of the bridge had informed him that the obstruction to the navigation of the Ohio, might be avoided by making a draw in the suspension bridge, or in some other manner, far less expensive to the bridge company, and equally convenient to the public, than by elevating the bridge as required in the opinion.

The suggestions were, by request of the Court, then reduced to writing, and, on Monday last, Judge McLean, delivered the opinion of the Court, embracing the following parts:—

1. All artificial obstructions to navigation must be removed without any regard to cost to the parties creating them.

2. At the same time, whilst protecting the right of freedom of navigation, this Court will not impose unnecessary expense on the defendants in the case.

3. Draws may be suitable to tide water navigation; but this Court are of opinion, that they will not obviate the obstruction of the Wheeling bridge, on account of the swift currents and high floods of the Ohio river.

4. The questions which are of practical skill and science are therefore referred to Engineer McAlpine, of New York, to report upon at the extra term in May.

5. The decree requiring the elevation or removal of the bridge shall now be filed, but shall not be recorded until after the Engineer's report. Decree filed.

So that the question of whether a draw may be made in the bridge, and its elevation or removal then dispensed with, will come up for decision by the Court at their meeting in May next.

The decision of the Court on this and every other point which the case involved, is conclusive, but there is a way by which the evils, which it is feared it would entail on the trade of the West and the intercourse between it and the Atlantic border, may be avoided. The judgment of those, whose interests are most concerned, would seem to be in opposition to that of the Court, as to the great advantage which structures over the Ohio river, like that at Wheeling, give to those who are concerned in the trade of that valley. This is shown in the action of the members of the Legislature of Ohio. That body consists of one hundred and thirty-one members, and though several of them were absent at the time, one hundred and twenty-one have signed a petition to Congress, in which they declare the bridge to be "an all-important work for the safe and uniform transportation of the United States Mail and for the accommodation of the travelling community of the whole valley of the Mississippi, and they therefore pray Congress to interpose to sustain the bridge by passing a law to legalize the same, as the Great Western Mail route."

This Congress has the right under the Constitution to do, and their vote declaring the bridge a regular mail route, will rescue it from the decision of the Supreme Court, and let it stand. The question is an important one now, but must increase in importance as the country fills up and railroads are extended. This opinion of the Supreme Court, if there be no means of avoiding it, must ever operate as an insurmountable objection to bridging the western rivers, if any interest can be brought to bear against it. Congress should, therefore, now that the evil is curable, interpose its authority, and by declaring the bridge to be a public mail route, save it from removal, and thus secure to the trading community of the whole valley of the Mississipi the "accommodation," for which the members of the Ohio Legislature so justly ask.

Northern Route.

A Fact for Tobacco Shippers.—Saturday last, a German house shipped through the houses of Messrs. E. Webb and Huston, of this city, by the Northern railroad route to New York, 68 hogsheads of tobacco, there to be re-shipped to Antwerp, for which market it was purchased. Before the contract was closed with Messrs. Webb and Huston, the holders of the tobacco telegraphed to the agents at New Orleans to learn the rate of freight between New Orleans and Antwerp, and after receiving an answer, and comparing the rate with that at which the tobacco could be shipped from New York to Antwerp, found it could be a saving in expense of transportation, as well as an economy of time to give the Northern route the preference. The charges between this city and New York are now high, owing to the lateness of the season, which compelled the shippers here to rely upon railroads all the way except across the Lake, instead of being able to avail themselves of the cheaper navigation by canals, through the States of Ohio and New York.—*N. O. Bulletin of 21st.*

Pennsylvania.

Canal Commissioners' Report.

From the report of the board of Canal Commissioners of this State we make the following extracts:—

The commonwealth of Pennsylvania has completed and in operation 652¼ miles of canal and railroad, independent of feeders not navigable, as follows:

	Miles.
Delaware division, from Bristol to Easton	59¼
Columbia railroad, from Philadelphia to the basin at Columbia	82
Eastern division, from Columbia to the junction of the Juniata and Susquehanna divisions at the head of Duncan Island	45¼
Juniata division, from the junction at Duncan's Island to the basin at Hollidaysburg	127¼
Portage railroad, from Hollidaysburg to Johnstown	36
Western division, from Johnstown to the Monongahela river at Pittsburg	104¼
Susquehanna division, from the junction at Duncan's Island to Northumberland	40¼
West Branch division, from Northumberland to Farrandsville	76
North Branch division, from Northumberland to the Lackawanna	72¼
Bald Eagle side cut from the pool of Dunstown dam, on the West Branch division, to Bald Eagle Creek	3¼
Lewisburg side cut, from Lewisburg to the West Branch division	¼
Lackawanna feeder, at the termination of the North Branch Division	¼
Alleghany Branch of the Western division in Alleghany city	¼
Feeder at Johnstown on the Western division	1¼
Feeder at the mouth of the Rayston branch of the Juniata	1
Total miles	652¼

Upon the completion of the North Branch canal, from the mouth of the Lackawanna to the New York State-line, 94¼ miles more of navigation will be added to the above.

The Erie extension, consisting of the Beaver division, the Shenango and Conneaut lines, and the French creek feeder, 163 miles in length, and the Wisconisco canal, 12¼ miles in length, which were nearly completed, have been transferred to private companies.

The receipts from tolls have been nearly doubled within the last ten years, as the following table shows:—

1842	$940,213 69
1843	1,017,841 12
1844	1,167,603 42
1845	1,196,979 43
1846	1,295,494 76
1847	1,581,575 87
1848	1,533,344 00
1849	1,633,277 72
1850	1,768,209 46
1851	1,793,624 01

The gross receipts on the several lines of canal and railroad for the fiscal year ending November 30, 1851, amounted to $1,793,624 82, being an increase over 1850 of $25,417 36. The expenditures for the same period amounted to $1,054,893 99.

Included in these expenditures are the following:—

For repairs of breaches	$71,249 72
Purchase of new locomotives	58,717 00
Maintaining ferry at Duncan's Island	10,000 00
Re-building weigh-lock at Easton	13,000 00
	$152,966 72

The re-building of the Conestoga bridge, $17,854 50; the re-building of the Clark's ferry bridge, $21,922 30; the re-building of the Shamokin Shute, $4,678 50; the extraordinary repairs to the planes on the Alleghany Portage railroad per act of 1850, $15,420 06; the building of an addition to the wharf at Bristol, $1,500; the repair of road and farm bridges, $25,000; and new depot at Parkersburg, $10,000—not being fairly chargeable to the

repair account of the year, are not included in the statement of expenditures.

Receipts for all purposes on the Columbia railroad	$698,982 53
Portage railroad	249,088 88
Main line of canal, from Columbia to Pittsburg	375,204 75
Delaware division of canal	253,873 43
North and west branch and Susquehanna divisions	239,941 05
	$1,817,090 61
Deduct drawbacks paid at Philadelphia	23,465 82
Total gross receipts on all the lines.	$1,793,624 82

The amount of anthracite and bituminous coal shipped from the several offices on the line of the State improvements for the year 1851, is as follows:—

Easton	707,702 tons
Beach Haven	334 007 "
Harrisburg	60,158 "
Liverpool	14,703 "
Portsmouth	450 "
Newport	2,879 "
Northumberland	11,696 "
Pittsburg	8,361 "
Freeport	51 "
Holidaysburg	46,745 "
	1,187,842 tons.

The main line—Philadelphia and Columbia—is 82 miles in length, extending from the city of Philadelphia to the borough of Columbia. This division of the improvements has been in successful operation duriug the year.

The freight passed over the road in 1851 amounted to 260,860 tons, being an increase over 1850 of 6,805 tons, exclusive of the tonnage from the Reading railroad in that year.

The number of cars passed over the road was 146,226, of which 17,066 were passenger cars. Increase over 1850, 9,271 cars.

Number of trips made by locomotive engines, 8,280.

Number of miles run by locomotive engines, 678 960.

Number of section boats passed over the road, 238.

Number of miles travelled by passengers, 9,838,287—equal to 119,979 through passengers. Amount of toll received on passengers and passenger cars, $216,719 61.

The motive power department is now in good condition, and fully equal to the business of the next year. Five first class locomotive engines were purchased during the past year. There are forty-six engines of all classes upon the road.—Seven of these are undergoing repairs, and will be ready for service in the spring. There are twelve sets of trucks for section boats in order. As the transportation of boats over the road appears to be on the decrease, this number will be sufficient for present use.

The Allegheny Portage railroad is thirty-six miles in length, and extends from Holidaysburg to Johnstown. Transportation was resumed on this road on the 25th of February.

There are twenty locomotive engines on this road; seven of these are of the first class; ten are adapted to short levels with light grades, and three are nearly worn out and of but little service. Two of the first class engines were purchased during the year. New ropes were placed on planes 2, 5, 6, 7, 8 and 10, at a cost of $18,624 94.

Pennsylvania Railroad.

At a meeting of the board of directors held on the 3d inst., the following gentlemen were elected directors—William R. Thompson, to supply the vacancy occasioned by the resignation of Edward M. Davis.

Edward T. Mott, as a representative of the district of the Northern Liberties, to fill a vacancy caused by the resignation of David L. Brown.

Samuel Jeanes, to supply the vacancy caused by the resignation of Thomas T. Lee.

From the Baltimore American.

The Extension of the Susquehanna Railroad to Williamsport.

Attention has recently been called, through the public prints, to a meeting to be held in this city on the 13th inst., for the purpose of advancing the above named improvement. A map has also been placed before the public, under the auspices of the Susquehanna Railroad Company, exhibiting in a clear and satisfactory manner the extensive Railroad connections that must be secured to Baltimore by the completion of this work. A glance at this map shows that the line extending from Harrisburg to Williamsport occupies a commanding position. It is the only line by which travel from the Northern and Western parts of Pennsylvania, New York and Upper Canada will pass to the South Atlantic States. The line from Harrisburg via Williamsport, Elmira and Geneva to Lake Ontario, cuts four grand arteries of trade. Three of these are now in operation, and the fourth (the Sunbury and Erie Railroad) will be under contract very shortly. The Harrisburg and Williamsport extension has the additional advantage of being the only line by which the City of Philadelphia will seek the trade of the Susquehana valley lying between Harrisburg and Williamsport. And it will also be the route by which travel from the North Eastern parts of Pennsylvania and New York will pass to the Western parts of Maryland and Virginia and the valley of the Ohio.

The influences of this extension upon the stock of the Susquehanna and York and Cumberland Railroad can scarcely be too highly appreciated. Some estimate may be formed, though but proximate, when a cursory view is taken of the Baltimore and Ohio Railroad previous and subsequent to its extension to Cumberland from Harper's Ferry. The total annual revenue of that work stood at about $100,000 for several years previous to its extension. After reaching Cumberland the revenue was soon doubled, and is, for 1851, about $1,350,000. The local population laying within about 25 miles of the extension was in 1810 about 107,000, while that which exists within the same distance of the Susquehanna extension is at this time about 210,000, or nearly double. It is not supposed that the local business would produce an increase proportionate to that obtained on the Baltimore and Ohio Railroad by the through and way business combined. But it is believed that the constant connection of the Susquehanna Railroad with the interior of Pennsylvania, New York and Ohio during the twelve months by railroad, instead of a casual connection of eight months, will go far to establish a proportionate increase for the whole line when completed to Williamsport. The gross revenue of the Baltimore and Susquehanna Railroad for 1851 was $355,000; and the annual increase during the last five years has been at the rate of about 30 per cent. So that allowing the extension to be completed by 1853, the gross revenue would then be about $568,000. Should this company furnish cars for the transportation of tonnage the revenue would at last amount to $700,000. With a road extended in length from 67 to 173 miles, draining, by the extension, the coal mines of Dauphin County and the mineral and agricultural districts of the middle and upper Susquehanna, the way business of a local population, increased by the extension, from 180,000 to 360,000; a constant connection with railroads running north and west to an extent of some 1200 miles—it appears but reasonable to estimate the increase of the revenue at 60 per cent. for the whole line during the first year of its operation, or in round numbers $1,100,000.

If the skeptical look upon this as an unreasonable estimate, they have only to examine the history of Railroads in the United States and Europe during the last ten years, to be convinced that it is rather below than above the mark.

This improvement deserves the critical attention of capitalists and our city authorities; not less for the favorable results that must flow to our trade, than for an opportunity to invest in an enterprise that promises a most favorable return. The fact that our internal improvements have not made large dividends thus far is no criterion by which to judge of their future character. It should be remembered that they have all been hampered by the want of funds in their initiatory movements, and that the original objects with which they have been commenced have not, up to this period, been attained for want of that nerve among our capitalists which has carried our Eastern neighbors forward to the most signal triumphs. All that we now require is the courage to attempt an enterprise, which patient investigation must convince us is easy of accomplishment. BALTIMORE.

Western and Atlantic Railroad.

The efficient General Superintendent, Mr. Wadley, is getting the work on the State Road fairly under way. He has appointed A. G. Ware, Esq. Agent at Atlanta—a first rate choice. Gen. Bishop is continued the Agent at this place with additional power granted him. We learn from the General that he now sends off daily, two freight trains, carrying three or four hundred bales of cotton, and several car loads of grain. Notwithstanding the daily arrival of cotton and other freight, the road is gaining on it. But if necessary, they are determined to put on still another train. Gen. Bishop is carefully storing the grain in box cars, and putting them next to the engine, so that there may be no danger of the cotton taking fire. In a few days, as soon as the people are *breaded* below, they will commence sending off the bacon and lard which is accumulating at this point.

We are informed that the rise of 20,000 bags of cotton have arrived up to this time, about half of which is now sent off—leaving upwards of 10.000 bags for shipment. If nothing happens, and cotton continues to go off as at present, it is thought that about 10,000 bags more will be brought up this season.

We are truly proud to be authorized to speak thus favorably of what is actually doing on the road. We were tired of making promises, which were not fulfilled, and know that our readers cared but little for future prospects based on hope and calculation. We are fully justified in saying—"Now, by St. Paul the work goes bravely on!"—*Chattanooga Gazette, 7th inst.*

Tunneling Machine.

The Boston Commonwealth gives the following description of the machine, which has been constructed to tunnel the Hoosic mountain:—

It is the application to the task of boring a 24 foot hole through a mountain, of a plan of stone cutting by machinery, which is now in use at the Quincy granite quarries.

The cutting tool to be employed is not a chisel, but a small wheel, the periphery of which is brought to an edge. A series of these wheels being carried back and forth over the face of a block of granite, are found to work it down rapidly. Now suppose a hoop 24 feet in diameter to be armed on one edge with these cutting wheels or rollers, and to be turned on its axis with the armed edge pressed against the face of the rock, and we shall see that it will cut a groove or channel of its own dimensions. Such a channel or heading the machine is to carry in three feet, and also drill a hole in the centre. It will then, being mounted on trams, be moved back and a charge of powder, or gun cotton, will be exploded in the central hole which will tear out the rock.

The mechanism by which the cutting of the channel and the drilling of the central hole are to be affected, at the same time, seems well adapted to the purpose. The immense hoop is mounted on a strong wheel, like a tire projecting forward in front 3 feet beyond the felloes. There are on its periphery 10 of the small cutting wheels, placed at different angles, so as to cut the groove larger than the hoop itself, and let it work freely. These cutters are disposed in four groups of 2 or 3 each, and behind each group is a scraper which collects the chips, and carrying them off on an inclined plane, loads them at intervals into a cart which stand underneath on one side.

This great wheel or auger-bit is mounted on a large *hollow* shaft or arbor from the centre of which a drill works to make the central hole. Motion is given to the great wheel not through its arbor, but by a shaft parallel with that arbor and above it, bearing a pinion which tooths into the inside of the great hoop.

And a fixed ring, toothed on its inside, gives motion to the drill in the centre of the main shaft,

The same shaft which drives the great wheel, also drives a feeding screw, which carries the main shaft and wheel forward on ways, one eighth of an inch for each revolution of the cutting hoop. The whole of this gigantic machinery is borne upon a mammoth railway carriage of four wheels, which, when the machine is boring, is to be braced firmly against the walls of the tunnel.

The driving power may be either a stationary steam engine at the mouth of the tunnel connected by bands, or it may be a locomotive, mounted on the trains.

When finished it will weigh 80 tons, every ounce of it of iron, steel and brass. To move it to the scene of its operations it will be taken to pieces. The heaviest piece will weigh 8 tons.

Debt of the State of Louisiana.

Mr. Bourdelon, State Auditor, in his report on the receipts and disbursements of the revenue during the years 1850 and 1851, gives the details of the State debt as follows:

Liabilities for the property banks	$9,225,888
" for 2d Municipality, N. O	356,160
" for 3d " "	30,240
" classed as State debt proper	1,225,000
Trust funds	756,441
Total	$11,593,629

Of the trust funds the largest item is one of $479,919 14, due the Government of the United States, it being received by Louisiana under the Deposit Act. The Seminary funds in the hands of the State amount to $120,038 14. Of the trust funds $756,411 are due on demand, and the rest of these fall due at different dates between 1855 and 1872.

Mobile and Ohio Railroad.

From a recent report of this Company we learn that whole amount of public lands which have been set apart for the use of the road, under the recent act of Congress, is as follows:

	Acres.
In Alabama: Even sections within six miles of the road	168,120
Selected within eight miles	85 480
" (by Miss. Com.) fifteen	78,912 75-100
Total in Alabama	332,512 75-100
In Mississippi: Even sections within six miles of road	271,643 60-100
Selected within fifteen miles	504,824 84-100
Total in Mississippi	776,465 84-100

making a grand total of one million, one hundred and eight thousand, nine hundred and seventy-eight and 19-100 acres. The title to these lands, (says the report) however, being vested by the act of Congress in the States themselves, further legislation became necessary to enable the company to employ this munificent grant for the purposes of its donation. Bills were therefore introduced into the Legislature of Alabama and Mississippi, early in their present sessions, to transfer the lands to the company for the benefit of the stockholders, upon the execution of a satisfactory bond to apply the proceeds of the lands to the construction of the road. These bills have been passed by both Legislatures, the bonds have been executed and approved, and the lands are now vested in this company in full and perfect title, subject only to the condition that the road shall be completed from Mobile to the Ohio river within ten years, from the 20th September, 1850.

A portion of the lands thus conveyed to the Mobile and Ohio Railroad embraces extensive forests of valuable timber that will be made easily accessible to the sea by the opening of the road—a considerable proportion is fertile productive soil; and another and larger portion will equal in fertility the average of the counties in which it is located. It would perhaps be premature to attempt to estimate at this time the pecuniary value of this donation to the stockholders of the Company, but a reasonable approximation will demonstrate plainly and satisfactorily that the road now posse-ses elements of progress that will command confidence and capital, both at home and abroad, sufficient to ensure its speedy construction. At the moderate average valuation of $5 per acre for lands within six miles of the line we have 439,763 6-10 acres $2,199,818. At $2 50 per acre for average outside of six miles 669,214 6-10 acres $1 673, 036, making a total of $3,872,854, being within a fraction of forty per cent. of the entire cost of the road and equipments, complete and in full operation.

We learn further from the report that the work of gradation of the first 33 miles of the road to *Citronelle*, has been completed, and that the road to that point will be finished by May or June next.

The total receipts and expenditures up to the 10th February, 1852, as per Treasurer's Report, have been as follows:

Total receipts to date of last report		$152,738 51
Instalments on stock	91,298 50	
Balance city tax for 1850	5,825 40	
" " " " 1851	12,973 65	
Bills payable	110,000 00	220,097 55
		$372,836 06

The expenditures for the same period have been:

Total to date of last report		$147,651 50
For graduation, masonry, and bridging 33 miles	68,985 13	
Cross ties, joint pieces and laying superstructure	17,587 97	
Rails, spikes, chairs, etc	105,437 72	
Miscellaneous	31,073 90	
Balance	159,89	372,836 06

In addition to the expenditures above stated, about $100,000 will be required for the remainder of track laying; for balances due on engine, cars, etc., and to meet other expenses necessary to place the road in working operation to Citronelle. The construction thus far has been accomplished at a cost considerably within the estimates of the chief engineer, owing principally to the advantageous contracts made for the purchase of iron—while the work done is of the best and most substantial character, equal in every respect to any of the first class railroads in the United States.

At the commencement of this work, the city of Mobile pledged herself to the construction of the first 161 miles, extending to the south line of Kemper county, in Mississippi. To redeem this pledge, it obtained authority from the Legislature of the State, to impose a tax of two per cent upon the real estate of the city for five years. It is believed that this tax will realize to the company at least $1,100,000. The same law authorizes the corporate authorities to anticipate the taxes of the fourth and fifth years, by a loan, secured by the pledge of those taxes, which will thus enable the public to realize the benefits of the road at least two years earlier than could otherwise be anticipated.

The length of the line, and cost of preparing the road bed as far as has been finally located, is by the revised estimates, as follows:

Alabama Division—Citronelle to Mississippi line, 28¾ miles, costing	$239,555
Mississippi line to Kemper line, 97¼ miles, costing	887 426
Total Alabama division, 125¾ miles, costing	$1,186,981
Mississippi Division—Kemper line to S. line Pontotoc, 108¼ miles, costing	1,049,595
Total Citronelle to Pontotoc county, 234 miles, costing	$2,236,576
By approximate estimates—S. Pontotoc line to Tennessee line, including portion of branch to Tennessee river, 82 miles	$740,000

The amount of reliable subscription thus far obtained, for the prosecution of the work between Citronelle and Pontotoc line, Mississippi, may be estimated as follows:

In Alabama Division—Mobile two per cent tax		$1,100,000
Private subscriptions in Clarke and Lauderdale counties, officially reported, as per original lists on file		37,500
In Mississippi division—county tax subscriptions, Noxubee and Kemper		175,000
Private cash subscriptions officially reported between Kemper and S. line Pontotoc county, inclusive, as per lists on file		511,900
Private subscriptions in Lowndes, Monroe and Chickasaw counties, payable in labor at estimates of chief engineer		265,000
Making		$2,089,400
To which add—Oktibbeha county tax, voted but certificate not yet received	$50,000	
Subscriptions in cash and labor, of which lists in Lauderdale, Kemper, etc., are in hands of agents, informally reported to the board	36,333	86 333
Making a total of		$2,175,733

By a comparison of the estimates thus presented it will be seen that there is still wanting, to make the sum required for the local work to Tennessee State line:

Between Kemper S. line and Pontotoc S. line	$60,843
North of Pontotoc S. line to Tennessee line	740,000
Making	$800,813

yet unprovided for in Mississippi for the local work.

It is believed that this amount will be easily raised by proper effort in the counties along the line of the road.

The report also states that no difficulty is anticipated in the construction of the Tennessee division. Its length is 129 miles. To this the State has appropriated the sum of $1,035,000, and the balance will be easily raised by private subscriptions.

The Kentucky division says the report has not yet been completed.

A lively desire is manifested by the citizens of various towns in Kentucky, to connect themselves with this road by branch lines, and one of the most important and valuable of these is a road from Paducah, on the Ohio, at the mouth of Cumberland river, extending south to a favorable point of intersection. Such a line would draw a large traffic from the Wabash valley, and become an important stem of the Mobile and Ohio road. It is understood that the greater portion of its cost has been already provided for, and it should be the policy of this company to encourage the construction of this as well as other auxiliaries to the main trunk, as far as may be in their power. Another connection of value may also be mentioned, terminating on the Mississippi river, at Columbus, Ky. The construction of the two linee here spoken of, will be simultaneous with the progress of the road from Mobile through Tennessee, and will form with it three great termini resting upon different points of the Mississippi and Ohio rivers.

In view of the means now provided, the report recommends that the line from Citronelle to Kemper county line, be put under contract as soon as practicable.

In conclusion the report gives the following summary of the resources which have been provided for this work up to the present time.

Road complete in working order to Citronelle, 33 miles, including equipment —also, cost of all surveys, locating line, etc.. paid for by Mobile subscriptions, say	500,000
Mobile two per cent tax	1,100,000
Subscriptions in Mississippi private, and county, per previous statement	1,075,733
Lands donated by Congress as per estimate	3,872,854
Total	$6,548,587

The lands included in the estimate, to be made most available to the stockholders, should be withheld from sale until after the completion of the road, when they will have attained a higher value.—They are now however at the disposal of the board, to be offered in security for a loan of five millions to furnish the superstructure and equipment, whenever the amount necessary to complete the local work shall be fully made up. With the spirit now prevailing along the line, it is believed that the deficiency at present existing, can be provided for during the coming spring and summer. Should these expectations be realized, the remainder of the road can be put under contract immediately after. from Pontotoc to the Ohio river, for graduation, etc. The board entertain no apprehensions, that with the securities which they will then be prepared to offer, any difficulty will occur in negotiating the loan desired, upon very favorable terms. This accomplished, they will be enabled to prosecute the work of construction simultaneously at different points of the line, and finally unite the Gulf of Mexico with the Ohio river by railway within the next three or four years.

Pennsylvania.

Pennsylvania Railroad.—An adjourned meeting of the stockholders of the Pennsylvania railroad company was held at Philadelphia on the 5th inst. It was officially stated in the report submitted that the sum of $283,150—which was necessary to secure the conditional subscriptions of the city of Philadelphia and the district of the Northern Liberties—had been promptly made up. The subscribed capital stock of the company is now $9,-876,050. The report says:—

The whole line of the Pennsylvania railroad is now so nearly completed as to be continuous, with the Portage road except for twenty-eight miles on the western division. In July next, these twenty-eight miles will be reduced to eight or ten miles, and this last interval will be closed in the month of September. The levelling of the mountain division is vigorously under way, and its difficulties will soon yield to the intelligent labor by which the process is directed. By the opening of navigation the inclined plane No. 1 will be avoided by the cars, and soon after the planes Nos. 2 and 3 will be dispensed with in traversing the mountain, leaving only a distance of ten miles of the seven remaining impediments of the Alleghany Portage to be overcome. The lessening of this great obstacle in our stupendous labors will be followed by a better regulation of the business of the mountain railroad, and a reduction to *three hours* of the six or seven hitherto consumed in passing it. But for the Allegheny tunnel at Sugar Run Summit, the last ten miles of these planes would soon be abandoned by our cars. The report of the Chief Engineer informs us that the contractor of that division expects to permit the passage of the cars through this difficult portion of his task—the only interruption to a rapid transit over the whole route—in the summer of 1853.

The cost of constructing this railroad, with its mountain obstructions, is unusually low. No one in the country, it is believed, can be compared with it in this respect; and perhaps no railway, on this side of the Atlantic, surpasses it in completeness and finish. That portion of the road which is in use, has paid, during the past year, 6¾ per centum profit on the cost of construction, including equipment and the interest charged to capital. It is a noticable fact, too, reflecting credit on the transportation department, as well as on the capabilities of the route for economy in working, that the expense of running the trains per mile has been as much as 40 per cent less on many of the best regulated railways in New England, and *cheaper than any other railroad in the United States.* It is not a distinction unheard of, perhaps, on any railway, that it commenced and continued to pay legal interest on the cost, out of its receipts, "*two years before a car was able to pass over it*!"

That the friends of the Pennsylvania railroad will subscribe the *two millions and a half* required to complete this great artery of our trade, thus on the verge of completion, the committee do not permit themselves to doubt. If they will not contribute this sum, from the public motive of aiding an enterprise, the most important ever undertaken in Pennsylvania, they will perhaps subscribe to the stock from its excellence, as a mere pecuniary investment. The company is unincumbered with a dollar of debt, and has a first-class railroad which penetrates the richest portion of our own State, and connects, by the cheapest and shortest possible line, the fruitful and almost illimitable west with Philadelphia and the Atlantic States. What more need be said, what further assurance is wanted to prove to capitalists the surpassing value of its stock? On this question doubt or conjecture can have no place. It has the certainty of a *fixed fact.* The receipts already show what the road is capable of accomplishing. In the month of February of last year (1851) the sum received for passengers was $29,-778, and for freight $20,416. During the present month of February, 1852, the receipts for passengers amount to $62 850, and for freight to $69,376; showing as the business of the month an aggregate sum paid into the coffers of the company of $432,-226. The increase, therefore, from the extension of the railroad, is, in regard to passengers, more than *double*, and to freight more than *treble*, the receipts of last year. If such be the results experienced on an unfinished line, what may be expected hereafter!—From the vast trade which is naturally dependent upon, and tributary to this railway, we may confidently anticipate the rich harvest which awaits its completion.

Copper Mining.

While the iron interest in the United States is in a most depressed condition, we are happy to state that in the department of copper mining, we have the most flattering prospect. Our success here is owing to the productiveness of our mines, which must in time enable us to produce copper at a lower rate than any other country. Below we give a condensed statement of the latest intelligence from the Lake Superior region:—

"In the Cliff mine alone, Boston stockholders are interested to the amount of $350,000, at the present market price of the shares, and it is not too much to say that one-quarter, if not one-third of the stocks of the eighteen or twenty other mining companies that are in various stages of development, is held in this city or New England."

The Cliff Mine of course demands the first notice. S. W. Hill, Esq., agent of the Copper Falls Mine, writes:—

"It would have seemed almost foolish to state within the last eighteen months that the Cliff Mine was improving, or that it was likely ever to become richer. But it is certainly much better than ever before. They are now stoping a new mass of copper, commencing about 40 feet to the south of shaft No. 3 in level No. 7, and extending more than 40 feet to the north of it. In the south part of the mine masses are to be seen everywhere, more particularly in the deepest work. I have no doubt this company will send to market, this year, 1,000 to 1,200 tons of copper."

The new mass described is more than eighty feet long and sixteen feet high, and it will yield sixty per cent of pure metal.

A recent article in the Lake Superior Journal, says of the Cliff:—

"They employ at present 220 men, and during the month of October raised fifty masses of copper, weighing in the aggregate thirty tons. They also during the same period stamped vein stone sufficient for fifty-four tons of copper ready for shipping; drafted thirty-seven yards and one foot, and stoped 112 fathoms and 21 feet.

"In connection with this mine the company have a farm comprising 225 acres of improved land, from which have been harvested this season 2,000 bushels of turnips, 600 bushels of oats, and 30 tons of hay, the potato crop being almost an entire failure from the remarkably rainy weather the past season."

Of the "Adventure" mine, A. Coburn, Esq., treasurer of the "Farm," writes:—

"The Adventure mine is producing considerable copper, and Captain Moyle (the superintendent,) says he will send down 30 to 40 tons in the spring."

The same gentleman says:—

"The 'Forrest' mine is looking well; there are probably six tons of copper raised. Some of it is in large masses. The prospects are better than ever I saw them before. The company has a fine saw mill and stamps. Mr. Sales has found a great deal of copper, there being several masses of 600 to 800 pounds."

Of the 'Shirley' mine, the writer says:

"We have reached the vein in the long adit. It is from five to six feet thick, composed of quartz, spar and epidote, charged with very fine copper."

Of other promising locations Mr. Coburn says:

"Mr. Wilson, agent of our mine, (the Farm) is pushing the work on the Farm, Toltec and Algomah with great energy and reduced prices. We shall have supplies sufficient to last till next fall. The vein, in the Farm and Toltec, looks very well."

The same gentleman says:—

"'The Minnesota' is producing from 40 to 50 tons of copper per month."

The Phœnix Mine has been been very successful of late. Joseph Paull, agent of the "North American," writes of the Phœnix:

"The mine is improving. The vein in the first level is from two to two and a half feet wide, very rich stamp work with some barrel copper. In the drift, sixty feet below this, driving south from B winze, the vein is from ten to twelve inches thick; also very rich."

Of the "Copper Falls," the superintendent says:—

"Our mine is now looking much better than ever before. The vein in No. 5 shaft is twenty inches wide, and produces excellent stamp work. In the upper adit the mine is good. Considerable barrel work has been taken from that part of the work to-day. Some sheets of copper are met with there.

"The west vein is yielding some pure copper and mixed rock and copper, equal in richness to the best vein in the country. Our mixed rock and copper is about 9 per cent of the latter.

"In the shaft, the vein is, in the north end, over two feet, and in the south about twenty inches thick. In the adit, we have a good vein, with copper in bunches, and disseminated through the vein rock."

The "Copper Falls," has expended a great deal of money in time past, and without much success. But the new vein is so decided and so rich, that it is now regarded as among the very best of the less developed mines.

The North Western Mine is managed and owned principally in Pittsburg and Detroit. There are fifty men engaged in this mine, which is rich in all its parts, with small mass, bbl. and stamp copper, and is opened in the most advantageous manner for extensive working. The engine is all ready for shipment as soon as navigation opens.

The Phœnix (old Eagle river diggings) is taking out some masses from 800 to 1,200 pounds each—a very promising trade. Here the water power machinery is in full operation.

This mine is nearest the lake shore, and has the nearest access to its harbor of any mine on the lake.

The North American has struck the rock at the depth of 53 feet in sinking the new shaft, on what is called the South Cliff.

The Adventure has continued to improve very

rapidly of late. They have a number of fine masses, and expect to ship 30 tons on the opening of navigation.

The Ridge has been placed under a new manager and mining agent, and is said to be opening very finely. The new agent has the highest opinion of the mine.

This company own 1,298 acres of land, and have mineral rights on 200 more. They employ at present 20 persons, and have all the necessary works for raising and smelting ore. They produce about two tons lead per day, and have capacity for three tons, at a cost of about $30 per ton. On the 16th ult. the workmen commenced drifting between the shafts. A calculation has been made on the basis of the present yield, that there is now over five millions dollars worth of lead between the two shafts.

A correspondent of the National Intelligencer says:—

"The Northwest Mining Company ranks next in value (to the Cliff.) Mining was here commenced in earnest in 1849. About $80,000 have been paid in. In 1849 the net proceeds from the sale of copper amounted to some $5,000; in 1850, to about $32 000; and in 1851 to something over $50,000. This company owns a large tract of mineral territory, upon which two valuable veins have been opened, and a number of others discovered.

"The Minnesota Mining Company is located near the Ontonagon river, some forty miles westward of the two preceding. Immense blocks of pure copper are taken from this mine. It commenced in the autumn of 1848, and has a capital paid in of some $90,000, or $30 on a share—there being but three thousand shares. They command $150 in the market.

"There are a number of other companies working with various success. The prospects of some of them, as, for instance, the Bohemian, Quincy, Douglas Houghton, Adventure, North-Western and Albion, are excellent."

The Bohemian is also according to latest accounts looking exceedingly well. It is in the hands of enterprising men, who have great confidence in the value of the property.

The Norwich also exhibits a very promising appearance. The Superintendent writes that he is getting out large amounts of barrel work of the richest description. He has also got out a mass which weighs 2,000 lbs. He pronounces the mine equal in value to any in that region, and states that the show is so great that blindfold a person well acquainted with the Minnesota, and place him in the shaft of the Norwich, and he would think he was in the Minnesota.

The Windsor, a mine adjourning the Norwich, is also being developed, and promises to be of equal richness with that mine.

Virginia.

Orange and Alexandria Railroad.—A recent number of the Alexandria Gazette states that Mr. Atkinson, the engineer of the road, has returned from a reconnoisance of the country between Lynchburg and Gordonsville, and speaks most favorably of the adaptation of the country for the construction of the proposed extension of the Orange and Alexandria road—a work which we hope to see commenced and prosecuted with vigor, under the auspices of the State—forming the only link wanting to a complete line from Memphis on the Mississippi to this place.

Blue Ridge Railroad.—The bill providing for the more speedy completion of this work has passed both branches of the Virginia Legislature.

The St. Lawrence Line of Atlantic Steamers.

It has already been stated that the Canadian government has advertised for proposals for the establishment of steam communication between Europe and the St. Lawrence. The Montreal Pilot of Tuesday contains the advertisement for tenders for the supply of competent vessels. The steamers to be employed in this service are to be on the screw principle, to ply fortnightly between the ports of Liverpool, Quebec and Montreal, during navigation, and monthly between the ports of Liverpool and Halifax, Portland, or such other Atlantic port as may be agreed on, during the winter months.—*Boston Journal.*

Changes in the Rates of Tolls by the Canal Board.

The canal board has made changes in the rates of tolls on the canals of this State as follows:—

Tolls per 1,000 lbs. per mile is changed	FROM cts.	m.	fr.	TO cts.	m.	fr.
On butter, tallow, beer, cider, and vinegar	0	4	0	0	3	0
On salted pork, bacon, lard and lard oil	0	3	0	0	2	5
On grease	0	4	0	0	2	5
On bloom iron, ("going towards tide water" struck out)	0	3	0	0	2	0
On gas pipes and water pipes.	0	4	0	0	2	0
On pot and pearl ashes and window glass, ("manufactured in this State" struck out,) pig copper	0	4	0	0	2	0
On broken casting, scrap and pig iron	0	3	0	0	2	0
On barilla and bleaching powders, [not enumerated heretofore]				0	4	0
On stoves, ["cast" erased.] iron car wheels, ["and car axles" added,] bed plates for steam engines, plough castings, and all other iron castings, except machines and the parts thereof	0	4	0	0	3	0
On stove pipe and furniture for stoves, not cast iron, ["going from tide water" struck out]	0	8	0	0	6	0
On timber, squared and round if carried in rafts, if cleared "between the 15th of June and 15th of August" changed to "after the 1st of June, and arriving at tide water before the 15th of August," white pine, white wood, bass wood and cedar	0	1	8	0	1	5
On boards, plank, scantling and sawed timber, reduced to inch measure, all kinds of red cedar, cedar posts, all siding, lath or other sawed stuff, less than one inch thick, carried in boats, per 1 000 feet per mile, when not weighed	0	5	0	0	4	0
On ship knees	0	2	0	0	1	0
On shingles carried in boats	0	1	8	0	1	5
On cotton	0	2	0	0	1	0
On rags and junk	0	4	0	0	3	0
On manufactured tobacco going towards tide water	0	4	0	0	1	0
On rye, peas and beans	0	4	0	0	3	0
On flour, starting and going from tide water	0	3	0	0	1	0
On iron in sheets, steel horse shoes, crockery and glassware, and tin in sheets in boxes, going from tide water	0	5	0	0	4	0
On rosin, tar, pitch, turpentine, oil, manufactured tobacco, anchors, chain cables and oakum, going from tide water	0	8	0	0	4	0
On all other merchandise	0	8	0	0	4	0
On railroad iron	0	2	5	0	1	5
On railroad chairs, [not enumerated before]				0	1	5
On all articles not enumerated or excepted, passing from tide water	0	8	0	0	4	0

It will thus be seen that New York is anticipating the movements of rival projects, by adopting a gradual system for the reduction of tolls. The canal will prove a hard customer to contend with. Its enormous revenues fortunately allows the widest range of experiments to ascertain the effect of reduction of tolls. Reductions thus far have always been followed by an increase of revenue.

New Castle and Richmond Railroad.

From the New Castle Courier of the 6th instant, we learn that the extension of the New Castle and Richmond railroad to the city of Lafayette is a fixed fact. Twenty-three miles of the work west of New Castle were let by the board of directors at their meeting on the 21 instant, and notice ordered to be given for proposals for contracts for the balance of the line to Delphi.

The stock is already taken sufficient to do the grading and put down the superstructure, and the iron for the whole line is guaranteed by the Cincinnati, Hamilton and Dayton railroad company, if the company cannot procure it on the sale of their own bonds in time to have it in readiness,—Without doubt the whole of the line from Richmond to Delphi, will be in the hands of contractors by the first of April. The road forms a connection with the Bellefontaine road at Anderson, the Wabash and Erie canal at Logansport, and the Indianapolis and Lafayette road at Lafayette, with the certainty of a connection with the Northern Indiana road to Chicago, and when completed from Logansport to Lafayette, will form an important link in a chain of roads, now in embryo, traversing the Wabash valley, in a direction to Toledo, either via Fort Wayne or Goshen.

The New Castle Courier, from which we gather our intelligence in relation to this great thoro'fare, which promises so much of good to our city, thinks the road can be built with unparalled cheapness, and occupies an outside position that precludes all idea that a rival road can be projected to disturb its business. The Ohio gauge has been adopted for the entire line from the Wabash to Cincinnati, which will avoid all transhipments, and which will tend to draw trade from a great distance on either side; and when completed, it is the opinion of men best qualified to judge in such matters, that it will be the *best paying road* in the State.

Sandusky, Mansfield and Newark Railroad.

The earnings of this road for February, 1852, were $6,120·32 more than during the corresponding month last year. Of this increase, $1,600,70 was in passenger earnings, and the remainder, $4,519,-62, in freight. It is proper to add that except during the last half of the month *this year*, the freighting business of the road was almost suspended in consequence of improvements going on in the warehouse at this point. It will be seen therefore, that the business of the road is opening large.

Last Monday, we are informed, the earnings amounted to over $1,200. That was a pretty fair day's work. The number of passengers carried over the road has largely increased, averaging now about 300 per day.—*Sandusky Register.*

The Wheeling Bridge Case.

The following are the leading facts in this important suit:—

1. The Wheeling bridge is 92 feet high, and has a clear span of 1,010 feet, being erected without piers.

2. The extreme floods in the Ohio, which the court allow to be considered in the cause, rise 30 feet high.

3. Boats with chimneys not exceeding 60 feet in height can pass under the bridge on the highest floods recognized by the court.

4. There are seven steamboats, recently built, which have raised their chimneys to heights varying from 70 to 85 feet, and which claim the right to pass the bridge, in any stage of the water, without lowering their pipes.

5. To accommodate these seven boats, the Supreme Court has decided that this structure, which cost more than two hundred thousand dollars, must be abated.

6. The plans of the bridge were published two

years in advance of its erection, and no complaint or objection was made until the bridge company had expended their entire capital.

CHARLES ELLET, JR.,
Civil Engineer.

American Railroad Journal.

Saturday, March 13, 1852.

Western Railroad Connections.

It is now a settled fact, that by the close of the fall navigation, we shall have a continuous line of railroad from New York to Terre Haute, Indiana. But a few months will elapse, before we shall be in connection with Cincinnati, and with Dayton, which is an important point on the great eastern and western line through Ohio and Indiana. From Indianapolis to the Ohio State line, the Indianapolis and Bellefontaine raod is so far advanced, that we may safely count upon its completion by December next. During the present season, the Dayton and Western and the Greenville and Miami roads will be completed, leaving only a small gap of about ten miles between Greenville and Union, in the Indianapolis and Bellefontain railroad. Arrangements have recently been perfected, we learn, for the completion of this link, simultaneously with the roads named, so that the next winter's travel will be accommodated by a direct line of railroad, extending from the Atlantic cities to the western boundary of Indiana.

Among the companies that compose this great chain, the Indianapolis and Bellefontaine, the Dayton and Western, and the Greenville and Miami, deserve no small degree of praise, for the energetic manner in which they have carried forward their several portions. They have resolutely put their shoulders to the wheel, and will in consequence bring their lines into immediate and profitable use, while others, by failing to imitate their example, are making but feeble headway, with the loss of that *prestige* of success, so important to every new work. The roads enumerated will, from the start, make a show of earnings that will exert a most favorable influence upon the stocks and securities. Those who purchase them at the present time cannot fail to do a good thing.

But for the impolitic course pursued by the State of Illinois, this great western line might in a year more have been opened to St. Louis. The friends of the direct route across that State, will soon have a host of advocates in the crowds of passengers who will exchange at Terre Haute, the rail car for the horse coach, to travel for 165 miles over one of the most villanous roads in the world. No legislature can long withstand the public sentiment thus created.

We hope soon to be able to state that the Wheeling extension of the Cleveland and Pitteburg railroad is under contract, to be completed the present year; a matter of vital importance to the Baltimore and Ohio railroad. We presume there can be no doubt that the Ohio and Pennsylvania railroad will, by the first of January next, form a junction with the Cleveland and Columbus railroad at Crestline.

Another very important link in our western roads is that connecting Toledo with the Ohio roads.—Early in the spring, Toledo and Chicago will be connected by railroad. As soon as the Toledo, Norwalk and Cleveland road shall be completed, Chicago, one of the most important cities in the west, now isolated from the east for many months in the year, will be as accessible as were Albany and Troy a few years since. In 1853, the Rock Island and Chicago will be opened, thus opening to us the mighty Mississippi and all its treasures.

Great Western Railroad of Canada.

The Chief Engineer of this road, R. G. Benedict, Esq., writes to the President of the company, now in England, that rapid progress is being made with the work on that important improvement. A very large force is now actively employed upon various parts of the line, and many of the most difficult sections are in a state of great forwardness.

The company have, we believe, made satisfactory financial arrangements for sufficient means for the whole work, and we presume that the road will be pushed forward and completed with all the dispatch consistent with economy. American capitalists are largely interested in the road, which is regarded as necessary to preserve the business of many of our most important lines. In every point of view, the Great Western is one of the most important projects in this country, and cannot fail to occupy a high place in public estimation, nor to prove a most remunerative investment.

Kentucky.

Henderson and Nashville Railroad.—The people of Henderson, Kentucky, are moving in the construction of the above road. A survey has just been made of that portion of the line extending from Henderson to Hopkinsville, by Mr. Bowley, Chief Engineer of the Evansville and Illinois Railroad; the survey shows a very favorable route. The cost of this first division of the road, of 35 miles, laid with a heavy rail, is estimated at 132,75, or $7,273 per mile, the principal items of cost being the iron and superstructure. The Henderson Banner express great confidence in the carrying out of this project, and states that the necessary amount of stock will at once be subscribed. We have frequently spoken of this proposed road as a very important one. The Evansville and Illinois Railroad will soon be extended north to Terre Haute, where it will connect with the Railroad system of the State. The Henderson and Nashville road is the virtual extension of this great line, *Southward.* And at the latter place it would be brought into connection with the railroads of the South. The road is of easy construction, and is within the ability of the people of that section of Kentucky, and we are glad to see a disposition to turn it to some account in the construction of the above road.

Baltimore and Ohio Railroad.

The earnings of this road for the month of February have been $122,075 40, of which $96,849 63 were from the main stem, and $25,225 77 from the Washington branch.

Stock and Money Market.

The past has been a very active week in Wall street, and nearly every kind of security current there, has shown a large advance. Erie stock reached 85 on Wednesday, but has since slightly declined. Eric first mortgage went to 115, second mortgage to 104½; incomes to 96, new convertibles to 93; old, 92½; with very large transactions in all. Other fancies, as well as sound stock have shown a decided advance, as will be seen by our quotations. Hudson River stock has improved to 66, with small sales. Most of this stock is strongly held, and there is but a very small amount in the street. In the coal stocks, there has been a very active business, under the expectation of a very large freight for the coming season. The new western roads are beginning to figure in the street, and we notice sales of the Michigan Southern at 104. The leading western stocks are soon to attract great attention in this market, and many of them will go to a high figure, which will tend to advance all western securities.

The activity of which we have spoken is chiefly confined to the well known stock, and the advance partakes strongly of a speculative character.—Money is very abundant, which allows operators to carry their purchases with a very small margin. The buoyant state of feeling which prevails, has however communicated itself to the securities of works in progress, which are in better demand at higher rates. The foreign demand is good, and rapidly absorbs such securities as come up to its requirements. There is beginning to be great attention paid in Europe to our railroad securities, and they are fast becoming a favorite investment in that quarter, particularly upon the continent.

The prospects of our works in progress, for the present season, are, on the whole, very encouraging. Our railroad companies will find no difficulty in borrowing money, provided they show a sufficient basis for their loans, which should at least equal the amount to be borrowed. We quote the bonds of first class roads in progress at from 85 to 90.—Those of second class projects, or of such are not well known, net the purchases from 75 to 85. The commission in such cases, averaging all the way from 3 to 7 and 8 per cent. It is the misfortune of weak projects, to have a considerable portion of their means wasted in effecting negotiations.

We have often alluded to what we consider to be a great oversight of railroad companies, and that is, the want of suitable effort to make their projects known. Another great mistake which the whole of them commit, is the mystery in which they studiously involve all their negotiations.—Those engaged in the negotiation of securities are in a great measure responsible for this kind of bad management. Why is it that the first class of railroad securities, such for instance as Erie first mortgage are worth from 110 to 115? Simply because money seeks investment at that rate, and the securities are *known* to be good. Now the first mortgage convertible bonds of the first class Ohio roads are better than the first class Erie bonds, from the fact that they pay the same interest, and have an additional value from their convertible clause, which is worth nothing to the Eric. They will in a few years go to the same high figure. Parties who profit by all this advance are the purchasers, and they accomplish this simply by enlightening the public mind, as to the value of the security.—This is a staff which our railroad companies should take into their own hands. Instead of doing this, they are completely at the mercy of the middle man, that stands between them and the purchaser for investment. As soon as a railroad President comes here with his securities, he is at once put into *quarantine*, as if his presence in the street would taint the whole negotiation. He mysteriously disappears, till it is announced that there has been a *safe delivery*, when the mouth pieces of the different parties in New York set up a grand "*feu de joie*," proclaim the grand event, and wind up by stating, "that the negotiations are in the highest degree satisfactory, and advantageous to all the parties concerned." Now if a western merchant should bring to this market for sale 1000 barrels of best quality pork, we do not believe that it would be at all necessary for him to go into retirement, pending negotiations for sale, nor preserve a mys-

terious silence, all the while. No; he would knock out the head of his best barrel, and place at specimen of his merchandise in every body's way. The first effort would be to post every body up with regard to the quality of his pork, and then invite the most extensive competition. This wholesome common sense way of doing things in railroad negotiations are entirely discarded. An impenetrable veil is thrown over the negotiations, which the seller is sworn not to remove, to admit the unhallowed gaze of the public. Now the real object of all this manœuvreing is to blind the eyes of both the seller, and the public who are the final purchasers, to get the securities at the lowest rate, and at the same time to convey the impression that a high rate was paid. Instead of sanctioning such a course, every sale should be *publicly* reported, and the exact price obtained stated. This course would at once reduce matters to a system, and securities would soon sell at their fair value, in the same manner as other kinds of merchandise. Purchasers for investment would investigate for themselves, and the information which is monopolized by a few persons, would, as it were, become common stock of the whole community. Should sales be made at too low a figure, this of itself would attract purchasers, whose competition would carry the price up to a reasonable point, as it does in the ordinary sales of merchandise. Railroad companies, too, make a great mistake in the vast amount of *sham* resorted to in almost every public sale; we mean the fictitious bids put in, and the various tricks practised to sustain the bidding.—The public is aware of all this, and look upon all statements, whether true or fictitious, with pretty much the same eye; that there is the same probability that they were made as a *blind*, as to give light. Unless some system such as we have indicated shall be adopted, companies must expect to submit to part with a large slice from the result of their sales, for services which could in a great measure be dispensed with. The present system is the one best fitted to keep the public mind in the *dark*, as to the value of securities offered. Under it the work of enlightening the public, falls upon the negotiator, who embraces the charge for this service in his commission. We do not say that his charges on this account are not earned, but we do say that by pursuing the obviously proper course, they could in a great measure be dispensed with. A broker is glad to sell Erie stock and bonds, for instance, for ¼ or an ½ commission. Why? Because he has nothing to do but simply see to the transfer; the *public* have fixed the rate. The great object of our railroad friends should be to give their securities the same currency, which *can* be done by posting up the public mind.

At a sale of Western Vermont 7 per cent bonds, $100,000 were disposed of at prices ranging from 85 to 88. The company refused to receive bids under 85. Since the sale, we understand that a large amount has been disposed of at this rate. The security is a good one, but at the present time, western securities are attracting more attention than eastern. A lot of Vermont Valley 7 per ct. bonds were also sold at 85.

It is difficult to give any definite quotation for western securities, based upon works in progress. Prices vary according to circumstances. There is however a good feeling toward them; and in the present state of the market, good securities can be negotiated at what are considered fair prices. Railroads have an encouraging prospect before them for the ensuing year.

The receipts of the New York and New Haven railroad for February are about the same as for the same month of last year. The opening of the Hudson River and Harlem roads to Albany has cut off the Albany business. The figures are:—

For passengers	$40,376 60
For commutation and freight	13,126 84
Total	$53,503 44
Deduct paid Harlem railroad	3,411 67
Total earnings	$50,091 77
Total for February, 1851	50,726 48
Total for February, 1850	30,360 11

The receipts on the Norwich and Worcester road show a fair increase over February of last year:

Receipts Feb. 1852	$17,636 39
" Feb. 1851	16,580 53
Increase in 1852	$2,055 86

Erie Railroad Receipts.—The February receipts of the Erie railroad reach $201,870—a large increase on the previous month. The following is a comparative statement of the business of the road for the first two months of 1851 and 1852:

	1851.	1852.
January	$144,909	$171,441
February	125,105	201,870
Increase for 1852	$109,297	

A quantity of Georgia State bonds, 6's have made their appearance in this market for negotiation.—The State has a high credit, and the bonds we presume will command a good price.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 13, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	105½
U. S. 6's, 1862	112½
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	118
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	120
Indiana 5's	86½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	71
Illinois 6's—interest	43
Kentucky 6's, 1871	107
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	99½
Maine 6's, 1855	103
Maryland 6's	102
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	101
Ohio 6's, 1856	105½
Ohio 6's, 1860	109½
Ohio 6's, 1870	113
Ohio 6's, 1875	114
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	104½
Tennessee 5's	84
Tennessee 6's, 1880	102
Virginia 6's, 1886	108½

CITY SECURITIES—BONDS.

Brooklyn 6's	105½
Albany 6's, 1871-1881	104½
Cincinnati 6's	95½
St. Louis	93
Louisville 6's 1880	92
Pittsburg 6's, 1869-1871	95½
New York 7's, 1857	106½
New York 5's, 1858 '60	101
New York 5's, 1870-'75	101½
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	100½
Baltimore 1870-'90	103
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	95½
Erie convertible bonds, 7's, 1871	91
Hudson River 1st mort., 7's, 1869	107
Hudson River 2d mort., 7's, 1860	95
New York and New Haven 7's, 1861	102½
Reading 6's, 1870	78½
Reading mortgage, 6's, 1860	83
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	90
Cleveland, Col. and Cin. 7's, 1859	102½
Cleveland and Pittsburg 7's, 1860	94
Ohio and Pennsylvania 7's, 1865	96
Ohio Central 7's, 1861	90

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 3.	Mar. 10.
Albany and Schenectady	99½	100
Boston and Maine	104½	104½
Boston and Lowell	108½	109
Boston and Worcester	100½	101
Boston and Providence	85½	85½
Baltimore and Ohio	62½	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112½	112½
Eastern	96½	97½
Erie	82½	84½
Fall River	98	97½
Fitchburgh	103½	98½
Georgia	—	—
Georgia Central	—	—
Harlem	67½	69
" preferred	108	108
Hartford and New Haven	123	125
Housatonic (preferred)	36	36
Hudson River	65½	65½
Little Miami	—	—
Long Island	21	23
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97½	97½
Michigan Southern	101½	104
New York and New Haven	109	109
New Jersey	126	128
Nashua and Lowell	107	106
New Bedford and Taunton	117	117
Norwich and Worcester	53½	55
Ogdensburgh	27½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	71	71
Rochester and Syracuse	110	113
Stonington	54	54
South Carolina	—	—
Syracuse and Utica	125	125
Taunton Branch	115	117
Utica and Schenectady	127	128
Vermont Central	23½	22½
Vermont and Massachusetts	22½	22
Virginia Central	—	—
Western	103	103½
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Wisconsin, Milwaukee and Mississippi Railroad.

We have been in the habit of looking upon Wisconsin as one of the boundary States of the Union, as embracing the extreme limit of our fertile lands in a northwesterly direction. Nothing in fact can be a greater mistake. A much broader belt of fertile lands lie west of Lake Michigan, in the Mississippi valley, than east of it, extending even to the Atlantic coast. The lake occupies as nearly as possible, a central position in the interior valley of North America. Upon its western shores, therefore, which are the western limit of lake navigation, and the points where merchandise must always be transhipped, must spring up some of the most important towns of the west.

The effect of railroads upon the course of trade, will practically change the direction of the Mississippi. Wherever a railroad strikes the river, it will intercept at that point, all the traffic thrown upon it below the next point of intersection above, so that *commercially*, the river instead of running parallel with the lake, will run at right angles with it, as soon as the various lines of railroad now in progress to connect the two, shall be completed. It is for this reason, that the city of Milwaukee occupies such an important position, and the Milwaukee and Mississippi railroad promises to become such a valuable line of public improvement, as it does. It is the most northern line of railroad yet projected, or that can for years be built, based upon Lake Michigan. Upon striking the Mississippi, it will command the trade of that river above the point of intersection, because it will offer the shortest and cheapest outlet for its business. Now the territory dependent upon that river for an outlet—including the Red River of the North—embraces an area equal to the States of Ohio, Indiana, Illinois and Kentucky. All explorations concur in describing this territory as one of the most fertile and inviting portions of the Union. It is rapidly filling up, and will in a few years more contain a very large population. The Mississippi and St. Peters rivers are navigable almost to their sources; and these interlock with the Red river, one of the most magnificent water courses within our whole territory, being navigable for over 500 miles for the largest class river steamers, for the whole year, excepting the winter season. The vast territory bordering this river, is one of the most inviting fields for emigrants to be found in the United States. It has a soil of inexhaustible fertility, a sufficient supply of wood and timber, and abounds in coal. Its climate is no more objectionable than a greater part of New England. The only element wanting is *time*, to render this one of the most thriving and populous portions of the United States.

Now we see no reason why Milwaukee, and the Milwaukee and Mississippi railroad are not entitled, by virtue of their position, to command a large portion of the trade of the Upper Mississippi, as well as that portion of Iowa which lies opposite to the western terminus of the road. Such being the fact, which we believe to be undisputable, the above road assumes an importance which the public have not awarded to it, simply because its position has not been properly appreciated. It has been forgotten that upon its line is one of the best portions of the country, extending hundreds of miles, for which, for years, the Milwaukee and Mississippi railroad must furnish an outlet, until new and parallel lines shall be constructed, striking the lake still further north; that on the west of the Mississippi river is a vast extent of fertile country, reaching to the base of the Rocky Mountains, through which the above road will be extended, as fast as the country shall become settled. The road that shall strike the lake at the most northerly point possesses many advantages over all others, from the fact that it will have rival lines only on one side. This will be the position of the Milwaukee and Mississippi railroad for years, to say the least.

Milwaukee is, and must always remain, the principal seaport of Wisconsin. It is 90 miles distant from what is regarded its rival, Chicago. The Milwaukee and Mississippi railroad is the only road projected in the State having the same general direction. It will have no rival either for its local or through business. It will, as soon as completed, accommodate a population of over 200,000, with vast commercial and agricultural interests. That portion of Wisconsin dependent upon the road is as densely settled as the average of Indiana or Ohio, and is possessed of equally natural capabilies, and in some respects superior. It will soon become the outlet of the lead of Wisconsin and Iowa, most of which is sent to market by way of New Orleans. As soon as the road strikes the Wisconsin river, a through route to the Mississippi will be formed. It is well known that upon the Wisconsin are the great pineries of the northwest. The lumbering interest on this river is very large. A very large portion of this lumber will find its outlet over the Milwaukee road, by which it will not only be taken to the lake, but distributed over the whole State, the southern portion of which is known to be wanting in this indispensable article.

If a person will take the trouble of examining the capacity of our different railroads for a profitable business, they will hardly find a line superior in any respect to the Milwaukee and Mississippi railroad. Wisconsin has grown so rapidly that we cannot bring ourselves up to a realization of its present condition. But a few years since it was a wilderness. It has now a population probably of 375,000, with a commercial capital of 25,000, possessing all the atributes of a large and thriving city. At the next census, Wisconsin will occupy a prominent rank among our leading States.

Hamilton, Canada West, March 6, 1852.

Editor Railroad Journal.

Sir:—In the ninth number of the Journal of the 28th February, under the head of "*Great Western Railroad of Canada*," is the following statement.

"The Syracuse Star states, that John F. Clark, Esq., late Division Engineer on the Erie canal, has been appointed commissioner on the part of the United States stockholders, as Engineer in Chief of the Great Western railway, and will soon assume the duties of that station."

The foregoing statement is only true in part. I was appointed a commissioner of the company; but, by this appointment, I am in no way connected with the engineer department as an engineer—have no authority, and am in no way responsible in that department.

This explanation is justly due to Roswell G. Benedict, Esq., the present able and popular Chief Engineer of the road—who is the person "under whose supervision the work will be rapidly pushed forward to completion, and the interests of the stockholders carefully guarded."

Please give this correction a place in your Journal, and oblige your obedient servant,

John F. Clark.

Freight on the Pennsylvania Railroad.

There has been much complaint growing out of the fact, that the Pennsylvania railroad company have refused to take packages of freight coming from New York over their road. The alleged reason is this. More freight has been offering than the road could well accommodate, and as all could not be forwarded as fast as received, the company discriminated in favor of merchandise *purchased* in Philadelphia, which amounted to a virtual exclusion of New York freights. The object of all this is to force western people to make their purchases in that city, instead of coming to New York.

This is certainly the most extraordinary policy ever set up by any railroad or canal in this country, and would never have been thought of in any other State but Pennsylvania. We have always regarded railroads as common carriers, who are not only bound in good faith, but legally, to take freight in the order in which it offers. To use railroads for any ulterior purpose, than the legitimate object, which is to facilitate commerce and travel, is a doctrine, which the Pennsylvania road is the *first* to develope, as we believe it will be the *last* to practice. It is too contemptible to gain footing any where else, or to be long sanctioned by the Pennsylvania railroad.

The excessive meaness and ingratitude of this business will be more fully seen, by looking at the facts of the case. The opening of the Ohio and Pennsylvania, and the Cleveland and Pittsburg railroads gives to the Pennsylvania route, for the present winter, some advantage over the New York and Erie. But for these roads, the Pennsylvania line would have hardly had a through passenger or a ton of freight during the suspension of lake navigation. Now both of these roads have been built by New York capital, and when she wishes to use works which are indebted to her for existence, she is shoved aside by a company that owes to New York its present position as a through route. The Ohio and Pennsylvania railroad was projected, and has been carried out expressly as a Philadelphia project. Its object is to build up that city at the expense of New York; yet, notwithstanding this, the former has contributed scarcely a dollar to the work, which never could have had an existence, but for money furnished by New York, although this road is of vast importance to Philadelphia, as has been demonstrated by the course of travel the present winter. So slight is the interest felt towards it by her citizens, that the President of the road stated to us in a recent conversation, that had he been compelled at any time to depend upon Philadelphia for a loan of $200,000, he should have been compelled to give up and abandon the project. Yet the same company comes to this market and is able to raise on favorable terms nearly $3,000,000 to build a road, the avowed object of which is to draw off the business from our own lines of public works, and the city. These facts furnish a good illustration of the difference in the two cities.

We could urge a good many arguments against the policy of the measures adopted by the Pennsylvania railroad, but this would be a mere waste of words, as it is not likely ever to be adopted by any other company, and as the present will be the last season in which it will be available by the former. The New York and Erie and the Baltimore and Ohio connections will be completed during the present year, so that both of these cities will be in communication with the western railroads. The Pennsylvania will on the other hand be compelled

to use the Portage railroad for a year longer, giving another opportunity to her rivals to retaliate, should they choose to imitate the example she has set. But we expect better things from them, as well as from other companies, who will have the wisdom to pursue a high minded and honorable course.

For the American Railroad Journal.

H. V. Poor, Esq:

It is scarcely possible to exaggerate the importance and consequence of the coal trade of the United States; whether considered as a luxury or as productive of mechanical power, it is almost impossible to estimate it.

The statistics of the year exhibit so vast an increase in the consumption of coal as to give great interest to speculations as to the future demand and supply. Very considerable alarm was entertained by the owners of coal stocks and property upon the increase of lines of transit for coal, and consequent over-production of the mineral. It appears that such fears were groundless, and that notwithstanding the increased facilities and the enlarged amount of coal mined, the season closed with an actual deficiency in market. The owners of coal mines may derive much consolation from the calculatioas made below:—

In 1821,	there were	1,071	tons consumed	in U.S.
In 1831,	"	178,000	"	"
In 1841,	"	888,000	"	"
In 1851,	"	4,383,730	"	"

At the same ratio of increase for the next decade the consumption will be in 1861 *seventeen millions of tons.* Suppose, however, that the increase is equal to twenty per cent per annum for the same period, which would bring the consumption up to the enormous quantity of *twenty seven millions of tons.* How is this vast supply to be obtained?—Duplicate every coal road, and each canal, and all would not have the capacity to transport so much tonnage. The measure of the capacity of the different lines on which coal forms a part or the whole business, is estimated as follows:—

	Tons.
Delaware and Hudson canal	1,000,000
Lehigh	1,200,000
Schuylkill	800,000
Reading	2,000,000
	5,000,000

To transport these quantities will require large outlays, and it must be remembered that this is an estimate of what *may be* done. Hitherto the quantity has fallen far short of these figures.

The amount of coal annually raised from the mines of England is variously estimated at from 35 to 50 millions of tons; but of this vast product we import, in the *shape of iron and cutlery,* a very considerable amount—an amount which we hope to see lessened by the increased facilities for obtaining a species of coal precisely similar to the Welch, which makes the best of iron. The opening of the Chesapeake and Ohio canal has already cheapened the invaluable fuel of Maryland, and efforts are now being made to reduce it to the consumer still lower, so that a variety of manufactures dependent upon this species of coal may grow up in our own country.

As the belt of wood, from which our railroad companies obtain their supply of fuel, recedes from the coast, our coal mines will receive additional value, for locomotive use. In Great Britain every engine uses coal or coke, and everywhere on the continent, save on the Russian roads, is coal the universal fuel. It behoves the managers of our railways, and the interests of their stockholders demand that they should look into the practical working of the best and cheapest coals for the use of their machinery. The cost of wood is now very high, but added to it the cost of sawing, piling, and interest on buildings—interest on the necessary large amount invested that is required to be kept on hand—the cost is enormous.

There is doubtless a prejudice to be overcome; the operatives accustomed to handling wood do not like to touch coal—but this objection is done away with after trial, as it has been upon the Baltimore roads. There the men will not use wood, as it entails more labor upon them than does coal. It is more work to handle three cords of wood than one ton of coal, and the constant firing rendered necessary with wood is almost done away with.—Independent of considerations like these, we believe that the running expenses of all roads, when the cost of wood is over two dollars per cord, may be materially reduced by the use of coal.

F. B.

Syracuse and Binghamton Railroad.

Editor Railroad Journal.

I desire, through the medium of the American Railroad Journal, to present to the public a few considerations in reference to the Syracuse and Binghamton railroad.

The line of the proposed road is to extend from Syracuse, passing through the beautiful and highly cultivated towns of Onondaga, Lafayette, Tully, Homer, Courtland, and Chenango, to Binghamton on the Erie railroad, a distance of 76 miles. The country traversed is one of the most productive parts of the State, although up to the present time, it has been without the advantages of railroads or canals. The business of this section of country, the above road will accommodate, without the fear of its being diverted by any rival work. The local traffic of the road promises to be very large. And for this, an outlet will be opened in both northerly and southerly directions.

But one of the most important aspects in which the above road can be viewed, is as a *through* route. In connection with the Oswego and Syracuse railroad, it will form a direct line between Oswego and the great coal fields of Pennsylvania, which are soon to supply central and northern New York, and the commerce of the lakes with fuel.

Below I give a table of distances from Oswego south, that will illustrate the advantages of the above route.

Oswego to Syracuse	35 miles.
Syracuse to Binghamton	76 "
Binghamton to Great Bend	15 "
Great Bend to Scranton	48 "
Scranton to the Water Gap	45 "
Water Gap to New York	80 "
To Philadelphia	299 "
Oswego to Water Gap	219 "
Water Gap to Philadelphia	82 "
	301 "

The distance from New York to Rochester is as short by the Syracuse and Binghamton as by the Canandaigua and Corning railroad, viz:

Binghamton to Elmira	58 miles.
Elmira to Jefferson	22 "
Jefferson to Canandaigua	47 "
Canandaigua to Rochester	29 "
	156 "
Binghamton to Syracuse	76 "
Syracuse to Rochester by the new line.	80 "
	156 miles.

I have shown the distance from Oswego to Philadelphia to be 301 miles. The distance between the same points via Albany is 428 miles, showing a saving of 127 by adopting the former route. The distance from Syracuse to New York via Albany is 292 miles; by way of Binghamton and the Erie road the distance is about the same.

It will thus be seen that the Syracuse and Binghamton railroad will form the shortest route from the Great Lakes both to New York and Philadelphia of any yet proposed, or that can be constructed.

I make the following estimate of the business of the road.

150 000 tons of coal to supply the Salt works at Syracuse, and the navigation of the lakes $1¼ per ton	$168 750
50 000 tons of other merchandise at $2	100,000
94,000 passengers each year at $1,50 each	141,000
20 way do. at $1,50 "	30,000
Mails and express receipts	10.000
Return freight	100,000
	$549,750

Running expenses, (40 per cent) $219,000 deducted from the above, will leave a balance of $329,850 for net earnings, upon an estimated cost of $1,520 000.

With regard to return freight, I would state that the coal for Syracuse and Oswego is estimated at 150,000 tons, a quantity which must fall far short of the real amount required. The trains that take up this coal, must return empty, unless they take a return through freight, which they can do at very small cost. This freight will be taken to the Erie road at Binghamton, and will thence be transported to New York on the Erie railroad, and subsequently to New York and Philadelphia, according to the demand. As there will be an abundance of freight offering, arrangements will be so made that an equal amount of business will be done in both directions of traffic.

The cost of the road equipped for business is estimated upon good authority not to exceed $20,000 per mile, or an aggregate of $1,520,000. The country is remarkably favorable for railroads, and it is believed that it can be built and equipped for the same sum.

Some facts with regard to the probable demand for coal at Syracuse may be interesting. The city of Syracuse now consumes annually, 300,000 cords of wood, in her Salt works. One half of the expense of salt manufacture will be saved by the introduction of coal, as it will be delivered at about the same cost per ton as wood, and one ton of the former is equal to two of the latter. The salt interest of Syracuse is already suffering severely from the high cost of fuel. It will be placed on a more profitable footing than ever, by the use of coal. The demand alone for the above object must be enormous. In addition to this, the amount required to supply Syracuse, a city of at least 25,000 inhabitants must be large. The city of Oswego, for her lake trade and home consumption, must take an equal amount with Syracuse. So that the transportation of coal alone must give to the road a lucrative business.

The capacity of the flour mills in the vicinity of Oswego are equal to 10,000 bushels of flour per day. These mills in the winter are idle, for the want of a suitable outlet for their flour. This outlet will be furnished by the above road.

In conclusion, I would invite the attention of capitalists to the above project. I believe that as far as its local and through traffic is concerned, no road in the United States can hold out better encouragement. Such must be the opinion of every per-

son who will examine into the matter. I believe it will be as profitable as any portion of the line from Albany to Buffalo, for which our people are paying $130 on a share of $100.

About $600,000 of stock has been already obtained. It is intended to carry this amount up to $800,000 before commencing work. The books of subscription are now opened at the office of the Treasurer, Horace White, Esq., Cashier of the Bank of Syracuse, for the convenience of those who may desire to make further subscriptions to this most important and promising work.

H. BRITNALL.

Syracuse, March 2, 1852.

Railroad Connections between Kentucky and Tennessee.

There are now (says the Maysville Eagle, from which we copy the following,) three prominent projects before the public, proposing to unite Kentucky and Tennessee by railway lines: 1. The Louisville and Nashville; 2, the Danville and Nashville; and 3, the M'Minnville and Burksville line. For the first considerable means have already been provided; the second and third are just now on the anvil and one or both will, we feel confident, be seen hammered into shape. The Louisville and Nashville line has enough local merit to justify its construction; the other two proposed lines, with scarcely less local claims, have perhaps greater merits as national thoroughfares, for they open shorter lines of communications with the north and south and with the east and southwest. On this point, we refer to an article in this paper, giving the railroad distances between the southwest and the principal Atlantic ports, from Norfolk to Boston, over the principal lines of railway constructed or proposed.

A convention is to be held at Nashville on the 12th inst., to promote the connection with Danville. Favorable charters have been granted by the Legislatures of Tennessee and Kentucky; and it needs only to awaken a proper degree of spirit along the line to insure the success of the project. Barren county alone, we are assured, will contribute three or four hundred thousand dollars; and yet Barren is not the strongest county on the line. If other counties make an approach to equal liberality in proportion to means and incentives—as we perceive no reason to doubt—this line may yet be made about as soon as the line from Nashville to Louisville. In a national point of view it is a more important line, for it will give a much shorter and more eligible line of conveyance between the southwest and the Atlantic seaboard, than any other.—With this line, the Maysville roads—the Maysville road running to Lexington and the Maysville road looking to Big Sandy and thence to Atlantic connexions—are intimately connected. It is, in fact, but an extension of our great trunk line—the great central railway of Kentucky. We cannot, therefore, feel otherwise than deeply solicitous for the harmony and success of deliberations at Nashville and the early practical prosecution of the work; and nothing but the most imperious obligations at home would prevent our attendance at the convention.

The M'Minnville and Burksville line is also one of great public importance, and like the Danville and Nashville line, of peculiar importance to the Maysville lines. This line will intersect the Danville and Nashville line, at or below Danville and intersect the Nashville and Chatanooga line, running nearly due north and south across the State of Tennessee, and afford a shorter line from the north to Mobile, Savanna and Charleston, than the line, *via* Nashville. We cannot but feel warmly solicitous also for the success of this project, as well as the other, for both are justifiable, being demanded by considerations of public convenience and economy. A convention of the friends of the M'Minnville line, from Tennessee and Kentucky, is to be held at Burksville, Ky., on the first Monday in April next. We trust its deliberations will prove harmonious and efficient, and result in the adoption of mesures leading to the early consummation of the project.

Ohio.

Cincinnati and Dayton Railroad.—We have received a copy of the report of the survey of this proposed road, between Cincinnati and Dayton, mad by E. Gest, Esq. By the survey it is ascertained that a saving can be effected between the above points, over the Cincinnati, Hamilton and Dayton railroad, of seven and a half miles. It is also stated that the city portion of the road would accommodate the business of the city much better than any road yet built. The cost of the whole line is estimated at about $1,900,000. The construction of the road will involve an expensive tunnel, which alone is estimated to cost $412,000.

The line of the road occupies a very direct line between the two cities connected, while the Cincinnati, Hamilton and Dayton railroad makes a wide circuit for the purpose of accommodating the business of Hamilton, an important point upon the line. But with all these advantages claimed, we doubt the expediency of attempting to construct another road at the present time. If built, it would be a rival of the Cincinnati, Hamilton and Dayton road for the business of the latter. Now we are opposed to the policy of building rival roads until our people are better able to build even the first. There can be no doubt that the Cincinnati, Hamilton and Dayton road can perfectly accommodate the business of both roads. The saving effected by the new line will be small, not half equal to the additional cost. We think our western friends will do better to turn their attention to projects through sections of country where there are no roads, than to waste their means by building parallel lines.

If the above road should be built, a large portion of the money would have to be furnished by New York. Now we do not believe that a loan could be effected here for any purely parallel west'n road. The public would see that it ought not to be built, and capitalists would be very shy in taking it up. The Cincinnati and Dayton road would, too, incur the formidable opposition of the Cincinnati, Hamilton and Dayton, a strong company, with their road already built and in operation.—We think that this company could effectually close the pockets of New York capitalists to any project not favored by them. Such are our views of the matter, taking New York as a stand point, and knowing the feeling entertained here towards western projects.

Georgia.

Superintendent of Central Railroad.—We are gratified to state that the board of directors of this road, have appointed Mr. McPherson B. Millen, Superintendent, in the place of Mr. Wadley, who has taken charge of the State road. For several years Mr. Millen was engaged on the Central road, but latterly has been Assistant Engineer on the Waynesboro' railroad. He is a native of Savannah, and fully competent to fulfil the responsible station to which he has been appointed.

Illinois.

Terre Haute and St. Louis Railroad.—The prospect of a speedy completion of the great lines of railroad from the Atlantic cities to Terre Haute, renders the extension of these lines to St. Louis of the utmost importance. The distance between the two last places is about 165 miles. The route is a most favorable one, and the country traversed not exceeded in fertility by any portion of Illinois.—This road, the people on its line are not able to build, but capitalists interested in the lines east, stand ready to take up the project, and construct the road with the least possible delay. All they want is, that the people of Illinois shall not oppose any obstacles in the way. If they will grant a charter, they will at once secure the expenditure of some $3,500,000 within their State, and open an outlet for one of the best portions of it, which is now deprived of a market for the want of suitable avenues. No other State in the Union would refuse this boon. For an instant, Illinois rejects it, to secure a mere imaginary advantage, a phantom. She has adopted what she calls a *domestic system* of internal improvements, the object of which is to build up large towns within her own borders, and to prevent her trade from going to St. Louis, and other towns beyond her limits. Now, there never was a greater folly than this. Trade seeks to go wherever it can make the best terms. If we tax it, by compelling it to go to points where it is not well accommodated, we are simply imposing a burden upon ourselves, without an equivalent.—Anything paid in this manner is so much lost. If cities will not grow up in Illinois without taxing the people to support them, they had better not exist, as they are not needed, and will only remain a burden upon the productive industry of her people.

But we hope for better things. We expect to see Illinois relax her partial legislation, and throw the door wide open to capitalists, who are disposed to engage in any laudible project. In her natural capacity, she is in many respects, the richest State in the Union. Her great wealth lies dormant, for the want of means with which to develop it. These means are now offered for one of the most important projects ever attempted, and we cannot believe that she will be so blind to her own best interests as to refuse their admittance into the State. In the present age of railroads, it is the great misfortune of Illinois, that her credit, from her former bad legislation and her pecuniary disasters, stands low. There never was a time in which she stood in such need of money with which to prosecute her public works, as at present. She has been gradually out-growing her misfortunes, and gaining in popular estimation, and we should be sorry to see her lose her present vantage ground, as she surely will, should she continue to exclude foreign capital from the State, by bad or injudicious acts of legislation.

New York.

Canandaigua and Niagara Falls Railroad.—A contract has been completed to construct this road from Canandaigua to Niagara Falls, a distance of 96 6-10 miles. The guage is to be 6 feet. The estimated cost of the road, equipped, is $2,500,000, or about $26,000 per mile.

Pennsylvania.

The works of the Schuylkill Navigation company were opened for the transportation of coal on Friday, at 50 cents per ton, and 5 per cent. allowance for wastage. The Delaware and Raritan canal will be opened on Monday next the 15th inst.

EARNINGS AND EXPENSES OF NEW YORK RAILROADS, 1851.

	Miles in use.	Miles run by passenger trains.	Whole number of passengers carried in cars.	Whole number of passengers carried one mile.	Number carried each mile run.	Earnings from passengers.	Expenses of passenger business.	Earned per passenger per mile.	Cost per passenger per mile.	Earned per mile run.	Cost per mile run.	Profit per passenger per mile.	Profit per mile run.	Miles run by freight trains.	Total tons carried.	Total tons carried one mile.	Tons each mile run.
Albany and Schenectady	17	56,753	303,045	5,152,258	90·9	$146,649 91	$58,089 99	2·84	1·11	259	101	1·73	158	44,162	92,058	1,564,986	35·4
Albany and W. Stockbridge	38½	54,824	147,247	4,565,954	83·3	.....	.....	.....	.....	.....	.....	.....	.....	144,637	185,119	6,479,165	44·8
Buffalo and Niagara Falls	22	31,334	150,792	3,028,300	96·6	83,677 44	27,530 72	2·76	0 91	267	88	1·85	179	.....	3,402	74 844	....
Buffalo and Rochester	76	194,319	322,985	18,025,158	92·7	366,245 68	89,431 03	2·03	0·50	188	46	1·53	142	66,820	48,880	3,010,730	45·0
Cayuga and Susquehanna	35	42,160	27,731	728,800	17·3	20,698 41	9 878 41	2·84	1·35	49	23	1·49	26	20.400	13.897	395,162	19·4
Hudson River	144	232,346	749,124	24,721,092	106·4	361,653 75	323,686 44	1·46	1·39	155	135	0·07	20	44,818	12,915	516,600	11·5
Hudson and Berkshire	31½	38,500	45,512	707,889	18·4	19,192 97	13,139 20	2·71	1·85	50	34	0·86	16	21,500	37,145	851,158	39 6
Long Island	95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York and Erie	464	725,978	688,789	52,213,092	71·9	1,163 535 77	434,791 26	2·23	0·83	160	60	1·4	100	733,222	250,096	34,790,480	47·4
New York and Harlem	131	216 462	2,673,077	14,595,518	67·4	372,652 10	213,810 20	2·55	1·67	174	108	0·88	66	98,426	47,904	2,399,435	24·4
New York and New Haven	61	320,862	796,936	30,323,236	94 5	595,500 86	not given.	1·96	....	185	....	....	....	90.355	60,525	not given	....
Northern	118	107,919	67,538	3,084,149	28·5	83,560 85	42,937 10	2·71	1·39	78	40	1·32	38	129,736	109,700	8,319,043	63·2
Oswego and Syracuse	35	52,360	80,288	2,042 268	39 0	57,710 51	35,039 77	2·82	1·72	110	67	1·1	43	20,000	19,992	426,748	21·3
Rensselaer and Saratoga	25	.....	178,740	4,697,853	.....	134,288 94	54,658 46	2 86	1·12	....	....	1·74	....	.....	27 194	744 883	....
Rochester and Syracuse	104	356,304	513,241	30,519.808	85 6	690,948 56	238,195 38	2·23	0·78	194	67	1·45	127	121,050	83 569	5,416,081	44·7
Saratoga and Washington	52	.....	134 224	3,850,901	.....	131,093 76	not given.	3·40	....	....	....	....	....	.....	.....	.....	.....
Schenectady and Troy	20½	52,755	70,473	1,444,696	27·4	28,652 01	40,678 58	1 98	2·81	54	77	L.	L.	6 075	15,898	325.909	53·6
Syracuse and Utica	53	169,373	449,870	18,392,881	108·6	371,935 86	150,910 69	2·02	0·82	219	89	1·2	130	58,006	86,849	3,734.507	64·4
Troy and Greenbush	6	30,548	135,458	812,748	26·6	19,704 45	23.917 67	2·42	2·94	64	78	L.	L.	5.040	29.449	176,697	35·0
Utica and Schenectady	78	245,440	453,731	27,462.475	111·9	560 523 91	180,083 69	2·01	0·66	228	73	1.38	155	134,268	115,750	5,579,156	41 5
Watertown and Rome	97	52.544	56,907	1.508,964	28·7	37 870 97	14.164 39	2·51	0 91	72	26	1·57	46	19 479	34 307	1.062.166	55 0

EARNINGS AND EXPENSES OF NEW YORK RAILROADS, 1851. (Continued.)

	Freight earnings.	Freight expenses.	Earnings per ton per mile.	Cost per ton per mile.	Earned per mile run.	Cost per mile run.	Profit per ton per mile.	Profit per mile run.	Earnings from sources other than passengers and freight.	Total earnings.	Total transportation expenses.	Amount of dividends.	REMARKS.
Albany and Schenectady	$87,432 64	$46,599 36	5·58	2·98	198	105	2 6	93	5,765 50	$239,847 75	$103,689 35	$70,000 00	
Albany and West Stockbridge	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Leased.
Buffalo and Niagara Falls	6,066 10	3,018 40	8·15	4·03	...	...	4·12	...	1,000 00	90,743 54	30.549 12	21,715 21	
Buffalo and Rochester	90,348 50	46,942 49	3 00	1·55	135	68	1·45	67	12,500 00	469,094 18	136,383 52	91,489 10	For ten months.
Cayuga and Susquehanna	30,722 27	24,128 85	7·77	6·16	150	118	1·61	32	24,399 59	75,820 27	34,006 95	.....	
Hudson River	37,095 35	14,594 53	7·18	2·82	83	33	4·31	50	6,800 41	405,549 51	338,280 97	.....	
Hudson and Berkshire	36,054 76	17,164 20	4·23	2·02	168	80	2·21	88	1,000 00	56,247 73	30,303 40	.....	
Long Island	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New York and Erie	1,108,138 07	586,858 10	3·18	1·68	151	80	1·5	71	.....	2,271,673 81	1,021,649 30	316,856 01	
New York and Harlem	156,806 52	105,777 69	6·53	4·41	159	107	2·12	52	61,483 52	590,942 14	348,587 89	215,512 00	
New York and New Haven	104,664 21	not given.	.....	.....	.....	.....	.....	...	28,342 17	728 507 24	354,276 19	171,930 00	
Northern	200,049 65	120,175 38	2·40	1·44	154	93	0·96	61	7,558 36	291,168 86	163,112 48	.....	
Oswego and Syracuse	13,022 61	10,103 43	3 05	2·36	65	50	0·69	15	22,682 09	93,415 21	45,143 20	12 250 00	
Rensselaer and Saratoga	42,055 63	25,225 69	5·64	3·38	...	...	2·26	...	13,059 00	189,383 57	79,884 15	39,300 00	
Rochester and Syracuse	237,530 47	82,916 09	4·38	1·53	...	...	2·85	...	22,033 38	950,512 41	321,111 47	.....	
Saratoga and Washington	28,697 88	not given.	.....	.....	.....	.....	.....	.....	.....	164,853 99	77,069 10	53,172 00	
Schenectady and Troy	16,263 88	15,589 60	4·99	4·78	268	257	0 21	11	1,331 43	46,247 32	56,268 18	.....	
Syracuse and Utica	111,090 15	61,098 74	2·97	1·63	191	105	1·34	86	15,221 90	498,247 91	212,009 45	239,435 00	
Troy and Greenbush	18,011 75	8,119 59	10·19	4·59	357	161	5·6	196	2,465 48	40,181 68	32,037 20	.....	For eight months.
Utica and Schenectady	251,599 68	101,319 72	4·51	1·81	187	75	2·7	112	45,495 68	857,619 30	281,303 41	412,400 00	
Watertown and Rome	48,132 66	21,397 48	4·53	2·01	247	110	2·52	137	7,865 01	93,868 64	35,561 87	.....	

The Pork Trade.

Hogs Packed this Season.—The following statistics are from the Cincinnati Price Current, of the 19th, showing a very considerable falling off in the number of hogs packed this season. The deficiency has been in the States of Iowa, Illinois, Missouri, southern Kentucky, and Tennessee. This decrease is suitable to the inadequate supply of corn in those States, the crops having been greatly deficient the last two years in Missouri, Illinois and Iowa; and the low price of hogs in 1849, and the subsequent high price of corn, induced farmers to sell the latter instead of feeding hogs; and hence. since 1849 there has been a rapid decline in the hog crop of those States. In Ohio and Indiana the corn crop the last season was ample, and prices being low, it was fed freely to hogs, and the result is that there is in both States an increase in number.

RECAPITULATION.

	1851-'52.	1850-'51
Ohio	461,075	443,418
Indiana	359,761	348 754
Illinois	174,671	257,536
Iowa	27,500	70,500
Missouri	58,168	107,274
Kentucky	199,300	205,914
Green and Cumberland rivers	8,505	24,000
	1,288,975	1,457,396
		1,288,975
Deficiency		168,421
West of White River		2,000
Bedford, is		6,600
Shawneetown and Graysville		5,000
Total deficiency		182,021

Tunnel under the Hudson River.

We recently alluded to the subject of a Tunnel under the Hudson river, at Albany, for railroad purposes. We find in a late number of the Evening Journal the following plan for its construction proposed by Mr. Higham, a well known engineer. He estimates the cost at $517,720, with a double track. If practicable at this expense, the companies interested should not hesitate about undertaking it. It would be preferable to a bridge, and would remove the great bone of contention between Albany and Troy in reference to the construction of one.

The plan is generally as follows:

It is proposed to commence the work at Qauckenbush-street, by an open cutting at a descent of 150 feet per mile to Columbia-st., where a sufficient height will be attained for the commencement of the tunnel. The tunnel, from Columbia-st. to the river, is to be made in the usual manner, by driving a drift, and turning brick arches. From the wharf into the basin, the work will be executed by constructing coffer-dams. From this point, for 600 feet under the channel of the river, it is proposed to sink iron tubes, and turn the arches in the tubes. The remainder of the distance to the open cut on the Green Island will be constructed in coffer-dams; across Green Island there will be open cutting. The form proposed for the tunnel is two circles, connected together by a range of columns; the arches to be of brick, twenty-seven inches thick; the brick to be made for the purpose, of the proper shape; three courses of brick to form the depth of the arch. Where the arches join in the centre, on the columns will be cast iron girders.—In the bottom of the arches, under the tracks, will be suitable drains to collect any leakage, and a pump at the lowest point (which will be near the pier) for drawing the water from the tunnel. The object of giving this form to the tunnel was to save height, and to lessen the grades entering into it.

That portion of the tunnel across the channel is to be of the same form as the other parts described; but instead of building coffer-dams, it is proposed to dredge the river to its proper depth, and to sink wrought iron tubes in which the brick arches will be turned. The tubes are proposed to be built of boiler plates, made in such lengths as may be found practicable. The plates of the tube to be riveted on ribs of T iron, to give them form and stiffness. The ends of the several lengths of tubes, as they are sunk, to have temporary bulkheads, so that the arches through each section may be finished when the joining will be made by throwing puddling materials on the outside of the tubes, and when tight, taking out the bulkheads and turning the arches at the connections. The materials for the arches to be taken into the tube by pipes rising above the water. From the iron tubes to the east shore of the river it is proposed to build coffer-dams, in sections of from 200 to 300 feet long, by driving piles and puddling between them. On the island the open cutting to be sufficiently wide to have a plank road laid from the mouth of the tunnel to the highway at East Albany, and a branch, or lateral tunnel, will be made on Broadway, between Maiden-lane and Steuben-st., for carriages and foot passengers. A chimney for ventilation [150 feet high] will be constructed on the pier, at which place will be the permanent draining-pump and the gas works for lighting the tunnel, and the several railroad companies' depots, shops, and grounds. A staircase will also be made on the pier and one on Quay-st., to give access to foot passengers into the tunnel. A double track railroad will be made from East Albany to Quackenbust st., where they will connect with the tracks of the several roads leading into the general passenger depot proposed to be erected for all the railroads terminating at Albany, and the freight grounds of the Albany and Schenectaday Railroad. In the tunnel will be a sidewalk, neatly railed in, for foot passengers.

The Rabun Gap Railroad.

William Spencer Brown, Chief Engineer of the Greenville and Columbia railroad, has made a rapid reconnoissance of the route of this road from Anderson C. H. to the Rabun Gap, and in his report to Judge O'Neal, President of the Greenville and Columbia railroad company, which is published in the Charleston Mercury, expresses the opinion that the entire road can be built for two million dollars.

The advantages of this route over all others in point of distance, Mr. Brown sets forth in the following table, assuming the length of the road to be 150 miles:

	Miles.
Chattanooga to Charleston, via Atlanta	448
" " " Rabun Gap	484—36
Knoxville " " Atlanta	548
" " " Rabun Gap	464—84
Chattanooga to Wilmington via Atlanta	579
" " " Rabun Gap	528—51
Knoxville " " Atlanta	679
" " " Rabun Gap	508—171
Chattanooga to Charlotte via Atlanta	563
" " " Rabun Gap	464—90
Knoxville " " Atlanta	663
" " " Rabun Gap	444—219

Judge O'Neal accompanies the report with the following letter addressed to "*Many Charlestonians.*"

According to my promise, I furnish the report of Mr. William Spencer Brown, Chief Engineer of the Greenville and Columbia railroad company, of his reconnoissance of the Rabun Gap.

It will be seen, that it is perfectly practicable to construct a railroad from Anderson through it. The connection thence to the Hiwasse, was, I presume, ascertained by Gen. Brisbane, in 1836, to be easy.

Mr. Brown's estimates show that the road can be constructed at a cost certainly not exceeding $2,000,000.

This sum can, I should suppose, be easily raised in South Carolina. The legislature can very well place the balance of their South Carolina railroad stock, some $500,000 or $600,000, in the hands of the company to be organised for this great work. The city of Charleston has, I presume, a similar sum in the Chattanooga and Nashville railroad; it may be also devoted to this work. Something like a million is thus obtained. The merchants of Charleston have so deep an interest in this project, that with their characteristic liberality, they will not fail to subscribe at least $250,000.

Columbia, Newberry, Abbeville, Anderson, Pendleton, and the intervening country between Anderson and Knoxville, with the Greenville and South Carolina railroad company, will make up the balance.

In this, I see I have inadvertantly omitted the South Carolina railroad company. This great company, with its annual income of a million, will surely take an active interest, and manifest it by a subscription of $100,000 or $200,000. For it seems to me the Rabun Gap road will add no ordinary item to her already great revenue.

I hope "Many Charlestonians" will move in this matter in Charleston. What will Charleston do? The Greenville and Columbia railroad company have ordered another reconnoissance and survey, when necessary. Will not Charleston and the South Carolina railroad company unite with the Greenville and Columbia railroad company, place a brigade of engineers on the line, and have a perfect survey?

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.

THOS. H. CALLAWAY, Prest.

Railroad Office, Athens, Tenn., 1st March, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

LOWMOOR LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Bosto November 29th. 1m

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan 22, 1852.

GLENDON LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.



The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.



The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIOS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 29, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India rubber Springs

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M. Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1819, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon; for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852. and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 12] SATURDAY, MARCH 20, 1852 [WHOLE No. 831, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

James River and Kanawha Co.....177
Cost of Transportation on Railroads.....177
Railroad System of Arkansas.....180
Ohio County Bonds.....184, 181
Susquehanna Railroad Convention.....181
Cincinnati and Marietta Railroad.....183
Lexington and Danville Railroad.....183
Peoria and Oquawka Railroad.....183
Vermont Central Railroad.....184
Continuous Bearing.....184
Illinois Central Railroad.....184
Convertibility of County Bonds.....184
Stock and Money Market.....185
Akron Branch Railroad.....186
Railroad Policy of Pennsylvania.....186
Indiana Central Railroad.....187
Board of Public Works of Ohio.....187
Columbus, Piqua and Indiana Railroad.....187
New Sprinkler for Railroads.....188
Peru and Indianapolis Railroad.....188
Woodruff's Railroad Car Wheel.....189
Commerce of the Lake Ports.....189
Cincinnati and Indianapolis Railroad.....189
Railroads in the Provinces.....190

American Railroad Journal.

Saturday, March 20, 1852.

James River and Kanawha Canal.

We have received the 17th annual report of the directors of the James River and Kanawha canal company, submitted to the stockholders on the 24th ult.; to which is added a report of subsequent proceedings of the company, and various documents in reference to the proposed extension of the water line to the Ohio river. The report makes a volume of some 450 pages, and contains an unusual amount of interesting matter.

From the report it appears that the whole am't of receipts of the company for the past year has been as follows, viz:

Receipts from canal from Richmond to Lynchburg		$222,113 57
Receipts from Blue Ridge turnpike and ferry		1,291 11
Receipts from Western improvement.		17,250 85
Receipts from Tide-water connection.		4,485 20
Miscellaneous		7,420 00
		$252,560 73

The expenses for the same period are as follows:

Current expenses Main Line	$64,146 78	
Current expenses Blue Ridge road	916 00	
Current expenses Western improvement	12,380 04	
Current expenses Tide-water connection	969 89	
Miscellaneous	3,608 20	
		82 020 91
Net income		$170,539 82

The disbursements for the year have been as follows:

Annuity to old James river company	$21,000 00	
Paid post notes and dividend	892 65	
Paid interest on company's debt	196,275 65	
		218,168 30
Excess of disbursements over net receipts		$47,628 48
The estimated disbursements for the present year are		$382,978 72
Receipts from the work are estimated at		332,000 00
		$50,978 72

The whole cost of the work up to the present time is $10,613,544 23; capital stock, $3,929,866 16—of which the State owns three, and individuals two fifths.

It will require some $300,000 to complete the Tide water connection, and pay the outstanding liabilities on the second division, for which a State loan of that amount is asked for. The construction of the third division from Buchanan is in a great measure unprovided for.

The whole amount of tonnage transported over the road the past year was 174,615 tons (against 157,905 for 1850), the total value of which was $7,092,086 21.

As the work at present stands, it can, after it shall be completed to Covington, expect to do but little more than pay the interest on the indebtedness of the company, which is chiefly upon its bonds, guaranteed by the State, leaving its stock a total loss. But what in Virginia is considered of still greater moment, the failure to carry the work beyond this point, is the abandonment of what has been the favorite project of that State, during the whole period of its existence; that is a water line from tide water to the Ohio.

The company now feel that the time has arrived when the question of the further extension of the canal must be decided. The failure to make immediate provision for its completion, will be regarded in the light of abandonment. A very large railroad interest is rapidly growing up, in which the State is deeply interested, and which threatens to supplant the former, in public favor; and should their lines be carried across the mountains, the necessity for the canal will be so far obviated, as to leave no sufficient reason for its extension. A crisis has evidently arrived in the history of this work, and in view of this the present elaborate report has undoubtedly been prepared, and as it may be regarded as presenting the arguments of the company in favor of the extension of the canal, we shall make copious extracts from it.

The two great points made by the report is, first, the practicability of the water line over the mountains, and secondly, the superiority of the canal over the railway, as a means of transportation.—To these, we may add another point made, the greater economy of the latter, on the score of cost of construction.

Our railroad friends will see that the superiority of the canal over the railroad for certain purposes, has yet stout defenders in Virginia. Maj. Gwynn, the chief engineer of the company, has argued this point at great length; and as the interest at stake is one of vast magnitude, the argument merits careful attention. From the known ability of the author, it may be supposed to present everything that can be urged in favor of canals over railroads.

We shall commence our extracts, by the publication of that portion of Major Gwynn's report, that relates to the subject referred to.

COST OF TRANSPORTATION.

The *cost* of transportation on railroads is one of the most difficult questions connected with the whole railway system. For a period now exceeding twenty-five years, I have been engaged in the construction and management of railroads, and in all this long time, with my best efforts given to the subject, I have been unable to satisfy my mind; and up to this period, although I have been in the possession of all the facts that could be obtained from reports and from correspondence with my friends engaged in managing railroads, I have never published an opinion as to the specific cost of the transportation of produce per ton per mile. The fact is, there is no fixed standard for railroad transportation, because the cost is rarely ever the same per ton per mile in any two trains on the same road. The term *railroad transportation*, with

the prefix of a specific sum, would signify about as much as a declaration that would assign a given size to any feature of the Anglo-Saxon race. It would be as vain and idle a labor to look for two railroads precisely alike, as would be a search for two human beings with like proportions, stature or features. But if it were possible to find railroads with the same profile the parallel would not hold, for in order that they should produce the same results, each should be surrounded with the same circumstances. The manners, the customs, the habits, the industrial pursuits of man must be the same on the one as on the other. The soil the climate, the cleared land, the trees bearing fruit, the forests which furnish fuel, the streams which furnish pure water, must not only be alike in dimensions, but should be equally distributed along the line of each. The villages, towns and manufactories on the line of the one should be the same as on the other; and the markets at the terminus of each should be the same. In short, to produce the same results, the panorama of each should be precisely the same, as well as the statistics carried out in all their details. They have no common characteristics for any practical good, except those which are derived from the varied pursuits of man. In the cotton growing region they thrive and flourish, not owing to their forms and dimensions, but owing to the habits of the people in those regions.

There statistics show that the local freight averages 2¼ per cent of the total amount of produce, and that the local travel yields $1 80 for each white inhabitant—while in those districts in which the staples are tobacco or grain, the freight average is reduced at least 30 per cent, and there is also a great reduction in the travel. In the States engaged chiefly in manufacturing, such as the New England States, where everything animate and inanimate is in motion—where the forests in Maine are converted into houses, and planted all over those thriving and industrious States—where every man is pressing onward with railroad speed in pursuit of fortune—there, railroads owe their being, their life and activity, not to anything inherent in them, but because they so admirably subserve the indomitable energy and restless habits of the population. In considering the subject of railroad transportation, therefore, we must after all look rather to man and his pursuits than to the locomotive. 'Tis more easy to prepare the feast than to furnish the guests. The difficulty which I have encountered in arriving at results satisfactory to myself on the subject of railroad transportation, arises from the fact, that the railroad companies in their reports do not separate the passenger from the freight expenses. With the exception of the Georgia railroad, and a few corporations in New York, where by law* they are required to keep separate accounts I know of no railroad company in the country which furnishes data (unless it may be the Reading rail road company, whose last report I have not seen,†) from which the cost of transportation per ton per mile can be inferred. The Baltimore and Ohio railroad company in their last report have omitted their usual table M, which apportions the passenger and freight expenses.

The general omission of details in this respect is owing to the fact that the companies themselves have not the means of furnishing them; the manner in which their accounts are kept would barely enable them to make an approximate ratio of the expenses between the transportation of passengers and freight. With the exception of the Boston and Lowell, there is not a railroad corporation in Massachusetts, as I am informed, which keeps a rigid account of expenses with each department of its business, viz: its passengers and its freight. I have dwelt somewhat at length upon the difficulties of obtaining correct information, in order to show what little reliance can be placed upon statements which are made by many with seeming confidence.

I have been endeavoring, as I have observed, for years to inform myself on the subject, not with the view of engaging in any controversy, but because the enquiry fell within the strict line of my profession.

Recently, since the subject has become one of great importance, involving, as it does, in my opinion, the completion of your improvement and the prosperity of the State, I have conducted an extensive correspondence. From the south I have received no *valuable* information, with the exception of a letter from H. D. Bird, Esq., president of the P. R. Co., which I annex.* From the north I have received some important results, which I will communicate in the sequel.

Before proceeding to give the results of my enquiries, and make some further remarks on the subject of railway transportation, I think it proper to refer to a statement of the committee of stockholders, made under the imposing weight of the authority of the state engineer of New York. The passage in the report of the committee to which I allude will be found on the 7th page of their report, in the following words:

"Mr. Allen, from the committee on canals, in a report made to the legislature of New York on the 13th March, 1851, says: 'The cost of transporting freight upon railroads is shown by the report of the state engineer to be 8 mills per ton per mile.'"

It is my purpose to show that as a general proposition, Mr. Allen has misunderstood the state engineer. This I shall do by quotations from the reports of the state engineer on this subject, and by submitting a table of freights accompanying his report, which of itself will show conclusively that he was misunderstood by Mr. Allen. The report of the state engineer, to which Mr. Allen refers, was made to the legislature of New York on the 7th February, 1851. In that report the engineer dwells particularly on the enlargement of the Erie canal, for which purpose, and for the completion of the Black River and Genesee Valley canal, the legislature appropriated a sum exceeding ten millions of dollars. The engineer is very earnest in his argument in favor of the enlargement, and to the facts set forth by him may be mainly ascribed the success of the appropriation for that purpose. He says: "In order to show that the statements and reasonings I shall set forth are somewhat in unison with facts, I here append a statement of the cost of railroad transport, as shown on a few roads in this state and in Massachusetts. The Massachusetts reports do not divide their freight from their passenger expenses; this I have done as well as I could.

"The law now requires our railroad corporations to report their freight and passenger expenses separately; in both states they are required to show their total movement. So far as I can determine, this has not generally been very accurately done."

I now submit some extracts from the "Statement of the cost of railroad transport," above referred to, some items in which will be corrected in a table presently presented, prepared by myself, in order to show the rates of freight prevailing on those roads. I quote also the statement of profit per ton per mile. The cost and profit added together will show the railroad charges or rates of freight.

Names.	Cost per ton per mile.	Profit per ton per mile.
Massachusetts.		
Western	1·561	1·382
Boston and Worcester	0·900	1·120
Boston and Maine	2·158	2·602
Fitchburg	0·939	1·431
Boston and Providence	1·770	2·378
New York.		
Albany and Schenectady	3·958	2·600
Auburn and Rochester	1·798	2·407
Hudson River	4·019	4·604
Utica and Schenectady	2·797	2·573
New York and N. Haven	3·172	1·119
Oswego and Syracuse	2·372	1·020
Tonawanda	4·077	3·793

The report then proceeds, but not continuously, as follows:

"The Reading road, its managers assert, can carry coal at a cost of six mills a ton a mile, because the trains are *fully* loaded *one* way. The Baltimore and Ohio railroad company entered into a contract to carry coal at 1¼ cents a ton a mile, while their ordinary traffic was costing them over 2½ cents a ton a mile.

"The estimates of their engineers showed them that the coal train would be fully loaded one way, while their other trains had an average movement much below one half of the power of their engines. Suppose that a train loaded with 50 tons cost 75 cents per mile run, then the cost per ton per mile is 1½ cents; but if the train is loaded with 100 tons, and costs 85 cents per mile to move, then the cost is ·85 of a cent per ton per mile.

"It is no doubt true that by careful management in every department, by employing well constructed cars and engines, trains heavily loaded can move at an expense of 80 cents per mile, and in case of many of our roads, where labor, fuel, etc., are cheap, for a less sum.

"It is also true, that with a large business at command, and under the management of experienced and capable men, average loads of from 100 to 150 tons may be moved, on heavy grades excepted, each mile, by all trains employed on the heavy traffic, which is moved at rates of speed not exceeding 10 miles per hour. This would make the cost from ·80 to ·52 of a cent per mile as the mere cost of transport." (That is, provided the cost per mile of train be 80 or 52 cents, an assumption not warranted by the preceding paragraph.) "Rejecting only the interest on investments, I am perfectly aware that no results have yet been attained to justify this statement.

"I am purposely to state the cost of transportation at as low rates as I imagine can, under the most favorable circumstances, be attained; and for evident reasons. Rates as low have been maintained in cases where a strong necessity or important reasons required.

"It has been shown to me that flour is now taken from Detroit to Ogdensburg for 30 cents per barrel. From Ogdensburg to Boston is 380 miles by railroad; at 8 mills per ton per mile, (cost price,) the rate will be 33 cents."*

Now the estimate of 8 mills per ton per mile between Ogdensburg and Boston was not intended by the engineer as a declaration that railroads do transport at that price, but an assumption that they may be enabled to do so by improved machinery.†

* "Among the complaints made against the provisions of the law by some managers, this requirement, to divide expenses between passenger and freight business, has been the most prominent, and I have been gravely assured that it *could not* be done." (See annual report New York railroad statistics, 1851.)

† Since writing this report, as in a note before stated, I have received the last report of the Reading railroad, in which I find the cost of transporting coal per ton for the whole length of the road is put down at 54·8 cents, or ·58 cents per ton per mile, and the cost of transporting merchandise 99·9 cents per ton for the whole length of the road, or 1·05 cents per ton per mile.

An examination of the report will show that the following items, properly chargeable to transportation, are omitted in the above calculation, viz:

Dumpage	$98,842 06
Freight on missing coal	4,563 22
Errors in freight and toll bills	177 21
Motive power on lateral railroads	8,120 99
Rents and ground rents	21,258 15
State, county and city taxes	5,355 34
Profit and loss, interest, damages and sundries	14,096 18
Total	155,413 15

By apportioning this sum between the freight and passenger expenses, the following, according to my calculation, will be the result, viz:

For the transportation of coal per ton for the whole length of the road	63·83	cents.
Do. do. per ton per mile	·67	"
For the transportation of merchandise per ton for the whole length of the road	104·98	"
Do. do. per ton per mile	1·1	"

* Subsequently to the printing of this report, I have received a report from General Alexander McRae, president of the Wilmington and Raleigh railroad, which is deserving of particular attention, and will be found in the appendix.

* The charge for transporting a barrel of flour from Ogdensburg to Boston is 50 cents per barrel, or 1·316 cent per ton per mile, which is nearly three-fourths of a cent per ton per mile under the *cost price.*

† As this subject involves the power of locomo-

The article, the cost of transportation of which was under his consideration, is flour, which the engineer states contributes, in a great degree, to give New York the command of the European trade; and the drift of his arguments and statements is to show that New York may be deprived of it in two ways: either by improved machinery, enabling railroads leading to Boston to carry flour at 8 mills per ton per mile, *cost price*; or they may transport it at a loss, relying upon remuneration from return freights, consequent upon building up a better market at the terminal point. But that by lessening the charges through the medium of the Erie canal enlargement, the railroad loss would be so great in any attempt to divert the flour, it is not likely it would be undertaken, and New York would continue a monopoly of that article of traffic so essential to her prosperity.

The following quotations from the report of the engineer, and the readings of other portions too lengthy to transcribe, clearly show this to be his meaning. He says:

"There is nothing in all this proving that railroads can transport as cheaply as the canal. We are comparing railroad rates which will give no profit with rates on the canal yielding to the state, in addition to cost *and profit* of transportation, a net revenue of over $2,500,000, or more than four per cent on the cost of *all the railroads in the state.*"

Yet the engineer thinks "the business of the canal can be diverted." But with the condition of "good machinery, large loads and slow movements, (compared with the present rate of speed on railroads) and to be applied only to the commodities carried at low rates, the admission that such rates, if established, would be *below the actual extra cost occasioned by this business*, is not proving that they may not be established. The report of the Western road shows that some of their rates are at the cost point.* They have an object in this, quite sufficient to justify the plan as a revenue measure, because it gives them other and profitable traffic, from which to earn dividends. This road would not pay expenses if it terminated away from a considerable market. These low rates tend to build up the terminating point, by which they add to the paying business. The object and the plan justifies the acknowledged shrewdness of our eastern neighbors.

"The famous competition between the Reading road and the Schuylkill canal reduced rates to a point as low as I have used, though they had no trade more profitable to rely upon for dividends. It is evident, therefore, that rates may be adopted on railroads which are below the real cost of transport for many articles, and I suppose that in all well devised tariffs this will always be so, simply as a revenue measure; that is, rates so low, that if no higher ones are charged, would result in actual loss. Could it be demonstrated that our railroads would carry all the freight that would otherwise pass through the canal, and at rates as low as will rule on the enlargement, then no consideration of public interest would require its completion. But it is here shown that they can do no such thing, but that on the enlargement we can carry freight of all kinds, and in both directions, at rates below what the railroads can possibly accomplish, and still give the state a clear revenue of $2,500,000 annually."

The above quotations show very clearly that Mr. Allen, whose construction of the report of the state engineer of New York the committee of stockholders have relied upon, (as an argument for the reduction of tolls on the canal,) was mistaken in his report to the legislature of New York in saying that "the cost of transporting freight upon railroads is shown by the report of the state engineer to be 8 mills per ton per mile."

For the present, I now take leave of the report of the state engineer of New York, and proceed to submit such facts as I have been enabled to collect.

As I have before intimated, the *cost* of transporting a ton of freight depends upon a variety of circumstances. It will be at a minimum when the road is level* and straight, when the engines are working with a maximum load, when the load consists of goods packed in bales or boxes of a convenient size and weight to be moved and packed with the least labor, when fuel is cheap and water good, and numerous other and smaller circumstances favorable. This condition of things existing, it is manifest the cost of transporting a ton of merchandise will be the least it can be.

As the road departs from a level and a straight line the expense of transportation increases. And suppose the profile of the road be the same, then the variation in the cost of fuel oil, labor, and the almost innumerable articles entering into the expenses of railroad transportation, will more or less affect its cost. The cost per ton per mile on one road is no criterion by which to judge accurately what it should be on another. This is apparent from what I have heretofore said. But in order to make more plain the fluctuations in the cost of railway transportation, I will here subjoin a few of the items involved in the regular business of a railroad:

1. The repairs of road.
2. The repairs of wooden bridges.
3. The repairs of iron and stone bridges.
4. The repairs, removal and replacement of iron.
5. Wages of switchmen.
6. Wages of gate-keepers.
7. Wages of signal men.
8. Wages of watchmen.
9. Number of men employed, exclusive of those engaged in construction.
10. For removing ice and snow.
11. The repairs of fences, gates, houses for signal men, gate-keepers, switchmen and tool houses.
12. Repairs of locomotives.
13. New locomotives to cover depreciation.
14. Repairs of passenger cars.
15. New passenger cars to cover depreciation.
16. Repairs of merchandise cars.
17. New merchandise cars to cover depreciation.
18. Repairs of gravel and other cars.
19. Fuel for engines.
20. Oil used for cars and engines.
21. Waste and other material for cleaning.
22. For gratuities and damages.
23. For taxes and insurance.
24. For repairs of station buildings.
25. For salaries of president, treasurer, superintendents, law expenses, office expenses of the above officers.
26. For all other expenses, not included in the foregoing items.

The above are *some* of the items not usually embraced under the head of *miscellanies*, a separate account of which should be kept for the passenger and freight business, and will give some idea of the difficulty which must be encountered in any attempt at approximate results in the division of accounts. I might go on and enumerate other difficulties of keeping separate accounts; such is the admixture of work in the machine shops. But enough has been said to show that any statement of the cost of the transportation of freight per ton per mile must, after all, be merely approximate.

Nevertheless, the statements which are put forth, when duly authenticated, may be relied upon as near approximations to the result. But in comparison with what may be accomplished on other roads, reference must always be had to the grades, curvatures and other considerations heretofore mentioned. I will give an illustration. For instance, the Lowell railroad is 26 miles long, and, with the exception of 1500 feet at Lowell, rising 30 feet per mile, it has no grade exceeding 10 feet per mile.

---

tive engines, it may be as well to state that it consists simply in the adhesion of its driving wheels to the rails. If the power of the steam be sufficient to slip the wheels, it is exerting upon the locomotive all the force it is capable of employing with effect, and no matter how much greater the force of the steam in the boiler may be raised, it will not increase the useful power of the engine. One-eighth of the weight of the engine is usually taken as the useful or effective adhesion. No improvement in the machinery, provided the steam power is sufficient to comply with the condition above, can add any power to the locomotive. In general terms, the improvements which are spoken of consist simply in the increase of the weight of the engine. Just 20 years ago, the locomotive Roanoke, (the first that ran in Virginia) was placed on the Petersburg railroad. A locomotive of twenty tons weight, fitted up with machinery similar to that which worked the Roanoke, would possess as much power as a locomotive of the same weight operating with all the improvements of the present day.

* The charge on the Western railroad for flour passing over the entire line is 28 cents per barrel, or 1 4-10 cents per ton per mile, which is 161-1000 of a cent per ton per mile *less* than cost prices. On this subject I beg leave to invite attention to the remarks of Mr. Hopkinson, of the Boston and Worcester railroad, which will be found in the "proceedings of the convention of the northern lines of railway held at Boston in December, 1850, and January, 1851."

"Mr. Hopkinson stated, that when he went into the direction of the Worcester road, there was a bargain between that and the Western road as to rates of freight; that bargain was renewed in the spring of 1849, and involved different rates for winter and summer freights, to which he acceded. There never had been any reduction whatever to meet the competition of the more northern lines. He had consulted with Mr. Gilmore, president of the Western road, on that point, who agreed with him that it was a matter of no consequence to their business, and, therefore, there was no change made to meet that competition. There was only a change made soon after from the winter to the summer rates, such as had heretofore been made every summer. He was aware that the rates had been too low on his line, and he felt warranted in saying that they should not be sorry to let the northern routes carry every barrel of flour that now came over the Western and Worcester lines. What had reduced their fares was competition with water communication—the line of packets from Albany to Boston. He acceded reluctantly to the renewal of the arrangement, at the present rates of summer fare for flour; but Mr. Gilmore, who was a gentleman of great experience, said that the loss of that would carry away other business, which was of value. The lines of packets from Albany to Boston were what had really kept down the freights. It was Mr. Gilmore's theory, and seemed a reasonable one, that even if the carrying of flour was of no profit to the railroads, it was best to carry it, because it would otherwise keep in existence a line of packets which would interfere with our business in other ways."

* "The following table shows the ratio of freight carried by the same engine on different grades, and also the multiplier or number of engines required on different inclinations to carry the same load—the unit being a level:

Grade of Road.	Ratio.	Multiplier.
Level	1·000	
Ascending 20 feet per mile	·476	2·098
" 30 "	·372	2 689
" 45 "	·276	3·630
" 50 "	·252	3·960
" 60 "	·215	4·647
" 65 "	·1997	5·006
" 68 "	·1913	5·227"

See report of John B. Jervis, Horatio Allen, etc., commissioners appointed by the legislature of the state of New York to locate certain portions of the New York and Erie railroad, January 14th, 1847.

The above table was calculated on the basis of a locomotive of 20 tons gross weight, all resting on the driving wheels. Adhesion one-eighth the insistent weight of the locomotive. Friction 8½ lbs. per gross ton of car and load.

The ratio of the freight for a general business being to the gross load of cars and freight, as 6 is to 10.

The *freight* which a 20 ton engine will carry on different grades will be as follows:

On a level	389	tons.
Ascent 20 feet per mile	185·4	"
" 30 "	144·7	"
" 45 "	107·16	"
" 48 "	101·64	"
" 50 "	98·22	"
" 60 "	83·7	"
" 65 "	77·7	"
" 68 "	74·42	"
" 74 "	68·55	"

Multiply the above numbers by 10, divide by 6, and the result will be the gross number of tons the engine will pull on the level grades.

The total rise and fall is 192 feet. It has no curve less than 2500 feet radius, except two at the depot at Lowell—one of 900 feet and one of 1200 feet radius. In 1850, miles run by trains were 235,995; number of passengers carried one mile was 9,706,190, and number of tons carried one mile was 5,863,416. The cost of that year was—

One passenger carried one mile, 1·563 cents.
One ton freight " " 1·531 "

Excluding the cost of loading and unloading, which being 26·7 per ton, would make the cost of transportation per ton per mile 2 531 cents. But the cost of transportation on this road is no criterion by which to judge of the cost of any other road. One not at all acquainted with railroad transportation, will readily perceive that the cost would not be so much if the railroad was longer, for the reason that loading and unloading would be distributed over a greater number of miles. Then the advantages of a longer road in this particular might be lost by heavier grades and curves of less radius. I have dwelt thus long on this subject in order to show how difficult the ascertainment of the cost of railroad transportation is, and how important and necessary a large experience is to enable one even to collate the facts and come to any thing like a correct conclusion. Mathematics, stubborn, true and inevitable," as it is in its results, avails nothing when applied to such a subject. It is experience alone that can guide us, and it is experience (not entirely my own) to which I am indebted for the facts set forth in the following table.

To be continued.

Appendix to Southern Convention Proceedings.

Report of the Committee on the Arkansas System of Railroads.

Arkansas, in point of territorial extent, is larger than any Southern State, Texas alone excepted, embracing in its limits an area of over 50,000 square miles, of 33,000,000 of acres. Her soil is one of unsurpassed fertility; the northern portion of the State, from its climate, being admirably adapted to the production of provisions, with the capacity to produce them to an unlimited extent; also embracing a belt of mineral region, rich in anthracite and bituminous coal, lead, zinc, copper, gypsum, manganese, silver and gold—needing only an outlet by railroad to the Mississippi river, to make it a more profitable mining district than California itself, while the southern part of the State is safer for heavy crops of cotton than any other portion of the south. This is established, beyond all question, by years of experience;—further south, the crop has become a precarious one, from casualty produced by the caterpillar, boll worm, grub, or cut worm. West, there is not rain enough more than one year in four, and in other States of the same parallel east, the soil is exhausted.

But Arkansas, with all that nature has done for her, is far behind her neighbors in improvements, population, and general prosperity. It is a source of humiliation to your committee to make these acknowledgements; but the truth should be told, "though the heavens fall."

The cause of this state of things, to the intelligent resident of Arkansas, who has understood her general State policy, is no mystery. She was admitted into the Union prematurely, before she had the basis of wealth and population upon which to raise a revenue to support a State government; consequently she was forced to resort to some financial scheme to raise the deficit. The State and real estate banks were chartered, and the endorsement of the State placed on $3,500,000 of their bonds; they both suspended in the general crash of 1837; and since then have not more than managed to keep the debt down to the original amount.—This constitutes the State debt of Arkansas, and the whole is set down as a State liability. The State is undoubtedly liable for the entire debt; but there is still a valuable asset in the banks, consisting in notes, and in bonds and mortgages on large tracts of the most valuable lands in the State; and should these lands be affected by railroads, as lands have been everywhere else, there is but little doubt that before the maturity of the bonds in 1862, the debt will be paid by the bank asset. At present valuation they would pay the debt down to $1,500,000. This, then, is the actual debt of the State—an amount for which she is at present unable to provide, but insignificant when viewed prospectively, and can easily be provided for, after a correct system of railroads shall have developed our vast natural resources.

As yet, private enterprise has done nothing efficient towards a system of railroad; and the State, as shown above, is not in a condition that her credit can be made available, as in other States, to assist in projects of improvement. But an awakening spirit, on this subject, has recently manifested itself; and the important inquiry is heard on every hand, cannot Arkansas do something towards a general system of railroad improvement?

Private enterprise and capital stand ready to act to the full extent of their ability; yet in the present advancement of Arkansas this is not sufficient, at least so far as capital is concerned, to prosecute to completion the system necessary. The only resources we have in addition are from capitalists in other States, and the liberality of the general government in making donations of lands for railroad purposes. We think we present more than ordinary claims on the government, in our proposition to point our improvements towards the Indian country. These Indian tribes are under the protection of the government; large quantities of specie to the amount of millions, have annually to be transported at great risk, and frequently at heavy expense, (land carriage having to be used,) to pay the Indian annuities—besides troops and munitions of war have to be sent there to keep in proper subjection the turbulent spirit of the various tribes. Besides, a direct line of railroad, penetrating the Indian country, would do more to civilize and Christianize them, than millions spent in the usual missionary efforts. With this view, we see the general government is directly pecuniarily interested in our railroads, as well as philanthropically, and possesses the same interest in ours that she does in the roads running through other new States. A donation for so much land on each side of the road, with the privilege of floating for it, would enable Arkansas to do much towards completing her roads.

In the selection of a starting point on the Mississippi river, we find central on the eastern border of the State the high lands touch the Mississippi at Helena; and it is a fact that may not be generally known, that this is the only point from Cape Jeridon to the Balize, where the high lands touch the Mississippi on its western bank. And by reference to the operations of the States on the east bank of the Mississippi, we find that all their railroads point to the bluffs for their termini: instance Memphis, Vicksburg, Natchez, and other places. This, of itself, is conclusive that high land points ought to be selected for our termini, in preference to swamp and overflowed ones, when they can be had.

Then, if we adopt Helena (the only practicable place) as the starting point of our system, we find the projected road from there to Little Rock to pass over a plain country, already a grade above overflow, (with the exception of four miles of White river bottom,) rich and fertile, with timber of the best kind for the superstructure, and with no cost for the right of way. Taking this as the first section of the main trunk for the system for Arkansas, we know of no road, in the south or west, that offers such inducements to capitalists for safe and profitable investment. This road, a distance of 110 miles, can be constructed with a T rail of 58 lbs. to the yard, at a cost of $1,000,000.

We think we risk nothing, when we base an estimate on 30,000 through passengers the first year; this, at $6 each, gives us $180,000, with the certainty of an annual increase to an ultimate extent that now baffles calculation.

When we take into consideration the large extent of country that will send its produce to market over this road, and receive in return its merchandise, we at once set down the freight receipts as more than sufficient to pay the expenses and repairs; giving the receipts from passengers as profit, making 18 per cent on the investment. And when the contemplated extensions and laterals are constructed, it will pay to an extent that ought to satisfy the most avaricious. It will also possess the advantage that, for years at least, it can have no rival. The enormous cost, and uncertainty in investment, over an overflowed bottom, will prevent any rival route from being constructed, giving to this the benefits of all the trade and travel of northern, western, and southern Arkansas; also, of south Missouri, northeastern Texas and the Indian country, without saying anything of its being a part and parcel of the great Southern Pacific railroad.

From Little Rock an extension should be made to some point on Red river to meet the Texas roads pointing east—also, another from the same place, by way of Van Buren to Fort Smith, to be ultimately extended into the Indian country—a country of vast extent, and possessing, according to the report of Lieutenant Marcy, the elements to make it, in proper hands, one of the finest agricultural countries that God ever made. And however much the philanthropist may regret it, he can but see that this vast region must ultimately be possessed by the white race!—be brought into cultivation, and made to play its part in support of civilization.—The Indians will be forced to retire to the vast plain country of the west—a country peculiarly adapted to their migratory, hunting dispositions.

At some point, a few miles west of White river, a branch ought to leave the main trunk, and following up the waters of the White river, and crossing it near Batesville, continue a north course, running through the fine agricultural and mineral region of North Arkansas and southern Missouri. This will constitute the system of main trunk roads of the State. So soon as they are completed, branches will be run out at various points, tapping the different basins, and giving to each section of the State facilities of direct railroad communication with the Mississippi river.

Objections have been urged against Helena as the eastern terminus, for the system for Arkansas, because it does not communicate directly with the roads now in process of construction from Memphis to the southern Atlantic cities. This objection is found, on investigation, to be trivial in its character, for to all those wishing to communicate with Memphis they are offered an uninterrupted navigation, for first class steamers, from Helena to Memphis, which can be run in five hours, making a difference of time between Little Rock direct to Memphis, and by way of Helena and the river, of not more than three hours.

By the way of New Orleans is the natural outlet for Arkansas products; and when other things are equal, her artificial lines of communication (as her rivers do) ought to point to New Orleans. With her, Arkansas is allied by contiguity, association, and similarity of institutions, and nothing but the most perfect apathy on the part of New Orleans can dissever this unity of interest; but without N. Orleans will take hold and act liberally, the southern Atlantic cities will unite Arkansas with them by iron bonds, and then hold her as in the hooks of steel. Memphis, Nashville, Charleston and Savannah; the last, though not least, Mobile, is beginning to bid for Arkansas trade, by proposing the construction of roads to cross the Mississippi at Memphis, and even 100 miles above these; and if New Orleans sleeps on a few years longer, she may awake, but it will be with a spasmodic effort, and she will quickly relapse again into the sleep of death, as in that time all the elements of her vitality will be taken from her by her more enterprising sisters, Mobile, Savannah and Charleston.

Should it be found necessary at any future day to connect the Arkansas roads directly with the roads east of the Mississippi, it can be done at much less expense by crossing the river at Helena than at any other point, and connect with the New Orleans and Nashville road at Holly Springs, Helena being on nearly an air line from Little Rock to Holly Springs. The difficulties of crossing the bottom opposite Helena are less than at any other point, in the knowledge of your committee.

In conclusion, your committee, feeling that all the statistical information necessary to stimulate the Southern States to action, will go before the country in other reports upon roads, exciting now more attention if not of more ultimate utility, and through the address that this convention will send forth, will only in a few words urge the importance of prompt and efficient action upon the railroad subject in all sections of the south.

Our glorious confederacy has just passed thro'

a critical period of her history. But recently the elements of discord were aroused and excited to a degree that made the heart of the patriot to quail; but by the combined effort of the distinguished men of both parties in Congress, oil was poured on the troubled waters, and peace and harmony were restored to our threatened and distressed country. But the struggle should learn us a lesson, and prompt us to go to work, and render ourselves independent of the north, and in no way can we do this so effectually as by opening all the artificial lines of communication, that may be necessary to develope our country. On the heels of our roads manufacturing enterprises will spring up, and then we may proclaim our independence. We will be dependent on the north for nothing; the north will be dependent on us for our cotton and sugar; and as we always treat freemen as freemen, we will treat our fellow citizens of the north as brothers of the same great confederacy; they having no power over us, will have no motive to treat us in any other way. Then we can live in peace, and go on to demonstrate the great problem of man's capacity for self-government, and let our example have its influence on the rotten monarchical governments of the old world; and there exert, by the moral of our course, an influence beneficial to the freedom of the world.

All of which is submitted.

JOHN MARTIN,
Chairman.

Ohio County Bonds.

BURTON, [GEAUGA CO., OHIO,] Feb. 26, 1852.

WILLIS MERRIMAN, ESQ.,

President Ohio and Indiana R. R. Co:

SIR,—Yours of the 19th instant is received. Being no longer a Judge of the Supreme Court of Ohio, or of any other Court, I am not aware that there can be any impropriety in answering the questions which you propound.

You inquire:

1. My opinion as to the probable result of the Crawford and Wyandotte injunction cases.

2. You ask my opinion as to the constitutionality of the laws of Ohio, authorizing county and township subscriptions to the stock of railroad companies.

So far as the first question is concerned, I do not know that I have any better means of forming an opinion than any other individual in the community. As our courts have been heretofore constituted, until within a short period since, I would conjecture the final result, of a question like that one involved in the cases referred to. But you know that we have new courts in the state, and new men to administer the law in those courts. With all the present Judges of the Supreme Court, and with most of the Judges of the Common Pleas, I have some acquaintance, but not sufficient to know their habits of thinking.

The great question involved in these cases, is the constitutionality of the laws authorizing subscriptions. Heretofore it has been the rule of action in the Supreme Court of the state, to hold legislative enactments valid, unless in conflict with the plain letter or palpable interest of the constitution. Even admitting that doubts may exist as to the legislative power, these doubts constitute no reason why the enactment should be held invalid. In a government like ours, where the people, through their representatives, make their own laws, it is no light thing for a court to pronounce one of these laws unconstitutional; and whenever it shall be done, unless in a palpable case, I cannot look upon it as anything less than judicial usurpation. In questions of this character, the action of the Supreme Court of Ohio has, as I understand it, been in conformity with the action of the Supreme Court of the United States, and of the courts of the several states.

According to my views of the duties of courts, the rule heretofore adopted in the Supreme Court of the state, is the only safe rule of judicial action in cases of this character; still I have some fears that it may be departed from. Of late years it has become somewhat common in a portion of the community, to denounce legislation which is thought to be injudicious or impolite, as being unconstitutional. Some go as far as to say, that there is a law higher than the constitution, or than any law enacted within the express provisions of the constitution, by which higher law, the latter must be controlled. What this higher law is, it is not easy to learn, as its advocates do not seem to agree with respect to it. I am not aware that any of the present members of our Supreme Court entertain any of these modern notions; and if they do not, it seems to me highly probable, nay, I may say almost certain, that the cases to which you refer will be eventually decided against the complainants.

As to the second question which you propound, I have no hesitation in saying, that, in my opinion, the laws of Ohio, authorizing county subscriptions to the stock of railroad companies, are constitutional and valid laws. They are within the proper scope of legislative power. By the constitution of Ohio, of 1802, which was in force when these laws were enacted, it is prescribed in the 1st section of the 1st article, as follows: "The legislative authority of this state shall be vested in a General Assembly, which shall consist of a Senate and House of Representatives, both to be elected by the people."

In subsequent parts of the instrument, this general "legislative authority" is somewhat restricted. These restrictions, however, are few, and none of them have any relation to the description of legislation now under consideration.

"The legislative authority" of the State being vested in the General Assembly, and that body having enacted these laws in accordance with the forms required by the constitution, the laws themselves being within the scope of "legislative authority," and not being within any restrictive clause of the constitution, it is impossible for me to see upon what principle they can be held to be violatory of that instrument. This legislation may not have been wise. Upon this point there is unquestionably great contrariety of opinion. I am myself one of those who doubt its expediency. But this is a matter which ought not to have any influence upon the mind of a court, in deciding upon its constitutionality.

By our state system, counties and townships are municipal corporations, or, as they are sometimes called, *quasi* corporations. The powers and duties of these corporations have been well defined by laws from time to time enacted. These powers have been sometimes enlarged, at others diminished. The prudential concerns of the former are principally managed by officers styled county commissioners, of the latter by township trustees. These laws now under consideration, I consider nothing more nor less than an enlargement of the powers of these corporate bodies; and I have not been able to find anything in the constitution prohibitory of such enlargement.

Laws similar in principle have been enacted in other states of the Union, and have, by the courts of those states, been held to be constitutional. As evidence of this, I refer to the following authorities:—Goddors *vs.* Crump, 8*th Leigh R.* 120. Bridgeport *vs.* Housatonic railroad, 15 *Connecticut R.* 475. Nicol *vs* Nashville, 9 *Humphrey's R.* 252. Talbot *vs.* Dent, 9 *B Monroe's R.* 526 Chesney *vs* Hooser, *ibid* 330. Commonwealth *vs.* McWilliams, 11 *Penn. R.* 61.

Those who oppose these laws on the ground of their unconstitutionality, do not well agree as to the part of the constitution which is violated. Indeed, most of them do not pretend to specify any particular part. The first specific objection which was made was, that although the laws authorized the subscription of stock, still no subscription could be made until assented to or advised by a vote of the people of the county or township. It was claimed that in voting for or against a subscription, the people exercised legislative power, which they could not do, as the "legislative authority" of the state, is by the constitution, vested in the General Assembly.

There is to my mind no foundation for this objection. The validity of the law does not depend at all upon the vote of the people. The law is perfect, as it leaves the legislative body. By it, the commissioners of a county, or trustees of a township, are authorized to subscribe stock, but whether this authority shall be exercised, depends upon a contingency. It is left with the people, the corporators of the county or township, as the case may be, those who are to be taxed to raise the necessary funds to meet the subscription, to say whether this authority shall be exercised.

The people in voting do not make the law, but they act under the law, as much as do the commissioners of trustees when they subscribe. This point is well considered in the cases to which I have before referred.

Another objection to these laws, is, that they are incompatible with the 4th section of the 8th article of the constitution of Ohio, which section is as follows: "Private property ought and shall never be held inviolate, but always subservient to the public welfare, provided a compensation in money be made to the owner."

The argument is, that if these subscriptions are made, they may have to be met by taxation, and it is claimed that the collection of the taxes thus levied, is taking private property. The objection, if valid at all, would be good against every species of taxation, and no tax could be collected without making to the tax payer "a compensation in money." This consideration alone will show that the objection is not well taken. It would seem to be impossible to mistake the meaning of this section of the constitution. It is intended to secure, and does secure to individuals, compensation for specific property, which the public welfare requires should be taken from them for the public use. It has no relation whatever to the subject of taxation.

These two sections of the constitution are the only parts of that instrument which I have known to be cited as being incompatible with the laws under consideration.

I am aware that other objections are made, but rightly understood, they go rather to the expediency than the constitutionality of these enactments; some of them have been considered in an opinion which I prepared upon the subject, and which will be published in the forthcoming volume of the Ohio reports. In that opinion I have gone much more fully into the whole subject than in this communication. So soon as that work shall be published, and it is now in the course of publication, you can, if you please, consult that opinion, in which my views are expressed upon the whole subject.

Respectfully,
PETER HITCHCOCK.

Railroad Convention in Baltimore.

A very numerously attended convention was held in Baltimore on the 13th instant, the object of which was to promote the construction of a railroad from Harrisburg, up the valley of the Susquehanna, via Sunbury and Williamsport, to Elmira, on the Erie railroad. A large number of delegates were in attendance from Pennsylvania and from the city of Baltimore. The Mayor of Baltimore, Hon. J. H. T. Jerome, presided.

After the organization was completed, General Packer, of Williamsport, offered a series of resolutions, which he sustained by an able and eloquent speech. The resolutions were as follows:—

Resolved, That the citizens of Baltimore be invited to unite with the citizens of Pennsylvania in the enterprise of introducing a railroad from the present terminus of the York and Cumberland railroad to Sunbury and Williamsport, on the Susquehanna, with a view to a connection with the internal improvements of the States of Pennsylvania and New York and the lakes.

Resolved, That the citizens of Baltimore be requested to commend this enterprise to the favor and patronage of the authorities of the city of Baltimore as one of very great value to the trade of that city, and its connection with the trade of Pennsylvania.

Resolved, That it is a matter of great interest to the successful developement of the resources of the southern coal field of Pennsylvania, that every necessary facility for the establishment of a great coal mart to the city of Baltimore should be furnished by the construction of the projected railroad between Bridgeport, Sunbury and Williamsport, and its completion in the earliest practicable time.

The speech of Gen. Packer, who has long been an ardent friend of the project, which was the great event of the convention, after stating that the pro-

ject, after long opposition, had at last secured the concurrence and approbation of Pennsylvania, that State having become satisfied that nothing was to be feared from the work injurious to her interests, proceeded to a discussion of the *local* resources of the route.

The valley of the Susquehanna is well known to be one of the most fertile portions of the State. But the great source of anticipated revenue would come from the minerals upon its line, chiefly coal. In a few miles after leaving Harrisburg, the great southern coal field of Pennsylvania will be reached. The first coal road intersected will be the Dauphin, 23 miles long, which has been completed at a cost of $500,000. The road will skirt this great coal field for 40 miles, intersecting in this distance four coal roads now penetrating it. From this coal field a vast tonnage is expected, and the same results are claimed for making Baltimore the depot of this coal, are admitted to have followed the construction of the Reading railroad and the Schuylkill canal. At Williamsport, which is to be a point on its line, the road will connect with the Sunbury and Erie, and with the Williamsport and Elmira, thus securing a continuation of its line both to Buffalo and Erie.

But valuable as this local traffic certainly will be to it, its importance is actually obscured, in the opinion of the speaker, by the through business diverted to it by the great New York lines of railroad and canals. He gives a most glowing picture of the magnitude of this trade, and claims that no small portion may be secured to Baltimore by the proposed road. That our readers may see the feast to which he invited his hearers, we give the following extract from his speech:

In 1850 the receipts of the Reading railroad were $2,363,953, and the expenses were $1,080,323, making a net profit of $1,283,630. This is the profit of a road terminating in the woods, without connecting with any other improvement, and depending solely on the coal trade for its support. Let us examine, and see how this compares with the Baltimore and Ohio railroad. In the same year (1850) the receipts of the Baltimore and Ohio road were $1,343,805, and the expenses $509,586, leaving a net profit of $734,219. In 1820, only 32 years ago, the whole amount of coal sent to market at Philadelphia was 365 tons; in the year after the amount sent to market was 80,000; in the year 1830 it was 174,734; in the year 1840, 867,045 tons; in 1850, 3,371,420 tons; and in 1851, 4,395,209 tons of anthracite coal, shipped to tide water by the improvements in Pennsylvania. In the year 1850, 1,211,615 tons of this coal were shipped from the wharf at the terminus of the Reading road, employing in its transportation 8,599 vessels. This is exclusive of the shipments by the Lehigh and Schuylkill canals.

Having thus alluded to the Reading and the Baltimore and Ohio roads, he goes on to speak of the importance of the proposed connections with the New York improvements:

But I have said enough relative to the local importance of this road along the Susquehanna, which is of itself a very great argument in its favor and a very good reason why it should be built as soon as possible. But this local importance is insignificant when compared to its importance as a great national thoroughfare. The route of this road has long been known as one marked out of nature as the channel of communication between the south and the great lakes on the north and north west.

The route is no new one, for as early as in 1807 we find it travelled over; and in 1812-13 and '14, when relays were posted between Washington and the north, we find them taking the very line of this projected road—going from Washington to Baltimore, from Baltimore to Harrisburg, from Harrisburg to Williamsport, from Williamsport to Elmira, and from thence to other intermediate posts between that and the lakes, thus showing that it has long been considered a great national thoroughfare—opened by nature, and of easier access than any other channel of communication between sections so far distant, to be found on the chart of the whole country.

I cannot see why any here should oppose the construction of a road along this route which gives to your city such unparalleled advantages, and where so many improvements already constructed will be made subservient to your interests, giving you the control of a large part of the trade of a vast fertile region and of the lakes, and forming a continuous unbroken railway communication between your city and points whose importance cannot be over-estimated. I hope to see the time, and that within six months, when both this road and the Sunbury and Erie shall be under contract. Look, for instance, at the immense trade of the lakes; and shall we not find it an argument most conclusive in favor of the contemplated project? Take the *little* port of Buffalo, situated as it is, in an *isolated* position, at the extreme end of Lake Erie, and consider the immense amount of trade that annually passes through it.

The value of the imports from the lakes, passing in 1850 towards tide water] was $22,525,781, and of the exports, or merchandise going west, was $44,501,737, making a total of $70,180,705 worth of merchandise passing on this route of the great trade of the northwest.

The trade of the lakes for the year 1850, collected from official sources, was as follows:

Lake Erie	$115,785,048
Lake Huron	848,152
Lake Michigan	24,320,481
Lake Ontario	28,141,000
Lake Champlain	16,750,700
Lake St. Clair	639,524
Total	$186,484,905

Add to this the passenger trade, and we have an excess of $40,000,000 over the value of the entire exports of the United States for the same year.

Again, let us look at the movement of property on the Erie canal to and from tide water during the same year, 1850, and I have chosen the statistics of this year as a basis on which to found my arguments, because I have them complete—not because the trade of 1851 is less, but the facilities of gaining correct statistical statements for that year have not been so great. But I will go back further to show that this is the usual amount of the movements of trade, and to prove that I have not taken the statistical statement of that year because the amounts exceeded any other equal period of time, either before or since. The movements on the Erie canal to and from tide water for the years '48, '49, '50 were as follows:

To Tide Water.	Tons.	Valuation.
1848	1,447,905	$50,883,907
1849	1,579,946	52,375,521
1850	2,034,081	55,480,049
From Tide Water.	**Tons.**	**Valuation.**
1848	329,461	$74,943,450
1849	317,364	75,266,073
1850	441,582	85,177,068
Total Movement.		
1848	1,777,366	$125,827,357
1849	1,897,310	127,641,591
1850	2,475,600	140,658,009

This exceeds the exports of the whole United States, which during the same year did not reach $140,000,000. I have not included the passenger movements in this statement, which would increase the amount considerably. The amount received on the lakes for the transportation of passengers alone is never estimated at less than $1,000,000 per annum. Here you set great value on your foreign exports, but how does your commerce with foreign nations compare with the trade of the lakes? The whole amount of your foreign exports in 1850 was only $8,278,418 45, and this was inclusive, too, of your shipments to California, amounting to $2,027,984, which is not properly foreign commerce, but yet I have thus enumerated it, because of the distance of that country. I have not cited this with the intention of underrating the trade of your city, but only to illustrate my argument more forcibly, and convince you of the vast superiority of this northwestern trade, of which you might have a full share if you would only stretch forth your arms and grasp it.

The Erie canal receipts in 1850 were $3,486,172,30, and the expenses during the same period amounted to $644,762, leaving a net profit of $2,811,410, clear of all expenses. But the State of New York is not satisfied with this! You would have thought they might be content, but no; they are now going to work to widen this canal in order that it may be capable of supplying the increased and continually increasing demand for transportation. It is not yet large enough to accommodate the trade of the fertile region beyond the Lakes, which is so rapidly filling up, and every year adding enormously to the amount of the produce exported from it.

More than this, they have built a railroad right along the line of this canal, which has received from the passengers alone $2,098,359, and from freights $797.776, total receipts $2,896,135. This road is not allowed to carry freight except only at such times as the canal is not in operation. They are not yet satisfied with this, but have constructed the New York and Erie road from New York to Dunkirk, forming another line of communication between the Lakes and the Atlantic. The receipts on this road for the last year have averaged $360,000 per month, thus making over $4,000,000 annually. The receipts for passengers in the year 1850 were $541,114, and for freights $522,835, making a total of $1,063,949.

This road cost over $21,000,000. The State lost $3,000,000 in its erection. The expenses of the road in 1850 were $518,412, thus leaving a net profit of $545,557.

The great trade of the West through the State of New York has also attracted the attention of the Boston capitalists. They perceived and appreciated its immense value, and accordingly constructed a road tapping these improvements at Albany, and forming a line of communication from the Lakes with another Atlantic city. On the Western railroad, in 1850, the receipts for passengers were $590,742; and for freight, $747,520, making the total receipts $1,338.272; the expenses in the same year were $607,549, leaving an amount of $761,964 as the net profits accruing from this improvement. In 1850 this company declared a dividend of 8 per centum.

Here, then, is a trade producing an annual profit of $6,038,094—which we ask you to reach out your arms and participate in. But there is one thing I would warn you against, and that is forming any connection with another company! You must build this road alone. It must belong exclusively to you, and nobody else have any right to interfere with it, Have nothing to do with any company or any road. but let your locomotive leave Elmira with the flag flying "For Baltimore!" And let her go through without changes and transhipments. Here are $6,000,000 of annual profits, of which we invite you to secure a share, and yours will not be a mean or meagre portion.

To prove to you that the immense trade passing over the road from Albany to Boston comes from the Lakes, I find set down among the merchandise 400,000 bbls. of flour. Where did this come from, if not from the Lakes? Where is the country in the region of Albany to produce it. But Boston has not been satisfied with this road; she has gone to work and erected a road to Ogdensburg, in the midst of the rugged mountains of New Hampshire, and by this means secured the trade of Canada, taking advantage of all the improvements that had been made in that country, and offering an avenue by which the merchandize brought by them from the western sections might find a speedy and safe conveyance to an Atlantic market.

New York, too, has free navigation of the Hudson river, by means of which a vast amount of produce arrives constantly in that city. But New York is not satisfied with this, and her capitalists have recently built a road right along the banks of this navigable river; and I noticed an account lately of a locomotive running fifty miles per hour

on that road. Should not Baltimore, then, build a road along a river which is not navigable? If this road would not be profitable—embracing as it does such a vast extent of coal region, and forming a direct line of communication with the Lakes, and at the same time appropriating to your own use a share of the improvements of New York, and the branch road already constructed, and in progress in Pennsylvania—where will you find one that is profitable?

I hope yet to live to see the day when this road shall be continued on to lake Ontario, and be known as the "Lake Ontario and Baltimore railroad."—To show how much you and we need this improvement I will cite you an incident which occurred in our State during the past winter. Four of the Senators of the Pennsylvania Legislature, who live a short distance above where I reside, in coming to Harrisburg had to go first to Elmira, from there to New York, from thence through the State of New Jersey to Philadelphia, and from thence to Harrisburg. Thus being compelled to go five hundred miles, and travel in two other States to attend their own Legislature. Now will not the "City of the Susquehanna" help the Susquehanna out. But this trade that I have cited you, as coming through the State of New York from the West, although amply sufficient now to urge you to grasp after a portion of it must increase.

Thus you see the sun of commerce is not an expected luminary on the plain of the lakes, but has already risen brightly and gloriously and although we are yet but in the enjoyment of its morning beams, it has lighted up a scene of busy life and enterprise which has astonished the world. What will it be when it reaches the glory of its noon-day splendor? Baffled imagination strives in vain to compute its vastness and its splendor; and the wildest fancy that ever wrought images for the pen of the poet shrinks back incompetent from the task of delineating the scene which it is destined to present. There is no power that can prevent its growth, there is nothing to blast or to wither it before it arrives at the immensity of its maturity. It not only will, but it must increase, and in time to come present a picture that has no parallel in all the history of mankind in past ages.

And Elmira is a point common to all these routes from the lakes to New York, Philadelphia and Baltimore. They will all pass through this town, and it is here that Baltimore has advantages of which she cannot be deprived. Among these advantages is that of distance. From Elmira to New York, by way of the New York and Erie railroad, is 283 miles. From Elmira to Philadelphia, by way of the Susquehanna, which is the best route, is 272 miles; by way of Cattawissa it is 264 miles; but the equated distance of the Susquehanna route is less because of the heavy grades necessary on the Cattawissa road, which would require more time to pass over than it would take to perform the eight miles of greater air line distance along the Susquehanna route. From Elmira to Baltimore is 249 miles, 34 miles less than to New York, and 23 miles less than to Philadelphia.

Speeches were made by Hon. J. P. Kennedy and others, of which that of Mr. Packer will give a pretty correct idea. The road is estimated to cost $2,000,000. It was proposed at the convention that the city of Baltimore should subscribe $500,000, and the counties of Union, Northumberland, and Lycoming an equal amount. The balance we presume could be raised on the company's bonds. A memorial addressed to the city of Baltimore, urging upon that city a subscription of $500,000 to the stock of the proposed road was adopted. The convention was a most spirited one, and we have no doubt that immediate steps will be taken to put the line under contract, and that the road will be completed with all reasonable dispatch.

The importance of the project to Baltimore justifies all the interest felt towards it by that city.—The local business of the route fully justifies the construction of the road, to say nothing of what will be derived from the New York connections. By railroad, Baltimore, Philadelphia and New York are nearly equal in distance from Buffalo; and were New York to depend upon maintaining her present superiority upon railroads, she might well be solicitous as to the future. It is the Erie canal that has given to this city its position, and through that work she must continue to maintain it.

Bridge over the Central Railroad Illinois.

By the politeness of T. B. Blackstone, Esq., resident engineer on this division of the Central railroad, we have had exhibited to us a plan of the viaduct by which the road is to cross the Illinois river at this point.

The distance from bluff to bluff is one mile and a quarter; about one half of which is to be occupied by embankment, and the remainder by a truss bridge resting upon piers one hundred and sixty feet apart. These piers are to be built of solid masonry resting upon piles driven into the ground as closely together and firmly as possible. They are to be fifty feet in breadth and fourteen feet in thickness, presenting sharp angles in both directions of the stream. The stream side inclines at the rate of six inches to the foot, ascending to the height of forty feet; this is to act as the ice breaker; for which purpose it is admirably adapted, inasmuch as a mass of ice, impinging upon it, instead of striking a tangent, expending its force upon the structure, lodging and creating a gorge, would have a tendency to slide up and be cut in two, or break by its own weight, immediately fall into the current, and be carried down.

The lower sides incline three inches to the foot and likewise present an angle in order that the eddy may not only be lessened but produced beyond the base of the pier, which will obviate the undermining process. At the height of forty feet is an onset, above which, a perpendicular portion, likewise of the best masonry, is to rise 17 feet, making the entire height of the pier, 57 feet; and upon this the bridge is to rest. Mr. B. informs us that notwithstanding there will be a span of one hundred and fifty feet, the character of the superstructure is such, embracing the principle of the arch, that the weight imposed by the cars rather adds to, than taxes its strength.—*Lasalle Standard.*

Ohio.

Railroad Facts and Fancies.—In these days of electric telegraphs, express mails and daily papers, when every facility is given for the detection of error, and spread of truth, it is really surprising to find a paragraph like the following, in so respectable a periodical as the American Railroad Journal:—

Next south of the "Central" is the "Cincinnati and Marietta railroad," aiming at a connexion with the "Hempfield" and "Baltimore and Ohio," at Wheeling. As however, this line is 26 miles longer than the route by Zanesville, and certainly not more favorable in grades or curves, it must depend upon *local* support. Between Marietta and Wheeling, a distance of 80 miles, the line occupies the margin of the Ohio river, and during the season of navigation, would find the steamboats control local traffic. This fact will make the extension of this road east of Marietta a very difficult matter.

Error First.—The M. and C. line is not 26 miles longer than the Wilmington and Zanesville route, to Wheeling. Take the straightest possible course for the latter, and the most crooked one ever contemplated for the former, and the difference is under 15 miles.

Error Second.—But it is in grades and curves that the Marietta and Cincinnati road bids defiance to any other line in Southern Ohio. It has been a primary object with the company, and a matter of pride with their excellent engineer, to make the best road-bed and have no curves of less than 2600 radius. He expects to put his express train through from Cincinnati to Belpre, at the average rate of 40 miles an hour. There is no railroad work in the State, that can favorably compare schedules with the Cincinnati and Marietta line, whether as to gradients, curves, masonry or width and solidity of road-bed.

Error Third.—It is believed to be by no means necessary to follow the course of the Ohio river, with the Cincinnati, Marietta and Wheeling line, between Marietta and Wheeling. A good route may be gotten, at about 70 miles in length, passing across the country, near Woodsfield. Take a map of Ohio and examine for yourself. You will find the courses of streams to favor this project.

Such derogatory comparisons, of railroad lengths, as that we quote from the A. R. R. Journal, are altogether *ad captandum* and unreliable. They are gotten up to depreciate the bonds of one company at the expense of those of others—and are thus understood, doubtless, by intelligent capitalists.—*Scioto Gazette.*

The article complained of by the Gazette was a *communication*; and to refuse all such, because every statement might not be *absolutely* correct, would be to adopt a rule shutting out such articles altogether. The Gazette very well knows that a great degree of freedom must be allowed to correspondents, and if any incorrect statements are made, our columns are open to their correction. We have always spoken of the Cincinnati and Marietta railroad as it deserves, in the highest terms, and shall always stand ready to present its side of the case, and to do it full justice, whether it has been wronged or not.

Kentucky.

Lexington and Danville Railroad.—The vote in Jessamine county on Saturday last, on the proposition for the county to subscribe seventy-five thousand dollars in the stock of the Lexington and Danville railroad company, resulted as follows: For the tax, 518; against tax, 422. Majority for tax, 96. This places the construction of the road beyond all cavil or doubt. We presume there never has been in the United States, a railroad commenced under auspices more favorable than this one. The stock already subscribed will enable the company to build the road complete, and put upon it all the necessary locomotives, cars, etc., without the necessity of borrowing a dollar. Now let this important work be pushed ahead. We congratulate the friends of this great work upon their success.

We are also gratified to see that our friends in Jessamine have held a meeting, and appointed delegates to attend the railroad convention at Nashville. See the proceedings in to-day's paper.—*Ky. Statesman.*

Girard and Chunnenuggee Railroad.

At a meeting of this company, on Monday last, [1st March] Major Robert S. Hardaway, Major Wiley Williams and John Fontain, of Columbus, and Homer Blackman, of Chunnenuggee, James E. Gachet, of Enon, Gen. Anderson Abercrombie and Dr. Thomas Dawson, of Russell county, Alabama, were elected directors of this railroad; after which Major Hardaway was elected President.

The directors have passed already, a resolution to let out, at once, the contracts for bridging and superstructure on the first section, [20 miles] and the President has been instructed to call upon the Mayor and Council of this city, in reference to the bonds agreed to be given, and preparatory to the negotiations for the purchase of iron, which the President expects to commence laying down as soon as it can be got up the river next fall. In the mean time, a large force is at work on this first section and is progressing rapidly.—*Columbus Times.*

Peoria and Oquawka Railroad.

We learn that business of considerable importance was transacted at the meeting of the directors, held at Knoxville on Tuesday last. That which we consider of the greatest moment, was an order extending the road to connect with the Chicago branch of the Central road, which was laid before the directors. Provision was also made for carrying forward the work upon the east end of the road from Peoria to Farmington, and for the purchase of two engines, and freight cars to be placed upon each end of the road to facilitate the progress of the work. This certainly looks like doing something in earnest.

An order was passed making provision for the payment of ten per cent interest upon the five per cent stock first paid in, which is to be paid before any other. This is certainly an inducement to stockholders to come forward and pay up their subscriptions for stocks as soon as possible.

The greatest unanimity and good feeling prevailed, and we are happy to say that the prospects of the company were never in a fairer and more prosperous condition than at present.—*Monmouth Atlas.*

American Railroad Journal.

Saturday, March 20, 1852.

Vermont Central Railroad.

This road has recently struck another vein of its *usual* luck; it has just lost its engine house at Northfield by fire, together with a large amount of valuable property. The loss is estimated at $140,000, with only $20,000 insured.

This road seems to be a sort of a Jonah among the New England roads, receiving an amount of penalty, which is sufficient to punish the misdeeds of the whole lot. It may serve this use, of attracting to itself the misfortunes and the ill-luck which would be a fair aggregate for all. If it cannot offer this apology for its disasters, we do not know what it is good for.

The Central, like the Hudson River railroad, in this State, is a great extinguisher of intellect. The former has uniformly carried down those who have attempted to hold it up, and has placed *hors du combat* we know not how many, who had acquired the reputation of heroes in other wars. But in this respect we believe that the Hudson River company bears off the palm. In this company, things have come to such a pass, that it now requires the sacrifice of some one person every few weeks, to appease the ghost of murdered—capital. The company is as inexorable as were the ancient Mexican Deities, and demand as frequent sacrifices upon their altars. We predict that after a few more *mysterious* disappearances, the victims will begin to be a little shy about offering themselves.

Continuous Bearing.

All persons having experience on railroads, know that the great defect in the common superstructure is, the settling of the rails at the joints. This is the weak point of the road, and is the cause of most of the expenses for repairs of the road, as well as the wear of machinery. This defect may be almost entirely overcome by using the continuous bearing rail. Gillespie, in his "Manual of Road Making," speaking on this subject says—"that when rails are supported at intervals, the less the intervals and the nearer the supports, the less will be the yielding and deflection of the rails. Carrying out this principle, and continually lessening the intervals, we at last arrive at *continuous* supports. The advantages of such solid bearings for the rails would seem to admit of no dispute. It is evident that an iron bar, laid on a series of points, will be much more easily bent, either laterally or vertically, by the heavy blows or jolts of the carriage, than when the same bar is made to form a part of the solid roadway. The system of continuous supports of longitudinal timbers is therefore superior to any other in strength, solidity, and ease of motion. The best railroad in the world, the 'Great Western,' has such continuous bearings."

The Evansville and Illinois railroad company have adopted this plan with remarkable success.—They use sills of white oak, sawed, 6 by 12 inches, laid down upon notched cross ties, four feet apart. The road is built on clay and mud, the banks are green, and yet it has stood the severe frosts of the past winter well—not a trip has been lost. When that road shall be ballasted, (which it is the intention of the company to do as soon as they reach a gravel region, near Vincennes,) it will be equal to the very best roads in the United States. H.

Ohio County and City Bonds.

We have the gratifying intelligence, that the Supreme Court of Ohio has decided, that bonds issued by cities and counties, in aid of railroads, are *valid and constitutional.*

It is a most important consideration for the Ohio railroads, and in fact for those of the whole country, that this vexed question has been disposed of. While pending, it has hung like an incubus upon the projects in that State, to many of which, the use of county and city securities was indispensable to success. To be sure, the question was only raised in one or two isolated, and comparatively unimportant cases, but so long as it remained an open one, capitalists were unwilling to purchase largely, whatever might be the probabilities that the law would be sustained. So long as the decision should be postponed, the work upon numerous and important lines would have to remain in abeyance. Had it been decided *adversely* to the validity of the law, it would have put a stop to more than one-half of all the railroad projects in the United States.

In two of the leading Western States, Ohio and Kentucky, has this question been finally put at rest. We apprehend it will not be raised again in any other. To deny the right of towns and cities to perform such acts as the majority shall determine as best fitted to promote their interests, is to deny the fundamental principle upon which all our institutions are based. In this country, constitutional questions, such as the one referred to, excite but little alarm. They are mischievous principally from their influence abroad, where the nature of our institutions are not so well understood.

The decision will not only help the county and city securities of Ohio, but those of the whole country.

To Contractors.

We learn that the Illinois Central R.R. Co. have advertised the grading, masonry, bridging, superstructure, or either of them, with or without materials, on the following divisions of the Illinois Central railroad, to wit:

First division, from Cairo to Big Muddy river.....60 miles.
Second division from Big Muddy river to Township No 1, north of the base line of the 3d principal meridian.....53 miles.
Sixth division from Bloomington to the Illinois river.....60 miles.
Eighth division from Freeport to Dubuque67 miles.
Ninth division, from Chicago to Kankakee river.....55 miles.
Tenth division, from Kankakee river to Urbana.....70 miles.

The proposals must be for the entire length of each division, and will be received at the office in Chicago, as follows:

For the ninth and tenth divisions, until April 15, 1852, at noon.

For the sixth division, until April 22, 1852, at noon.

For the eighth division, until April 29, 1852, at noon.

For the first and second divisions, until May 27, 1852, at noon.

Profiles, plans, and approximate estimates of quantities, and specifications, will be ready for inspection, and blank forms for proposals, and statements of the mode and terms of payment, will be furnished at the office, over the New York and New Haven railroad passenger Station, No. 33 Canal st., New York city, and at the office of the Chief Engineer, R. B. Mason, in Chicago, Illinois, on and after March 25, 1852.

We presume that the company wish to let work only to their own friends, as they do not advertise in papers likely to be seen by eastern contractors. For the benefit of our subscribers, we give so much of the advertisement as will enable them to inquire into the matter.

Housatonic Railroad.

The gross receipts of the Housatonic railroad for 1851 were $329,041, an increase of $19,000 over 1850. The expenditures were $169,139, showing an excess of receipts over expenditures of $168,902. Deducting the rents of the Berkshire and Stockbridge railroads, $74,808, the net receipts are $74,094. Interest on bonds $21,000; paid on floating debt $57,402. The whole of the floating debt will probably be paid off during the current year.

Judge Hitchcock's Opinion.

We give this week the opinion of Judge Hitchcock upon the question of the constitutionality of the Ohio county bonds. We published it as high authority, in the matter, not expecting so soon to receive the final decision of the Supreme Court of the State. It was in type before the despatch reached us.

To Railroad Companies.

As a large amount of city and county securities are constantly coming to this market for sale, for the purpose of raising money for railroads in progress, we would suggest, that the companies offering them, will find it for their interest, to make them convertible stock; and also to guarantee their principal and interest, for the following reasons. In the first place, neither counties nor cities connect themselves with railroads, for the purpose of making anything out of the stock for which they subscribe, the sole object they have in view, are the incidental advantages that will follow the construction of the road. There are some obvious objections to corporate bodies becoming parties to railroads; and the sooner they are enabled to withdraw from the connection, after the road is completed, the better. Now the convertible clause presents the opportunity of doing so, provided the project be a good one. It is better all round, that railroads should be owned and managed by private individuals, occupying the same relative position toward each other, than corporations. Companies should guarantee the securities offered by them, upon the same principal that we require the indorsement of a note by the person who sells it.—But an additional reason for doing so, is the fact, that railroad affairs are generally entrusted to business men, who understand and appreciate the importance and punctuality in all monied transactions, which may not be the case with persons at the head of a municipal corporation. Where companies are holden, they will see that suitable and timely provision is made for all liabilities as they fall due. All these matters, such for instance, as remitting money, can be attended to without much inconvenience, or additional labor on the part of companies, while they would impose a very considerable inconvenience upon county and city

officers. For these reasons, purchasers much prefer bonds guaranteed by railroad companies, to these that are not, even when the *safety* of the security is not questioned.

Virginia.

The South Side railroad, as we learn from the Democrat of Petersburg, was on Saturday last completed to the point of junction with the Danville road. Cannons were fired in Petersburg in honor of the event. Thus within less than two years, 53 miles of the road have been constructed, and that too, in the most substantial and durable manner. The President and directors deserve great credit for the energy with which they have pushed forward the work.

Stock and Money Market.

Money continues very abundant, and must remain so for some time to come, unless we again commence the shipments of specie on a large scale. There is good inquiry for railroad securities, and at the going rates, the demand for those of the first class is fully equal to the supply. As a general rule purchasers insist upon the convertible clause in the bonds of roads, which is looked upon as adding materially to their value. Should the general expectation with regard to many of our new projects be realized, they will pay 10 per cent at least for many years to come. Should such turn out to be the case, bonds that are now selling at 90, will in a year or two, command a handsome premium for conversion into stock.

The relative position that western securities occupy in popular estimation, is determined pretty nearly by the length of time the roads upon which they are based, have been in operation. The 10 per cents of the Galena and Chicago railroad have, we believe, been all taken out of the market. The Milwaukee and Mississippi bonds, bearing the same interest, are selling well at *par*. Of the Ohio roads, the 7 per cent bonds of the Little Miami, Cleveland and Columbus, Ohio Central, and Cleveland and Pittsburg, are in request at from 90 to 96 and 7. Securities of more recent projects are gaining rapidly. The Cleveland, Painesville and Ashtabula bonds are considered a very excellent security, and are in good request. The bonds of the Michigan Southern railroad have come rapidly into favor. The same may be said of the Terre Haute and Indianapolis. We instance the above projects, that our readers may get a good idea of the class of securities that find favor. We can repeat what we have said in two or three of our last numbers, that in the present state of the market, new projects will find no difficulty in obtaining money at what are considered fair rates, provided they occupy strong routes, and can show an outlay equal to the amount sought to be borrowed. If railroad companies can prepare their road for the iron, they can without much difficulty raise a sufficient sum in this market for that important article, and their equipment. The public mind, both in this country and Europe, is turned to the subject of our railroads, and there can be no doubt that their wants are now supplied with the freedom consistent with a sound state of our finances. This country alone could not carry on one-half of our projects, but the foreign demand rapidly take from the market such of our securities as have acquired a reputation for soundness.

The west is the most attractive field at the present time. The great number of railroads in operation and progress in that quarter, by inviting general attention, mutually assist each other. The state of facts applicable to one road is equally so to many others, so that a person who has thoroughly studied the condition and prospects of one road, is well posted up in reference to all similarly situated. Our people therefore are better informed in reference to the prospects of Ohio, for instance, than those of our neighboring States, and securities of the former sell better than an equally good ones in the east. Foreigners, particularly Germans, who buy very largely of our road bonds, have acquired an excellent knowledge of the western States, from the vast number of those people who have settled there. The southern and southwestern States lack this advantage, consequently there is less demand for the bonds of their roads. But time will gradually bring these last into favor.

Railroads in the west will soon receive a new impulse, in being brought into connection with the roads of the Eastern States. As yet no connecting link has been opened between the two. Early in the season the Lake Shore road will be completed and over this route a continuous line will be formed. Next will come the Baltimore and Ohio, and then the Pennsylvania Central. Should the Wellsville extension of the Cleveland and Pittsburg road be completed simultaneously with the Baltimore and Ohio road, the latter will be brought into connection with Lake Erie at Cleveland by the first of January next.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 20, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	106½
U. S. 6's, 1862	112½
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	117⅝
U. S. 6's, 1868	117½
U. S. 6's, 1868—coupon	119½
Indiana 5's	86
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	75
Illinois 6's—interest	47
Kentucky 6's, 1871	106½
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	99½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	106
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102
New York 5's, 1866	104
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	101
Ohio 6's, 1856	105½
Ohio 6's, 1860	108¾
Ohio 6's, 1870	113
Ohio 6's, 1875	114½
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	105½
Tennessee 5's	85
Tennessee 6's, 1880	102
Virginia 6's, 1886	107½

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	105
Cincinnati 6's	95
St. Louis	94
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	96½
New York 7's, 1857	108
New York 5's, 1858 '60	102
New York 5's, 1870-'75	102½
New York 5's, 1890	102½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1870-'90	102½
Baltimore 1870-'90	104½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115
Erie 2d mortgage, 7's, 1859	105
Erie income 7's, 1855	95½
Erie convertible bonds, 7's, 1871	93
Hudson River 1st mort., 7's, 1869	105½
Hudson River 2d mort., 7's, 1860	95½
New York and New Haven 7's, 1861	103
Reading 6's, 1870	84½
Reading mortgage, 6's, 1860	81
Michigan Central, convertible, 8's, 1860	103½
Michigan Southern, 7's, 1860	90½
Cleveland, Col. and Cin. 7's, 1859	102½
Cleveland and Pittsburg 7's, 1860	92½
Ohio and Pennsylvania 7's, 1865	95½
Ohio Central 7's, 1861	90

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 17.	Mar. 10.
Albany and Schenectady	100	100
Boston and Maine	104½	104½
Boston and Lowell	109½	109
Boston and Worcester	101	101
Boston and Providence	87	85½
Baltimore and Ohio	63	64
Baltimore and Susquehanna	34	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112	112½
Eastern	97	97½
Erie	85½	84½
Fall River	98	97½
Fitchburgh	98½	98½
Georgia	—	—
Georgia Central	—	—
Harlem	72½	69
" preferred	108½	108
Hartford and New Haven	126	125
Housatonic (preferred)	35	36
Hudson River	66½	65½
Little Miami	—	—
Long Island	23½	23
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97½	97½
Michigan Southern	104½	104
New York and New Haven	111	109
New Jersey	126	128
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	56½	55
Ogdensburgh	27½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29½
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	74½	71
Rochester and Syracuse	109	113
Stonington	54½	54
South Carolina	—	—
Syracuse and Utica	127½	125
Taunton Branch	115	117
Utica and Schenectady	127½	128
Vermont Central	20½	22½
Vermont and Massachusetts	22½	22
Virginia Central	—	—
Western	103½	103½
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Ohio.

Akron Branch Railroad.—We have received the first annual report of the directors of this road, from which we learn that on the first of January last eight miles of the road were completed from Hudson to Cuyahoga Falls. The surveys for the route from Hudson to Akron were commenced on the 12th of April, 1851, and on the 20th of June following, the grading and bridging on that portion of the road, embracing a distance of 13 4-10 miles, were put under contract.

It was the intention of the contractors to have completed the first eight miles of the road, from Hudson to Cuyahoga, by the 15th of November, but the weather during that month and the following was so unfavorable, that the work was not finished until the 1st of January.

Notwithstanding this delay, the progress made has been very rapid, when we consider that the company was organized on the 17th of March, 1851, and that explorations and surveys were made, 14 miles of the road located and put under contract, and eight miles completed in the short space of 9¼ months.

Up to the 31st of December there had been expended upon the work $71,693 29. Of this am't, $58,061 36 were collected from the private subscriptions to the stock; the balance was derived from the proceeds of the Summit county subscription. On the 1st of January, there remained to be collected from the private subscription of the northern portion of the road to Akron, $20,988 64.

The entire funds of the company have thus far been obtained from subscriptions along the line of the road, and it is the expectation of the board that the amount required to construct the road beyond Akron will be raised along the line of the extension.

It is now anticipated that the track will be completed to Akron for the running of the cars by the 1st of June, and that, a few months later, the road may be connected with the Ohio and Pennsylvania railroad. The extension to Coshocton must be influenced much by the contributions of aid to the work, which the board have reason to expect from the lower part of the line.

The directors feel confident that the local business of their road will be very profitable, because it traverses a populous and fertile portion of the State, rich in manufacturing and mineral resources.—The coal traffic which will then fall to the road will, of itself, form an important item of business, and render the amount expended upon the work a profitable investment.

A heavy through business may be expected from the connections that this road will make with other important thoroughfares. By the Ohio and Pennsylvania railroad, it will be connected with the central, western and south western parts of the State. On the extension of the line to Coshocton, it will connect with the lines of railroad running eastwardly to Steubenville, and will connect with the roads to Cincinnati, Columbus and Wheeling. These roads traverse a portion of the State as densely populated, and as rich and prosperous as any other. They will, in connection with the Akron branch railroad, present the most direct and easy communication with the Lake Erie and north western thoroughfares to New York and Boston, and with twenty counties, having an aggregate population of 600,000, or near one-third of the population of the State.

With these connections, there is no doubt that the through business of the road will be large, and being favorably situated for local traffic, it must become a profitable line.

At the meeting of the stockholders January 14th, the following officers were chosen for the ensuing year:—President, Simon Perkins; Directors, Simon Perkins, M. W. Henry, J. W. McMillen, Akron; H. A. Miller, Cuyahoga Falls; James Butler, H. N. Day, Hudson; J. Cary, Millersburg Secretary, H. N. Day; Treasurer, J. W. McMillen; General Superintendent, James Butler; Chief Engineer, W. H. Grant; Assistant Engineer, W. A. Kellogg.

Pennsylvania Policy.

General Packer vs. History.—In his speech before the recent Baltimore convention, to aid in the construction of the Susquehanna road, Gen. Packer claimed the most tolerant and liberal spirit on the part of Pennsylvania in her legislation in reference to railroads, he says:

"Pennsylvania was once governed by prejudice, but the time for that past by when she saw that its influence was derogatory to her character and interests."

We quote further from another part of his speech.

"The only reason why this road, connecting with the public improvements already in operation in the State of New York, and susceptible of conversion into a channel through which the commerce of the Great Lakes will pass to the nearest Atlantic market, has not before been built was prejudice—the doubts of some and the jealousy of others. But this is now removed, Philadelphians have been convinced that they will not be injured by the completion of a public work which will improve so large a portion of the State. The trade of Philadelphia will not be diminished; produce will be sent to Baltimore it is true, but if it had not come here it would not have gone to Philadelphia but to New York, the natural rival both of Philadelphia and Baltimore. No, the trade of Philadelphia will not suffer while that of Baltimore will be vastly increased."

Now these statements are in thinking contrast with the fact and with the settled policy of Pennsylvania, as can be easily demonstrated. She has always displayed the most determined hostility to every scheme calculated to advance the interests of New York, and this hostility, instead of softening in its aspects, is becoming still more bitter and unyielding. She demands of the Erie railroad, a yearly tribute of $10,000 for the privilege of passing over a few miles of her territory. This road, for a greater part of its course, follows nearly upon the dividing line between the two States, and has added more to the value of property in that State than its whole cost. This is the *only* instance in the history of railroad enterprizes in this country, when a *State* has compelled a railroad corporation of another State, to pay for the right of passing a portion of its territory. Again, a most vigorous effort has been made by Pennsylvania to defeat the construction of the Lake Shore road through Erie county, for the purpose of cutting off New York from all connection with the West! Having failed in this she has just forbidden the Erie guage to enter her territory, for the reasons given in the following extract from an article in the Philadelphia North American, upon the subject of the recent law in that State in relation to the guage of railroads.

The section, it will be seen, keeps the New York influence outside of the State lines, and harmonizes the railroads of Pennsylvania into one complete system. It avoids transhipment within the State, and keeps our grasping neighbor within her own bonds; and, by binding together the interests of all counties, will foster everywhere a good feeling for Philadelphia. Where a difference in the gauge of railroads renders a transhipment at some point inevitable, it should be fixed near the boundary, for reasons so palpable and convincing as to require no comment. As every transhipment, forced by a change of gauge, is equivalent to fifty miles of road, it is quite apparent that it never should take place in the middle of Pennsylvania, for that would turn the trade of the northern half of the State away from us forever.

Philadelphia, to be strong over the whole western country, must first be strong in her own State. She must first be allied in interest and intercourse with all parts of the commonwealth, and thus acquire strength at home. Her ground plan of operation should cover the whole of the State of which she is the metropolis—her connections with the improvements of other States can then be made and *controlled* in such a manner as will fill her coffers and swell her commerce. Pennsylvania soil should not be used as a highway leading to and from her rival and competitor—it should be ramified by railroads uniting in Philadelphia, as the human body is coursed by arteries centering in the heart.

New York has long indulged the hope and expectation of running across eastern and northern Pennsylvania, to shorten her railroad distances to the Ohio and the lakes. It has been her aim to penetrate Pennsylvania on the north with the six feet gauge of track, and on the east with the New Jersey track of four feet ten inches gauge, and so, while running through the State, secure its local interior trade to the loss and injury of Philadelphia. But this cunning game has been effectually checked in the adoption of the gauge law above alluded to.

In addition to these public acts of the State, the Pennsylvania railroad has just given a practical illustration of a policy, that has so often been iterated, by refusing to forward over its road, merchandize *purchased* in New York!

In the face of all these things, it is certainly amusing to see with what coolness the Pennsylvanians talk of stepping over their boundary, into this State, and of turning into their own laps, the vast commerce and traffic developed by *our* public works, and of transferring to themselves what has constituted the source of our prosperity.

Railroads are the agents of commerce, and we have always maintained the ground, that commerce should determine the direction and the manner in which they should be built, upon the same principle, that the wants of commerce determine the model of the ship, and its destination when freighted. The people of the State of New York, have recognized this principle to the fullest extent, in their railroad Legislation.

The State of Pennsylvania on the other hand, sedulously pursues a different policy, and seeks to throw barriers in the way of commerce, and taxes the transportation both of passengers and merchandize, for her own supposed benefit.

We have uniformly sustained the liberal policy, but we confess we should not be very sorry to see our people say to the State of Pennsylvania that they must not attempt to enjoy the advantage of any connection with the Erie road, until they release it from the tax now imposed upon it; nor until they will give us the right of extending branches into that State, of such gauge as suits the convenience and interest of railroad companies.—Such a determination upon our part, would put an effectual quietus upon the project, from which the Baltimore convention anticipated such splendid results, or it would correct the crooked and mistaken policy of our neighbor, and show the danger and folly of the course she has been pursuing. By

adopting our suggestion, the Erie road can secure to itself justice for the present and security for the future."

Indiana Central Railroad.

We are happy to state that this project has met with a very favorable reception in this city, and the company have the flattering prospect of disposing of their securities and purchasing their bonds on the most favorable terms. Negociations to accomplish both of these objects has been so far perfected, that Mr. Newman, the President of the Company, has been enablec to return to Indiana leaving Mr. Meredith, one of the Directors, to carry out the details o. the contracts.

The Central Railroad has the double advantage of occupying a very strong route, filled with a dense and wealthy population, prepared to furnish a large and lucrative business to a railroad, and at the same time a route that shows remarkably well on paper. To a person looking upon a map of Indiana, the mere examination of the line of the road makes out a satisfactory case. It occupies that portion of the State that can at present supply the largest amount of local traffic. As for its through business, it is enough to say that it will form a part of the great East and West line, extending from the Atlantic to the Mississippi.

The project owes no small part of the high estimation with which it is held, to the lines that are constructed or in progress, with which the Central is to be connected, and which will bring it into immediate profitable use as soon as any portion of it shall be opened.

We learn that it is the intention of the Company to push forward the work of construction with all possible despatch. With the credit they possess, their means will be abundant, and the public may rely upon seeing the road opened as soon as it can be by a judicious application of money. We congratulate the Company that it has started under such favorable auspices.

Ohio.

Railroads vs. Canals.—Board of Public Works.—The opening of the new lines of railroad in Ohio, and the rates at which they are carrying freights, have aroused to the highest pitch, the wrath of the board of public works of that State. The wise men who compose that board, anticipate the most disastrous consequences from the combination of railroads to carry freight cheaper than the rates charged by the canal. They state, in a communication to the Legislature, that the Cincinnati, Hamilton and Dayton road is carrying flour from Dayton to Cincinnati for 8 cents per barrel, or 80 cents per ton, which, says the report, *is much below the actual cost.* The consequence is, that the canal board has been compelled to reduce the tolls to two mills per ton per mile, between the above places, to compete with the road.

Another outrage has been committed by the Mad River railroad. "That company," says the canal board in their report, "unable to induce the manufacturers of flour in Dayton to send their flour Sandusky by railroad, have now an agent in market there, purchasing grain and shipping it by their road."

The Central railroad has also been outraging popular rights. "It is," says the report, "in connection with the Newark and Mansfield and Sandusky railroads, now transporting flour and other produce from Zanesville to Sandusky City, at a much lower rate *pro rata* than from Mount Vernon to the the same place. It is understood that the Mansfield and Newark railroad is leased to individuals living in Buffalo, for the period of three years, who, of course, have no interest in the permanent welfare of the road, and no interest in common with the people of the State."

"It is said that these lessees are making preparations for doing a large business in the *purchase of produce* through the agency of some foreign banks of doubtful permaneney; the result of which will be that the business must be diverted from the canal, the revenues of the State suffer great diminution—honest dealers in produce be broken down by an unnatural competition, and the people in the end be probably *swindled* out of their hard earnings by a worthless currency."

In view of this *tremendous crisis* the report goes on to say—

"There can be no doubt but that the time has come when the State should exert its sovereign power and protect its revenues from being destroyed by these railroad companies. It owes this to the people, who are already heavily taxed to pay interests upon debts contracted to make these canals; and more especially should this be done when the new constitution requires yearly appropriations to pay off the principal of this debt. We are not among those who believe that these companies can wrap themselves up in what is called "vested rights," and defy the sovereignty of the State. *There are many ways in which they can be reached. Let the State repeal all criminal laws which protect these roads from depredations, and the companies would soon sue for mercy!* * *

"As guardians, however, of the canals, and made such by the people, who have a deep interest in their protection, we feel bound to guard carefully the avenues leading to their ruin, and to use all the powers conferred upon us for their protection. If these railroads would be content with doing their legitimate business, both they and the canals might prosper, but unfortunately they are owned and controlled mostly by foreign capitalists, who feel no sympathy with the people of the State or prosperity, and are guided only by the hope of large dividends. Against the efforts of these capitalists the State should early erect barricades, and carefully guard them, or it will soon find, when too late, the public works of the State entirely at their mercy.

By order of the board,

ALEX. P. MILLER, Prest."

Here is laid bare a horrible conspiracy "against the rights of the people," and one that should be met with the most condign punishment of the guilty authors. It is enough to thrill the veins of every man in Ohio, and to drive all to the most energetic measures to repel the attack. Just think of the enormity of the charge. Foreign capitalists have gone to Ohio, have built railroads at great cost, and now offer to carry the produce of the farmers to market at one half the former, and at rates less than the actual cost of transportation!!! If the farmers will not accept this offer, these crafty and designing capitalists go even so far as to buy up the produce for the sake of losing money in the carriage of it!

But these "swindling capitalists" are to be tolerated no longer. The canal board have found the remedy. They recommend that the State *repeal all criminal laws which protect railroads from depredations*, so that a man may steal from them, blow up their track, and burn down their bridges and depots with impunity!

We send our paper to a good many European capitalists, who look with great favor upon the Ohio railroads, and we should be unwilling to present to them such a specimen of American officials, did we not feel certain that the scoundrel who could submit to the Legislature a proposition to outlaw such a mighty interest as are the railroads of Ohio, embracing some 2,800 miles of line, and an expenditure of twenty or thirty millions of dollars, would be regarded the world over as an exception to the general rule of humanity. Such knavery carries its own antidote, and is as harmless in Europe as in Ohio. It defeats the object that prompted it. If a collision must come between the railroads and canals of Ohio, the former will number ten supporters, to one of the latter. The railroads make one common interest, against which the canals can make no headway. Their hostility is the last thing that the canal board should provoke. Railroads, as far as their peculiar interests are concerned, speak with a potent voice, and are all powerful in the State to secure the privileges they have a right to claim.

Ohio.

Columbus, Piqua and Indiana Railroad.—We have in hand the first annual report of the directors of this road, submitted to a meeting of the stockholders held at Urbana on the 17th ult., from which we extract the following account of the operations of the company up to that time.

The organization of this company took place February 17, 1850, and the work of construction commenced the June following.

The estimated cost of the road up to the equipment is estimated at $10,575 per mile. As is well known, the road occupies a remarkably favorable route, and is one of the easiest construction in the West. Although it passes through a thickly settled portion of Ohio, its cost is but slightly increased on that account; the lands needed by the company, being, as a general thing, a gratuity to the road.

The amount subscribed to the capital stock of the company is not far from $600,000.

The company have purchased the iron for the first division of the road extending from Columbus to Urbana, a distance of 46 miles, to arrive during the coming season of navigation. They have also purchased two locomotive engines. In these purchases a large amount of the company's bonds have been disposed of. The fact, that in the present state of the works, the bonds of the company have found a steady market, shows the high estimation in which the project is held by the public.

The Columbus, Piqua and Indiana road is one of the great lines of road extending from Columbus to the western boundary of the State, in the direction of Indianapolis. It will be one of the greatest routes between these two important towns. It will come in for its portion of through travel going *east and west.* The road will probably connect with the Indianapolis and Bellefontaine road at Union, which is upon the boundary between the two States, instead of Winchester as has been contemplated.

The affairs of the company are in the hands of capable and energetic men, who are pushing forward the work of construction with vigor. The project stands well in public estimation. This has enabled the company to complete some very favorable contracts, by use of its credits. It is intended to complete the first division of the road, during the present year, and the whole by January 1, 1854.

The following gentlemen constitute the board of directors for the present year.

Col. Sam'l Medary, R. E. Neil and Wm. Dennison, of Columbus; J. R. Hilliard, of Madison Co; James Fullington, of Union Co; E. Martin, I. A. Bean, and S. G. Breecount, of Champaign Co; I. Dukeminier, R. Walkup, M. G. Mitchell, and Dr. M. R. Shellabarger, of Miami Co; S. M. Raisbeck, of New York.

The President of the company is M. G. Mitchell, Esq., of Piqua; Chief Engineer, A. G. Connover, Esq.

Ross and Rutters' Patent Railroad Track Sprinkler or Dust Layer.

This is a very ingenious and simple contrivance, for laying the dust on railroads, moistening the atmosphere the cars move in, reducing the friction on the rails and wheels, preventing the boxes from heating, and the bearings from wearing.

It keeps the dust from the joints of the frame of the car, and prevents them from wearing.

Every experienced railroad man is well aware that it requires less power to move a train of cars on a *wet* rail than it does on a dry one. The valve conducting the water to the track is under the immediate control of the engine-man.

It can be so connected with the throttle valve lever, that when the engine starts the water begins to flow, and when it is shut off, the water stops; thus giving a dry rail to apply the brakes on. The machine is placed next behind the tenders; and the discharging apparatus can be connected to the main tender, if the latter be large enough.

The dust is laid so effectually by this machine, as to give no annoyance to the passengers whatever, and where one has been used the passengers will not submit to its being taken off.

☞ The labor of cleaning cars, and the wear upon the paint and varnish is *greatly diminished*. It is in fact an indispensable machine for every railroad.

Testimonials of its comfort may be had from the patrons, on the Providence and Boston, and the Providence and Stonington railroads, where the sprinkler has been satisfactorily used.

Indiana.

Peru and Indianapolis Railroad Co.—This flourishing company has been re-organized, and has elected Hon. E. W. H. Ellis, the present Auditor of the State of Indiana, as its President. It has adopted the T rail for the entire line, and looks forward to an early completion of the work. The President is now in this city for the purpose of negotiating a loan to secure this end. We copy the following exhibit, and invite to it the attention of our capitalists, and of all who take an interest in developing the resources of the great west.

The charter incorporating the company, was granted by the Indiana Legislature at their session of 1845–6, and received the approval of the Governor on the 19th January, 1846. The company was organized in July, 1847, and an experimental survey of the route was made in September and October of the same year. The line from Noblesville to Indianapolis was permanently located in July, 1848, and a letting of the clearing, grading and bridging of the same was made in the succeeding August, and of the timber superstructure in January, 1849. This division of the road, embracing 22½ miles, was completed on the 10th of March, 1851, and has since been in operation under an arrangement with the Madison and Indianapolis railroad company.

The total cost of this division, including right of way, engineering, turn-tables, offices, rents, car, wood and engine houses, directory, officers' salaries, and all other incidental expenses connected with or resulting from the construction of such portion of said road is $128,446 53, or $5,708 73 per mile.

From Noblesville to Peru, a distance of 50 miles, the road was permanently located in June and July, 1849, the right of way secured, and the grubbing and clearing of the same were let in June, 1850. This contract has been fulfilled, and the road grubbed and cleared the whole distance.—Quite a portion of the grading is also done, and the work is yet in progress, as will be seen by the following statement:

Total amount of embankment, c. yds.	369,495
" of excavation, c. yds.	173,022
Amount of embankment done	110,787
" excavation done	10,639
" embankment, c. yds., yet to do.	258,718
" excavation, " "	162,383

The piers and abutments for the White river bridge are about half done.

The following is an estimate for this portion of the work, made when it was in contemplation by the board to put down the flat bar.

COST OF DIVISION OF ROAD FROM NOBLESVILLE TO PERU.

Length 50 miles 4,500 feet.

Grubbing and clearing—*absolute cost*	$12,534 56
Grading as estimated on final location.	55,658 75
Bridging as estimated on original survey	63,053 80
Superstructure—timber as estimated—*sawed track*	55,550 00
Iron at 2,000 per mile	101,400 00
Add for all incidental and contingencies 10 per cent	28,819 71
Total	317,016 82

The experience of a single year has satisfied the board of directors of the imperative necessity of adopting the T rail for a work of this importance, and they have accordingly made an order to this effect with great unanimity. The estimated cost of the road under this arrangement is as follows:

For superstructure	$53,000 00
Cost of T rail	204,000 00
Cost of road from Indianapolis to Noblesville	128,446 53
Bridging as estimated in original survey	63,053 80
Grubbing and clearing 50 miles	12,534 56
Grading as estimated in final location.	55,658 75
Making	516,693 64

or $7,126 per mile; thus, in cheapness of construction, challenging competition with any road in the west.

This unprecedented cheapness is owing to the level nature of the country, the abundance of timber, and the fact that there are no streams of any magnitude to be crossed in the whole route.

STOCK ACCOUNT.

The last official statement of the stock account shows as follows:

County Subscriptions.

Miami county	$40,000
Howard county	15,000
Tipton county	2,500
Hamilton county	40,000
Individual subscriptions	109,066
Total stock account	206,566

BUSINESS OF THE ROAD.

The business of the 22½ miles of road completed, since 10th March, 1851, to March 1, 1852, has been as follows:—

From opening of road to September 1, 1851	5,309 61
From September 1, 1851 to January 31, 1852	4,830 09
From January 31, 1852, to March 1, 1852	1,312 00
Total	$11,451 70

The number of passengers who have passed over the road within the last month is 1,250 and for the entire year, 16,175.

This exhibit of the business of the road, running but 22½ miles and without forming any connections north, is sufficiently gratifying, but the future prospects of the road are not to be judged from this beginning. Commencing in Marion county at the capital of the State, it runs northward through Hamilton, Tipton and Howard counties, to Peru, the county seat of Miami, there forming a connection with the Wabash and Erie canal.

The aggregate valuation of taxable property in these counties, and the increase for the past year, are as follows:—

	Valuation of 1851.	Increase over 1850.
Marion	$7,620,070	3,157,790
Hamilton	2,642,827	1,052,927
Tipton	478,419	204,178
Howard	576 311	288,185
Miami	1,532 863	555,593
Total	$12,850,490	$5,285,673

This is the valuation for tax purposes, whereas the real valuation is more than double this statement. In addition it may be stated that a very small portion only of the lands in Tipton and Howard counties are yet taxable. It may be asserted, without fear of contradiction, that no road in the west, for its length, will be more liberally sustained by its local business, but its principal importance is to be derived from its

Railroad and Canal Connections.

The city of Indianapolis is THE railroad city of the west. From this point roads are already finished or in progress as follows:

The Bellefontaine road, pointing northeasterly, to Bellefontaine, Ohio, 45 miles completed.

The Richmond road, directly east to Dayton, Ohio, under contract.

The Lawrenceburgh road, southeasterly to Cincinnati, under contract, and 20 miles completed.

The Madison road, south 85 miles to the Ohio river, completed.

The Terre Haute road, southwesterly to the Wabash river, 70 miles completed; and thence thro' the centre of Illinois to St. Louis.

The Lafayette road, northwesterly to the Wabash, all under contract.

The Peru and Indianapolis road, north 70 miles to the Wabash river and Wabash and Erie canal, 22½ miles completed.

Of all these roads the last is the most free from competition, and of the cheapest construction. At Peru it connects with the Elkhart, Kosciusko and Miami road, which is to be pushed vigorously to form a connection at Goshen, with the great trunk railroad from Toledo to Chicago.

By its junction with the canal at Peru it will open the most direct, and cheapest route for the transportation of articles of produce and merchandize to and from Indianapolis and the eastern markets. From New York to Peru is a water communication the entire distance, leaving but 70 miles of railroad transportation to reach the centre of Indiana; while from the city of Louisville to New York, over this route, there is a railroad transportation of only 155 miles.

It must be evident to all, that a large amount of business must be done over this route, and that as soon as completed, it will occupy a position among the most favored thoroughfares in the West. It is the design of the board of directors to make it in construction, material, and every appointment, a road of the first class, which will be a credit to the State, as well as a matter of interest to its stockholders, and of benefit to the commercial, agricultural and travelling community.

The interest felt in the work by the Legislature of Indiana may be seen in the liberal provisions of its charter and amendments, and in the joint resolution enacted for its benefit as early as 1849. It is regarded by all as a most important connecting link between the Ohio river and the lakes, and as such is deservedly an object of general interest.

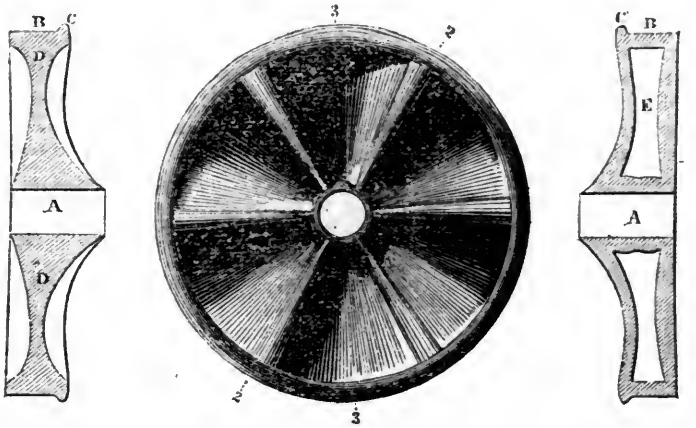
Every product of central Indiana seeks an eastern market. Its route now is to the Ohio river by railroad—thence to Cincinnati by the river—thence to Cleveland by railroad, passing over the whole breadth of the State, and thence by lake and canal to New York. This circuitous and expensive route reduces the profits of the producer to the lowest possible point. All this will be avoided by the Peru and Indianapolis road. Wheat will then be transported to Toledo for 15 cents per bushel, corn for 10 cents and other articles in proportion. All the heavy articles of merchandize from eastern markets will come over this route, and thus will an entire revolution in these branches of transportation be effected.

E. W. H. ELLIS,
President of P. and I. R. R. Co.

Indianapolis, March 5, 1852.

Woodruff Railroad Wheel.

Figure 3. Figure 1. Figure 2.



The accompanying engravings represent the patented Wheel of Mr. Horace W. Woodruff, of Watertown, Jefferson Co., N. Y.

Figure 1 is a face view of the wheel; fig. 2 is a section taken at the line 2 2 of fig. 1, and passing through the hollow plate; fig. 3 is a like section taken through the solid plate 3, of fig. 1. The same letters refer to like parts.

The nature of the invention consists in casting the wheel in one piece, with a chilled rim connected with a solid undivided hub by means of a plate, which, at certain parts, is single, and solid in the direction of the radii, acting in the manner of radial spikes, presenting curved lines, in concentric lines, on both faces, from hub to rim, and the whole constituting one casting. A is the hub with a central hole to receive the axle; B is the rim with a flange, C, as usual. The wheel is so moulded that its two faces are corrugated as represented in the engraving. The parts, D D, are solid, so that imaginary radial lines from the hub to the rim, as at D, will pass through the solid metal. At these parts the external surface is curved on both faces of the wheel, extending from the ends of the hub to the edges of the rim, or nearly so, as at D D, fig. 3. The flange side of the wheel extends outside of the plane of that face of the rim, and on the other face it coincides, or nearly so, with the plane of the rim; E are spaces between the solid parts, D; they are cast on cores, and form two plates between any two of the solid parts. The two plates gradually spread out from each other from each solid part or spoke. These plates are, therefore bent or waved in lines concentric with the hub and rim, and the plates on the inner side are bent from hub to rim. On the outer face of the wheel the plates are partly bent and partly straight. The rim and hub are connected together by a plate, which, at certain parts, is single and solid in the direction of the radii, forming what may be termed radial spokes, and at other and intermediate parts double, and constituting hollow spokes. It is therefore a compound plate, giving support to the entire periphery of the rim, and acting as a brace to the ends of the hub and edges of the rim, to resist lateral strains; and the solid parts of the plate, constituting the solid spokes, give the required support in the direction of the radius; this support, being aided by the double parts of the plate (which are bent from hub to rim and in concentric lines,) can yield to the unequal contraction, and thus enable the solid parts to resist the strain without breaking, which is due to unequal contraction. The claim is for "casting a railroad car wheel with a chilled rim and solid undivided hub, connected by means of a plate which is single and solid at certain parts, so that imaginary radial lines, from hub to rim, will pass through the said solid parts, and be double and bent in opposite directions, between the single and solid parts, and wholly or partly from hub to rim, the whole constituting one casting as specified.

More information may be obtained by letter addressed to Mr. Woodruff, at Watertown, N. Y., as above.

Commercial Statistics of Great Britain.

The information collected by Mr. Braithwaite Poole for his valuable work, certainly exhibits most surprising results. Pitt and Canning stated the yearly production of our agricultural and manufacturing pursuits at an amount equal to the national debt; but nobody knew how they made it out. The summary of these statistics, however, prove that our great statesmen were right; and the comparisons are highly interesting.

Mr. Poole shows that the railways have cost £240,000,000; the canals, £26,000,000; and the docks, £30,000,000.

Our mercantile marine consists of 35 000 vessels, 4,300,000 tons, with 240,000 men; and one vessel is lost on an average every tide.

Our Navy consists of 585 vessels, 570,000 tons, and 48,000 men. Yachts 520, and 23,000 tons.

The agricultural produce, of milk, meat, eggs, butter, and cheese, 3,000,000 tons, and £50,000,000.

The ancient Britons knew only six primitive ores, from which metals were produced; whereas the present scientific generation use fifty. The aggregate yield of minerals in this country is equivalent in value to about £25,000,000, annually.

The ale, wine, and spirits consumed annually exceed 3,300,000 tons, and £54,000,000; whilst sugar, tea, and coffee scarcely reach 450,000 tons, and £27,000,000.

Our fisheries net £6,000,000 annually.

In manufactures, the cotton, woolen, linen, and silk altogether amount to 420,000 tons, and £95,000,000; whilst hardwares exhibit 360,000 tons, and £20,000,000; in addition to which 1,250 tons of pins and needles are made yearly, worth £1,100,000.

Earthenware, 160,000 tons, £3,500,000; glass, 58,000 tons, £1,680,000.

The Gazette shows an average of four bankrupts daily throughout England and Wales.

In fact, the whole book is full of the best information that could be collected, and should be possessed by all interested in scientific, literary, or commercial pursuits.—*London Mining Journal.*

Commerce of the Lake Ports.

The value of the articles of flour, wheat, corn and wool received at the port of Buffalo from the west, during the year 1851, exceeds fourteen millions of dollars.

The amount of each of these articles was as follows:—

Flour, bbls	1,323,784	Value	4,883,743
Wheat, bu	4,212,979	"	2,947,085
Corn, bu	6,146,519	"	2,755,545
Wool, lbs	12,507,421	"	3,752,226
Total			$14,338,599

The total imports from several lake ports were as follows:—

Toledo, tons	120,909
Chicago	109,315
Cleveland	99,220
Detroit	77,881
Sandusky	48,747
Erie	42,454

The estimated value of al the property received at the port of Buffalo from the west during the year is $35,000,000.

To Increase the Illuminating Power of Gas.

In one of your late numbers, you allude to a recent patent for improvements in the manufacture of gas, the object of which is to render the gasses resulting from the decomposition of water suitable for lighting purposes, by passing them over cannel coal in the process of distillation. I witnessed some experiments of this nature with the gasses obtained from wood in the manufacture of pyroligneous acid, and have myself, for some time past, been making a series, using several descriptions of slightly illuminating gas, but principally those given out by peat and the lowest quality of coals, and the results are highly interesting. I find that a certain volume of such gas when passed through a heated retort containing Lancashire cannel coal, becomes of much greater illuminating power than the same volume of such gas mechanically mixed in a gasholder with the gas given out by the cannel; indeed, some of my experiments show this increase to be at least 50 per cent. when our common coal gas is so treated, as 10,000 feet of it may be passed through the retorts containing a ton of Lancashire cannel in the process of distillation, and the result will be 20,000 feet of gas equal in quality to that given out by the cannel alone, and it incurs no perceptible deterioration by being retained in a gas holder for several days.—C. C.

Cincinnati and Indianapolis Railroad.

The travel between this city and Indianapolis now takes a boat here for Madison, and thence by railway to Indianapolis. It takes a day to perform this journey.

We understand that an arrangement is in progress to connect this city with Indianapolis by railway as early as the 1st of October, 1852, so that the travel may pass from city to city in nine hours without change of conveyance. O. H. Smith's Bellefontaine road is to be finished and run by that time from Indianapolis to Union, on the State-line Union is eleven miles from Greenville, over a level country, and Winchester but little farther. The railway from Dayton to Greenville will be finished and run by the 1st of May, and if the line from thence to Winchester or Union can be made by the 1st of October, lines of railway will take the travel from this by Dayton, Greenville and Smith's road to Indianapolis. The Greenville company can provide the iron, and accomplish the work, provided Cincinnati and Dayton will raise each a small sum to grade and bridge this short piece of road, and this, it is supposed, they will at once do, by the purchase at a profitable rate of investment, the convertible 7 per cent bonds of the company, or by subscriptions to the stock of the company. This little piece of road will not only open a connection by railway with Indianapolis, Terre Haute, Lafayette, etc., much earlier than will be done by any other line, but will open the way for an early extension of railway on a very direct line to Fort Wayne, and all northeastern Indiana. The im-

portance of this to the business of the city will be obvious to every man of business.

Railroads in the Provinces.

Below we give an extract from the speech of Mr. Chandler, of New Brunswick, recently delivered before the House of Assembly of the Province upon the subject of the railroad from Halifax to Quebec:—

In the first place, Mr. Chandler stated that the extent of railway which New Brunswick would be called upon to build, under what is now emphatically termed the "final proposition," is 270 miles, in place of 412 miles, as contemplated under the plan of two lines—the Northern railway and the European and North American railway. He assumes that these 270 miles, between the Bend of Petticodiac and the Grand Falls of the St. John, would not, at the utmost, cost more than £6,000 currency per mile; and he read documents from very competent persons to show that it would not probably cost more than £5,000 per mile. Still, taking the larger sum, the cost of these 270 miles would be £1,620,000 currency. The interest on this sum, at 3½ per cent, would be £56,700 per annum. As the road, built with money borrowed at 3½ per cent, would be the property of New Brunswick, the mails would be carried over it free of all charge, and this would be equal to £3,000 per annum. The British government now pays to the American government the sum of £28,000 sterling per annum, for the transport of the English mails through the United States to and from Canada; but as these mails would go over British territory so soon as the Halifax and Quebec railway was built, the New Brunswick proportion of this mail-pay would be about £15,000 currency per annum. Deducting these mail allowances from the interest on the cost of the railway, the whole liability of the Province, *even if the railway only paid working expenses*, would not exceed £38,700 currency per annum.

This amount, as contrasted with the large sums for which the Province is already pledged on account of railways, will surprise many persons, as we will shortly show.

The Legislature, by an almost unanimous vote of both branches, stands pledged to grant £20,000 per annum, for 20 years, to the Halifax and Quebec railroad by the North Shore route. The Province has agreed to subscribe for stock in the European and North American railway to the extent of £300,000 currency, in debentures bearing six per cent interest, thus incurring a further liability of £18,000 currency per annum. By one of the acts now in force for facilitating the construction of the Woodstock section of the St. Andrews and Quebec railway, the province has agreed to pay interest on £100,0000, at 6 per cent per annum, for 20 years, after that section is completed—amounting to another £6,000 per annum. By the act of last session, now also in force, the Province agreed to subscribe for stock in this same railway to the extent of £60,000 currency, payable in debentures bearing interest at 6 per cent, thus incurring a further liability of £3,600 per annum! And besides these great money liabilities, the Province has offered to give to the Halifax and Quebec railway, by the northern route, two millions of acres of land—to the European and North American railway, 500,000 acres—and to the St. Andrews and Quebec railway, 280,000 acres—in all, the enormous extent of 2,780,000 acres of the best land in the Province!

The line of railway now proposed will absorb the Halifax and Quebec railway, the European and North American railway, and the St. Andrews and Quebec railway, which combined will form but one continuous line. The large sums already offered to be given in aid of these several lines will not therefore be needed, and the money liability of the Province will thus be greatly reduced. So far from incurring a greater liability by the "final proposition," this Province will be actually relieved, because it will have its public lands freed from the present claims upon them, to the extent of 2,780,000 acres; and it will have the sole ownership of the railway, with all its earnings and profits, to aid in paying off the debts contracted on its account.

American Manufactures at the World's Fair.

The Philadelphia Price Current states that Messrs. Morris & Jones & Co., of Philadelphia, the well known iron manufacturers have received a first class medal for the specimens of bar and sheet iron exhibited by them at the World's Fair. The various articles deposited by them attracted universal attention during the progress of the Fair, and were noticed in terms of high commendation.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. Ray, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To Mr. F. M. Ray, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. Ray, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

Hudson River R.R. Office, 68 Wareen St.
New York, March 5, 1852.

F. M. Ray, Esq.

Dear Sir: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. Oliver H. Lee,
Late Sup't Hudson River Railroad.

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.
THOS. H. CALLAWAY, Prest.
Railroad Office, Athens, Tenn.,
1st March, 1852.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.
Bosto November 29th. 1m

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by
WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me. and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.



The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.



The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed.

F. M. RAY.

New York, January 1, 1852.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 13] SATURDAY, MARCH 27, 1852 [WHOLE No. 832, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

James River and Kanawha Co. 193
Rock Island and Chicago Railroad 195
Columbus and Xenia Railroad 196
Cleveland and Pittsburg Railroad 196
Travel on the Lakes 198
Ohio County Bonds 198
Massachusetts Railroad Statistics 198
Syracuse and Binghamton Railroad 199
Raleigh and Gaston Railroad 199
Galena and Chicago Railroad 199
Roanoke Valley Railroad 199
Ohio and Indiana Railroad 200
Duryee, Forsyth & Co's Scales 200
Stock and Money Market 200
Railroad Law in Tennessee 202
Eaton and Hamilton Railroad 203
Railroad between Lake Michigan and the Gulf of Mexico 204
Memphis and Charleston Railroad 204
Cumberland Valley Railroad 205
Hillsboro' Railroad 205
Ohio and Pennsylvania Railroad 205

American Railroad Journal.

Saturday, March 27, 1852.

James River and Kanawha Canal.

Continued from Page 180.

COST OF TRANSPORTATION.

Actual Cost (approximately) per ton per mile of Transporting Freight on the following Railroads in 1850.

MASSACHUSETTS.

Western ..... 1·561 cents.
Boston and Worcester* ..... 1·720
Boston and Maine ..... 2·558
Fitchburg (repairs of road not kept up sufficiently) ..... 1·140
Boston and Providence ..... 2·206
Boston and Lowell ..... 2·531
Old Colony ..... 2·967

NEW YORK.

Albany and Schenectady, 4 cents, exclusive of cost of iron, repairs of road, depreciation of engines and machinery, depreciation of freight cars, and depreciation of passenger cars.

Auburn and Rochester, 1 cent and 8 mills, with the same omission as above.

Hudson and Berkshire, 2·3 cents, with the same omission as above.

Hudson River railroad, 4 cents, with the same omission as above.

Northern railroad, 4·3 cents, with the same omission as above.

Oswego and Syracuse, 2·4 cents, with the same omission as above.

Rochester and Syracuse, 1·6 cents, with the same omission as above.

Utica and Schenectady, 1·8 cents, with the same omission as above.*

New York and New Haven, 3·1 cents, with the same omission as above.

Tonawanda, 4 cents, cost of iron omitted.

GEORGIA.

Georgia, 2·218 cents.

VIRGINIA.

Petersburg railroad, 3 7 cents on plate rail 2½x½; 2·62 cents on edge rail.

By an examination of the table it will be observed that the cost of transportation per ton per mile varies between the extremes of 1·14 cents and 4·3 cents, and that the average cost is 2·58 cents.

In speaking of railroad transportation as a general proposition, which extreme shall we take? Or shall we take the mean? I shall take neither, for neither would be correct as an assignable quantity, nor would any figure in such a sense be reliable. I can say this much, however, that the table does not sustain the proposition stated in the report of the committee of stockholders: "That the experience of our country has pretty well established the fact, that the cost of railroad transportation does not exceed one cent per ton per mile on well constructed railroads." And I will here take occasion to say, that so far as my inquiries extend, (and they have been carried into every quarter of the country where railroads are to be found) there is not a railroad in the country, unless it may be the Reading railroad, whose transportation does not exceed a cent per ton per mile; and in Massachusetts it is on the increase. I have before me a letter from a friend, an engineer of distinction in that state, who says: "I find that many, if not all of those who have charge of our railroads, put the cost of transporting freight much higher than they used to. They find it necessary to allow much more for depreciation of stock of all kinds, including road, cars, stations, etc., etc., than they did formerly."

Now in deciding upon and selecting from the table a rate which will be applicable to the portage railroad from Covington to the Ohio, care must be taken to select that road which bears the nearest resemblance to it. I am unable to find one which corresponds in grade or in any leading feature. Mr. Jonathan Knight, in his review of the report of the chief engineer of the Baltimore and Ohio railroad, dated December 13th, 1845, says that a charge of four cents per ton per mile would be low upon a railroad crossing the Allegheny.

In the first annual report of the Lynchburg and Tennessee railroad company, now the Virginia and Tennessee railroad company, which contains the memorial of the stockholders to the general assembly, the president's report, and the reports and estimates of the engineers, all setting forth the advantages and benefits to result from the construction of the road to induce a subscription on the part of the State, (see house document No. 3, session 1848–9) will be found the following paragraph, p. 21, on the subject of the increase of the value of lands by cheapening transportation:

"By it the least valuable agricultural products will pay their transit expenses to an eastern market, and yield a liberal profit to the farmer in addition; and thus will those lands, now of little value, be sought after and cultivated to an extent scarcely to be estimated at this time." For instance: "By reference to the reports of the following railroad companies, to wit: the Boston and Lowell, Boston and Providence, Boston and Worcester, Eastern, Georgia and Baltimore and Ohio, it will be seen that the average charge per ton per mile for freight is 4 cents and 9 mills." And these rates of freight were looked to on the Virginia and Tennessee railroad as the means of accomplishing and bringing about the promised benefits of the road to the people, (which, to a great extent, I have no doubt will be realised,) coupled with the opinion that "the travel, such as the world has not seen, will pass over the road."

By an examination of tables A, 1, 2, and 3, hereto annexed, it will be seen that the average rate for transporting freight per ton per mile on seven northern railroads, for the full distance, is 2·70 cents; for half distance, 3·65 cents; for the full and half distance combined, 3·17 cents.* That the averages

* The cost of transporting freight per ton per mile on the Boston and Worcester railroad, for the year ending November 30th, 1851, was 2·1 cents. See the 22d annual report of the president of the company. And the cost of transportation on other roads has also increased, as I am informed.

* Exclusive of canal tolls, which I have estimated at 1 cent per ton per mile. The cost, including canal tolls, would be 2·8 cents per ton per mile.

I would here observe that all railroad companies in New York are now exempt, by law, from the payment of the canal toll.

* The rates on the northern railroads are generally considered below remunerative prices, as will appear from the following extracts from the proceedings of the convention of the northern lines of railway held at Boston in December, 1850 and January, 1851. In that convention, on the resolution "That it is expedient to raise the price for transportation both of passengers and freight"—

"Mr. Whitemore, of the Vermont and Massachusetts railroad, said that, so far as concerned the railroads commencing fifty miles or more from Boston, they *must* either raise their rates on freight and passengers, or do something else to obtain an income, or else they must die. It was well known that the rates on freight throughout the country, traversed by railroads, were very much less now than before they were built; less than the roads

on the Baltimore and Ohio railroad are respectively as above for the length, half length, and length and half length combined, 2·85, 3·43, 3·39; and for eleven southern railroads the averages on the like principle are 4·31, 5·65 and 4·99 cents. With this weight of authority before me, I could not, if my judgment and experience were in conflict with it, place the charge price for freight on the railroad from Covington to the Ohio less than four cents per ton per mile.

The next question is, what portion of this should be charged to cost? In my judgment, it would not be safe to place on the side of expenditure a less sum than 2½ cents per ton per mile. By referring back to the quotations from the report of the engineer of the State of New York, it will be noticed, he says, that on the Baltimore and Ohio railroad "their ordinary traffic cost them over 2½ cents per ton per mile." My own judgment is, from a comparison of the cost of transportation on other roads, with all the circumstances which influences that cost, that 2½ cents per ton per mile cannot be considered as much out of the way.

The account would then stand thus:

Receipts for transporting one ton from Covington to the Ohio, 228 miles, omitting fractions, at 4 cents per mile	$9 12
Expenditure at the rate of 2½ cents per ton per mile	5 70

I shall now pass from this subject for the present, and give some facts in relation to canal transportation.

The cost of transportation on a canal is made up of two items: that of *freight* paid to the carrier, and that of *toll* paid to the company for the use of its work.

On the 78th page of a report on the Chesapeake and Ohio canal, made by William H. Swift, president of the Western railroad, Massachusetts, and Nathan Hale, president of the Boston and Worcester railroad, (which report was drawn up at the request of Thomas W. Ward, Esq., agent for the Messrs. Baring, Brothers & Co., of London,) a detailed estimate of the actual cost of transportation on that canal will be found prepared by Mr. Fisk, the chief engineer of the canal. The result of which is, that "the actual cost of transporting a ton of coal from Cumberland to Georgetown, exclusive of tolls, will be 78·8 cents, which for the distance between the two places, 184·4 miles, is a small fraction over 4½ mills per ton per mile." This estimate is made under the supposition that the boat will be only loaded one way; that is, that there will be no back loading, and that the captain is not the owner of the boat. Mr. Fisk estimates "the cost to the canal company from the carriage of a ton of coal over its work at 5 cents." This would make the actual cost of transportation 86·6 cents, including *freight* and *toll*.

Allowing $1 per ton between Cumberland and Georgetown, 184·4 miles, would give a profit to the carrier of nearly 27½ per cent, after providing for the perpetuation of the boats, mules, interest on capital, investment, etc.*

The charge for toll is at the discretion of the company, within the limits prescribed by the charter, and is always in proportion to the amount of tonnage, and that is materially affected by the length of the line. For the rates of toll on the Ohio, Pennsylvania and New York canals, I beg leave to refer to table B, hereto appended, taken from the report of the committee of stockholders; the *actual cost* of transportation on the several canals being, as I am informed, from 3½ to 4½ mills per ton per mile, and the charges from 5 to 8 mills per ton per mile.

The actual cost of transportation on the Erie canal, that is the present canal, is 3½ mills per ton per mile; the cost on the enlarged canal will be 2 mills per ton per mile. (See Charles S. Olmstead's report, page 44, rep. of the state engineer on the canals of the state of New York before referred to.) The rates of freight and toll combined on the Erie canal in 1850, were 1·56 per ton per mile, making the total charges $6,484 545. (See state engineer's report, p. 15.) Of this amount, the state received for tolls $2,918,771, and the remainder, went to the carriers. Page 14, same report, estimates the toll and freight on the enlarged canal at 7 mills per ton per mile, viz: 3 mills for toll and 4 mills for freight. The tolls, it is estimated, will amount to $3,000,000, or more than 10 per cent on the cost of the canal, and the rate of freight amply remunerates the carrier.* On canals, local circumstances affect general results, though not in the same degree as on railroads. Relative results, and not absolute, are to be considered on the one as well as on the other. But canals have the advantage over railroads in this: that with the exception of the wooden structures, such as the lock-

---

"Mr. Whittemore, the president of the company, gave it as his settled conviction that the railroads of New England must combine to raise the prices on all the roads in order to save themselves. If the prices were just doubled, the interior railroads would pay the stockholders about six per cent."

could afford to receive, and much less than the freight could afford to pay. Change was not so much needed as to roads terminating in Boston, as in regard to those in the remote country towns; but it was clear to him that, at the present prices, the distant roads must, as a class, be ruined. The result of such a change might be thought uncertain; but without such change there could be no dividends. He was in hopes that it would be one effect of the present convention to declare the existing rates on freight to be far too low. Doubtless the newspapers always will advocate 'low' freights and low fares, and these might do well enough for roads near Boston. Some roads could afford a different policy from others. It was well known that fares had been recently raised on the Fitchburg road, and he had heard little complaint; he thought this a safe precedent. He would vote for a rise, even should odium follow. It was time to inform the public that railroad business could not be done at the present prices. * * * * Something must be done for the suffering roads. He could speak for one road, on which the prices paid for a very large department of business did not give a 'living.' Roads terminating in Boston, like the Lowell, and Fitchburg, could do business on lower terms than interior roads. * * Directors, presidents, the press, and of course the public, were all in favor of low, lower, lowest. It was hard to say who began this, but it was clear where it would end, namely, in the ruin of railroad business. It was time to stop; but how should we begin? The winter was a good time to begin, and a great blessing to railroads, shutting up water communication, and giving some profits on transportation for at least a third of the year. We ought to take advantage of this."

"Mr. Fairbanks, of the Connecticut and Passumpsic Rivers railroad, supposed the resolution only intended to elicit discussion. The two questions, as to freight and passengers, should be separately considered. Passengers might so increase in numbers under low fares as to avoid loss. Not so with freights. Some freights would decrease in amount if prices were raised, but most would be but little affected. With certain competing roads —roads competing with water communication— there might be difficulty; freight might be lost at too high a rate. But in local districts, without such competition, where there was a certain am't of products to go to market, and a certain amount of articles to go from the city for consumption, there would be no loss by a rate decidedly higher than the present, provided it were lower than the price paid before railroads were introduced."

"Mr. Thompson said that on the Sullivan railroad they were literally doing business for nothing. He was for changing the rates with reference to freight and not to passengers. Freight rates should be increased and very considerably."

"Judge Follett, of the Rutland and Burlington railroad, thought the tariff might be revised in regard to many towns on the roads. In establishing the rates for through freight, it was understood that towns on the road should have their freight carried at proportionate rates; and he instanced Ludlow as a point where there might be a revision in prices, and many other towns might pay more. Local freight paid about five cents a mile generally."

Since the first publication of this report I am in receipt of the proceedings of the annual meeting of the Vermont and Massachusetts railroad company, held on the 11th February, 1852, in which "Mr.

* "Assuming that the year of navigation will be 300 days, that animal power will be used, as at present, for the tracking of boats, (for which purpose mules are considered on this canal preferable in every respect to horses,) that the average rate of travelling, including the time consumed in passing locks, will be 30 miles per day, that 17 round trips will be made each year, and that there will be no return load, and I estimate as follows:

First cost of a boat and its fixtures	1,000 00	
Add for the time required for repairs, which may generally be made during that portion of the year when the navigation is suspended, but for which notwithstanding I will allow one-tenth; in other words, that 11 boats are required to keep 10 running	100 00	
		1,100 00
First cost of 3 mules	240 00	
Add for occasional lost time from accidents, etc., one-tenth; in other words, say 11 mules are required to keep 10 at work	24 00	
		264 00
		$1,364 00
The interest on this sum per annum is		81 84
The depreciation of boats and mules, assuming that they will last (taking into consideration the occasional loss of a mule) 10 years, will be per annum		136 40
The annual repairs of the boat and fixtures including the additional one-tenth, say		
8 per cent on their first cost		88 00
The cost of feeding and shoeing the mules, and other expenses attending them and their harness, say $80 each; to which add one-tenth for the reason above given, making $88, which for 3 mules, amounts to		264 00
Wages of a captain per month	18 00	
Wages of a bowsman and towboy	18 00	
Board of the three per month	18 00	
	54 00	
Which for 10 months amounts to		540 00
Tow ropes, snubbing and other ropes per annum		40 00
Tools and fixtures for unloading		50 00
Extra expenses, beyond those provided for in other items, for loading and unloading, say per trip $8, and for 17 trips		136 00
Total cost per annum		$1,336 24

"As 1,700 tons will be taken down in 17 trips, (the number assumed for the year's work), the actual cost by this estimate of transporting a ton of coal from Cumberland to Georgetown, exclusive of tolls, will be 78 6; which for the distance between the two places, 184·4 miles, is a small fraction over 4½ mills per ton per mile.

"If the price charged by the carrier for *freight*, exclusive of tolls, from Cumberland to Georgetown, should be $1, the amount received for a year's work would be $1700; deduct the actual cost, as estimated above, and there is left $363 76 for the year's profit per boat."

* To show that even the present rates of toll on the James River and Kanawha canal do not compare unfavorably with the charges on the Baltimore and Ohio railroad and on the several railroads of Virginia, I annex a table marked C. An examination of this table will show that four of the eleven articles selected for comparison are carried cheaper on the canal than on the Baltimore and Ohio railroad, and that ten out of the eleven are transported cheaper on the canal than on the Virginia railroads, and that there is a marked difference in favor of the canal; for instance, on the canal, toll and freight on grain is 3·64 per ton per mile, on the Virginia railroads the rate of freight is 6·67 cents. The canal toll and freight on flour is 3·15 cents per ton per mile, and on the Virginia railroads the rate of freight is 5·81 cents per ton per mile.

gates, which require to be renewed about every ten years, and the timber dams, which last from 50 to 100 years,* they may in general terms be considered as imperishable; while the superstructure of a railroad, which costs from $4,000 to $6,000 per mile for a single track, is every day depreciating, and requires renewal sooner or later, according to amount of business, temperature, soil, etc. I shall, under another head, dwell more particularly on the relative advantages of a canal and railroad as a portage from Covington to the Ohio, and will therefore proceed at once, as I have done in the case of the portage railroad, to submit an estimate of the actual cost and charges on the water line from Covington to the Ohio. The line, it must be borne in mind, will consist of a mixed improvement of canal, lock and dam from Covington to the mouth of the Greenbrier, thence to the Ohio lock and dam for steamboat navigation.

The estimate will then be as follows:

ACTUAL COST.

From Covington to the mouth of the Greenbrier, 83 miles, freight per ton per mile 4½ mills	37·35 cents.
From the mouth of Greenbrier to the mouth of the Kanawha, 156 miles, by steam tugs, 2 mills per ton per mile	31·20
Cost to the canal company for the whole distance	8
Total	76·55 cents.

RATES OF FREIGHT AND TOLLS.

From Covington to the mouth of the Greenbrier river, 83 miles, freight per ton per mile 7 mills, which would yield a profit to the carrier	58·6 cents.
Tolls per ton per mile 6 mills	49·8
From the mouth of Greenbrier to the mouth of the Kanawha, 156 miles, freight per ton per mile 3½ mills	54·6
Tolls per ton per mile 3 mills	46·8
Total	$2 09·8

So it appears that the *charges* for toll and freight on the canal would be $3 60·2 less than the *actual cost* of railroad transportation; and that the freight would be $7 02·2 more by railroad transportation than canal transportation, exclusive of transhipment. I leave these pregnant facts without comment for your consideration and reflection. I think they demonstrate that the ability of the James river and Kanawha company to maintain a permanent low rate of tolls, depends on the completion of their line to the Ohio by an unbroken water line.

I proceed to remark on the adaptation of the improvement to the peculiar and most pressing wants of the state; of its capacity to transport the heavy and bulky products constituting the wealth of the mountain region; of its tendency to promote the opening of the western forests, and their settlement with farms, and manufactories, and villages, and towns; of its capacity to draw to our own the trade and commerce of other states; and though last, not least, of the prospect of its yielding a satisfactory revenue with a reduced rate of toll.

Having shown that the canal is the cheapest mode of transportation, no farther argument is needed to prove that it possesses all the prerequisites of an improvement to minister to the wants of the state. It is the only description of improvement that can advantageously transport the heavy and bulky products of the farm, the mines and the forest, and consequently conduce to the wealth of the state. I have shown in former reports that we can in no other way than by the extension of the water line to the Ohio enter into the competition with other states for the trade of the west, by which alone we can give value to the investment of the stockholders, and build up a considerable market in our state. But there is one view I have not yet taken, which I will now present: that is, the inadequacy of a portage railroad to supply the canal, provided it were worked up to its full capacity.

In the report of the state engineer of New York, which I have heretofore so largely quoted from, on the 13th page, there will be found the following statement, which is so applicable to the case before me, that I beg leave to transcribe it. Nothing could be more apposite. The engineer says:

"In order more fully to impress upon the mind the present magnitude of the canal trade and the capacity of the canal when enlarged, let us imagine its business transferred to a railroad.

"The tons arriving at tidewater last year were 2,033,863, all performed in the space of 226 days. A railroad operated six days in the week will have 313 working days in the year. If the above business should be divided equally throughout the year, then the arrival at tide water would be 6,498 tons daily; average loads of 100 tons of freight per train would require the arrival daily of 65 trains, equal to one train *every twenty-two minutes throughout the twenty-four hours.* A railroad performing a large passenger and fast freight business, and having a double track, with usual turnouts, could not, I suppose, perform one sixth of the above, *as additional business*, by slow trains, even admitting that the variation of trade at different seasons of the year could, by increased loads, be accommodated by the number of trains stated. In other words, it would require six double track railroads, having other traffic from which to earn dividends, to perform the business of the Erie canal during the past year, and some eight or ten for the business which the enlargement can command. The above business would require an outfit of at least 10,000 cars and 400 engines, costing, say $9,000,000; and if confined to one road would require the daily arrival of 4½ miles of trains to be unloaded, loaded, and sent back, supposing that each train and *each car* should be fully loaded.

"All the railroads now built and in *process of construction* to connect Baltimore, Philadelphia, New York and Boston with the west, would be overburthened with business, if freights equal in amount to that of the Erie canal should be thrown upon them."

The capacity of the James river and Kanawha canal is equal to the passage of 2,929,680 tons per year, allowing ten minutes for the passage of a lock, 313 working days, and 65 tons to the boat, which is 895,817 tons more than reached tide-water on the Erie canal in 1850. Now, with a capacity equal to the performance of six double track railroads, "requiring other traffic from which to earn dividends" is it wise policy to limit and contract the power and capacity of the line by the substitution of a railroad that will cost more than the canal for a single track, and when provided with a double track can only furnish one-sixth of the tonnage which the canal can bear? Let every man who has any regard for the true interests of the State ponder this question well. The great state of New York, whose prosperity and growth are almost without a parallel in history, with a market which one would suppose would defy competition, with a canal pouring into her lap 2,633,863 tons per annum, with two lines of railroads to the lakes, became alarmed for her "emporium." The railroad corporations contended they could rescue her from the impending danger of losing her commerce and trade; the struggle was long and violent; the legislative department of the government was broken up. The people (and it is one of the most striking illustrations of the advantages of a popular form of government,) took the matter in hand; they discussed, they deliberated among themselves; they knew, without the aid of engineers and politicians, what was best for them. They were told that the improvement was superannuated—that the progress of the age called for the young locomotive, and not "whip-striped mules." But the works were before them; they "saw with their own eyes;" their advantages had been brought home to every man's door, for to them they were indebted for exemption from taxation; they saw how intimately their prosperity was connected with "cheap transportation; they saw that whatever would reduce the cost in one portion would reduce it in another. The question was not local, but equally important to the northern, the central and the southern portions of the commonwealth." They saw rival lines springing up to rob their great highway to the west.—They saw the grandeur of their great city, the market of the continent fading before their eyes. Seeing, they believed; and in the middle of this nineteenth century, the most enlightened of the world, they subscribed (as it were) in their sovereign capacity at the polls $9,000,000 to enlarge a canal.—How infinitely stronger are the arguments in favor of building a canal, especially in a state like ours, which is drooping in every department of industry, and can never otherwise be revived!

I do not deny the advantages of railroads. Those who have read my former reports to the company will recollect that I have always disclaimed the idea of an attack on railroads generally, or the impression that I advocate the canal policy to the exclusion of railroads under all circumstances. It would indeed be strange if I should be opposed to railroads, when I am connected with two lines in the chain between the north and south, making in their aggregate length 380 miles. On these lines, if canals were practicable, I should decide in favor of railroads; there they are in their appropriate sphere. But when I have before me the choice of a railroad or water line to command the trade of the west, superadded also to the necessity of building up a market in Virginia, in opposition to rival works leading to established markets in other states, I cannot hesitate which to choose. I am forced to give my preference in favor of the canal; every argument, every fact, every motive of expediency and policy is in favor of it; and especially that it will enable the company to do a far larger business and at less cost to the people. As to the question of the relative cost of the two plans, which even for a single railway happens to be in favor of a canal, I consider it one of minor importance. The canal has been shown to be equal to six double track railroads. If the result of the question of cost were reversed, and the canal were to cost six times as much as a railway, even without the condition that the railroads would require other business to maintain them, my views would be in favor of the water line. Because I am sure it would be promotive of the best interests of the state, that it would enable us to build up a market, that it would ensure our commercial and political power, and that it combines greater advantages than any other improvement that can be devised with a view to develop the resources and accommodate the trade of western Virginia.

So much, gentlemen, for matters *strictly* professional, and which I have endeavored to discuss with as much brevity as their very intricate nature and important bearing upon the interests of your company would warrant.

I repeat, that my experience for twenty-five years in the construction and management of railroads has not led me to depreciate their capabilities.—Divested of all professional or personal prejudices or bias in favor of one mode of improvement over another, I have zealously and unremittingly urged the completion of your canal as *the* work of the state, and (indeed next to the Erie canal) as *the* work of the age. Such are my convictions, [sustained by the present distinguished engineer of the state of New York,] and that others should reach opposite conclusions, and conscientiously too I can readily believe; but "error ceases to be dangerous when reason is left free to combat it."

I am gentlemen, very respectfully,
Your obedient servant,
WALTER GWYNN,
Chief Engineer J. R. and K. Co.

* Twenty-seventh annual report of the board of public works, pages 573, 571, it is stated by Capt. C. Crozet, in his report on the "examination of the Upper Appomattox," that the dam at Venable's mills "has existed 60 years, without ever being rebuilt." "The Stony Point dam has existed 70 years." "The Clementown dam has been in existence ever since 1734, that is 108 years," (up to the date of the report.) "No better evidence could be adduced of the permanency of such works and navigation."

Illinois.

Rock Island and Chicago Railroad.—The work on this road, from Chicago to Peru, a distance of one hundred miles, is under contract, and it is intended to have this portion of the road completed by the close of navigation. At Peru the road will connect with steam navigation on the Illinois river, thus opening a steamboat and railroad route from St. Louis to Chicago.

Ohio.

Columbus and Xenia Railroad.—The second annual report of the Columbus and Xenia railroad presents the following general statement of the operations of the company for the past year:

The income of the road for the past year exhibits as was anticipated, a large increase over corresponding periods of the previous year, as will be seen by referring to the following statement of gross earnings, exclusive of mail service, for each month, from the opening of the road to December 31, 1851.

	Receipts in 1850.	Receipts in 1851.
January		$8,648 58
February		8,287 78
March	$5,929 68	12,773 12
April	5,785 39	12,557 96
May	6,317 46	14,374 36
June	6,452 75	16,150 63
July	5,782 77	18,385 96
August	4,665 42	20,290 71
September	6,870 78	28,708 03
October	9,126 85	25,157 30
November	6,359 83	17,619 96
December	7,755 15	15,097 50
Totals for 10 mos.	$65,046 08	$181,145 53

The sudden and great increase in the business and productiveness of the road, is mainly attributable to the completion of the Cleveland, Columbus and Cincinnati railroad from Columbus to Cleveland, opening, as it did, a direct communication between the lake and the Ohio river, and between the two great commercial emporiums of the State. The Columbus and Xenia road was opened late in February, 1850, and the Cleveland, Columbus and Cincinnati road was opened the last of February, 1851.

A final settlement has been made with the Little Miami railroad company, of the account of that company against the Columbus and Xenia railroad company, for constructing so much of the Columbus and Xenia road as is within the county of Greene; and a balance of $25,000 found due to the Little Miami railroad company, payable in the stock of the Columbus and Xenia company, drawing dividends from Nov. 1, 1850.

The first dividend was made on the first day of July, 1851, of 5 per cent—out of the net earnings of the preceding 8 months; and the second, of 6 per cent, on the first day of January, 1852—out of the net earnings of the preceding 6 months. These dividends were both made payable in the capital stock—leaving the earnings of the road to be applied to the various cash wants of the company, and thus avoiding the alternative of borrowing money at a high rate of interest, or selling bonds at a large discount.

In order to simplify and render more intelligible a statement of the earnings of the road, and the charges thereon since the time when it was deemed expedient to commence making dividends, the report includes in the accounts of receipts and disbursements for the year 1851, those of the months of November and December, 1850—making in all 14 months:

The gross earnings of the road for the year 1851, as stated in the report of the superintendent, were		$211,631 37
Do. for November and December, '50		14,376 24
Total for 14 months		226,007 61
Running expenses for 1851	69,952 03	
Do. for November and December, 1850, say	6,000 00	
Total running expenses		75,952 03
Net earnings from November 1, 1850, to January 1, 1852		150,055 58
Chargeable with interest	41,800 00	
July dividend, 5 per cent on stock	30,488 50	
January dividend, 6 per ct. on stock	40 631 31	
		112,919 81
Balance surplus fund		$37,135 77

From the foregoing statement, it appears that the earnings of the road for 14 months, ending December 31, 1851, were sufficient—after defraying running expenses and all other ordinary expenses of the company, cost of repairs of the road and equipments, interest to bondholders and other creditors of the company—to pay dividends to the amount of 11 per cent to stockholders, and leave a surplus to balance depreciation and provide for contingencies, of $37,135 77.

The total cost of the road and its appurtenances and equipments, on the 1st day of January, 1852, as evidenced by the amount of capital stock for which the stockholders had received, or were entitled to receive, certificates; debts due to bondholders and to other creditors for temporary loans, was $1,194,073 80.

Which is balanced by the following items:

Capital stock including amount due the Little Miami railroad company as hereinbefore stated, and to stockholders on account of dividends	$721,719 81
Mortgage bonds paying 7 per cent interest	300,000 00
Outstanding income bonds, same interest	75,100 00
Bills payable—temporary loans	97,253 89
Total	$1,194,073 70

In addition to this are several parcels of real estate, not necessary for depot purposes or roadway, and other assets, amounting in all to $29,289 93 which may be considered as an investment of so much of the surplus fund available for the improvement of the road, or for renewing such portions of it as are subject to destruction or decay.

The Xenia and Columbus and Little Miami roads are now worked on joint account, and the net profits divided in the ratio of capital.

We have no doubt that for many years to come, the entire line from Cleveland to Cincinnati, will pay at least 10, and probably 12 per cent per annum. This must carry the stock to a high figure, as well as the bonds, for conversion. The average value of eastern railroad stocks paying 10 per cent, ranges from 125 to 130, and we can see no reason why equally valuable Ohio stocks should not go to the same figure.

Travel between Albany and Buffalo.

Summer Arrangements of the Central Railroads.

There will be seven or eight daily trains from this city, during the coming season. The following is the programme.

LEAVE ALBANY.

Leave Albany.		Arrive at Buffalo.
A. M. 6½.	Express, through in 12½ hours,	7 P. M.
" 7½.	Lake Erie Express, in 12½ "	8 "
" 9.	Mail " in 18 "	3 A. M.
" 11.	Express, through in 12½ "	11½ P. M.
P. M. 2.	Accommodation to Syracuse, where it unites with another train to Buffalo.	
" 4.	Express—falls into 7. P M. Train at Syracuse.	
" 7.	Night Express through in 13 hrs. 8 A.M.	

FREIGHT.

A. M. 8.	Way freight to Syracuse.
P. M. 1.	Emigrant and through freight.
" 6.	Through freight.

LEAVE BUFFALO.

Leave Buffalo.		Arrive at Albany.
A. M. 5.	Express through in 12½ hours	5.30 P. M.
" 7.	do. 12½ "	7.30 "
" 7½	Accommodation from Syracuse	3 00 "
" 8.	Express from Buffalo, 12½ hours	8 30 "
" 10.	Mail 18 "	4 00 A. M.
P. M. 5.	Night Express 13 "	6.00 "

It is in contemplation, also, to run a train in connection with the train which leaves New York at 6 P. M., arriving at Albany at 11, provided the Postmaster General will afford a reasonable compensation for expediting the mail to Buffalo ten hours.

The Lake Erie Express train at 7 12 A. M. is intended exclusively for passengers going West of Buffalo. No baggage will be taken for any intermediate point.

Ohio.

Cleveland and Pittsburg Railroad.—We copy the following brief, but satisfactory account of the Cleveland and Pittsburg railroad:—

This road is constructed to Wellsville under one of the best and most liberal charters granted in the State. Cyrus Prentiss of Ravenna, is President of the company. The directors are S. Chamberlin, Henry W. Clark, and Zalmon Fitch, of Cleveland; James Butler and H. N. Day, of Hudson; Cyrus Prentiss and J. B. King, of Ravenna; Jas. Farmer, of Salienville; D. McDonald, John S. McIntosh and James Stuart, of Wellsville. It runs through the counties of Cuyahoga, Summit, Portage, Mahoning, Stark and Columbiana, all populous, productive and rich.

The road was commenced in 1847, 18 miles of the southern division being put under contract July 28th of that year. The funds were furnished by the southern division. But little work was done until 1848. March 10th, 1848, 32 miles of the middle division were put under contract; funds furnished by the division. September 4th, 1849, the residue of graduations and masonry, with the superstructure for the completion of the work, were let to the Messrs. Chamberlain & Co. The road is constructed of good materials and in the best manner. The masonry and the bridges will compare with any road built. None of the ties have less than 8 inch bearing, and they are placed only 2 feet from centre to centre. This gives a solidity and durability seldom attained in railroads. The iron is best English T rail, weighing 60 lbs. to the yard. The gauge is 4 feet 10 inches. About half the road is already ballasted, and over this a speed of 40 to 50 miles the hour is often made, without accident or unusual jar. The grade in leaving the pier at Cleveland, and ascending the lake bank is under 40 feet to the mile, which is about the maximum. Tinker's creek bridge is a fine specimen of the builder's art, and crosses a gulf 140 feet deep by a single span 232 feet in length. Its great strength has been tested by bearing over 180 tons at a time, without any perceptible settling. The builders were Messrs. Thatcher, Burt & Co., and the structure does great credit to their enterprise and skill. The deep cut at Sandy Summit, which divides the waters of the Sandy from the Little Beaver is 54 feet deep and 800 feet in length; while the deep cut at Yellow Creek Summit, dividing the waters of Yellow Creek and Little Beaver, is 1200 feet in length, with an extreme depth of cutting of 74 feet. The slate rock walls of the road stand towering and enduring, a proud monument of the triumph of man's energy and enterprise.

The stations on the road are only from 3 to 6 miles apart, and are Newburg, Bedford, Macedonia, Hudson, Earlville, Ravenna, Rootstown, Atwater, Lima, Alliance, Winchester, Moultre, Bayard, Rochester, Hanover, Brush Run, Salineville, Hammondville, Yellow Creek and Wellsville.—At Hudson, the Akron branch, an independent work, connects with the road. It is completed to Cuyahoga Falls, and will be to Akron by the 1st of June, and from Akron to where it crosses the Ohio and Pennsylvania railroad, 22 miles, next fall. This branch road will be continued to Millersburg, Coshocton and Zanesville, there connecting with the Central Ohio road, and opening a direct route through a very productive country to the rich Muskingum valley. The route of the Cleveland and Pittsburg road to Lima is through one of the finest grazing and dairy sections of the Reserve, and at Lima enters the wheat granary of the State. From thence on, the wheat and flour freights will form a very important item in the business of the road. Many single townships whose surplus will find a market over the road, raised an excess last year of 100,000 bushels of wheat. At Alliance the Ohio and Pennsylvania road crosses the Cleveland and Pittsburg road, opening an iron way to the Iron City, and to Massillon, Canton, Wooster, etc., in Ohio. At Bayard the great produce point on the C. & P. road, the Carroll branch, also an independent work, comes in. It will be completed to Carrolton, 15 miles, in June next. Carroll county stands first in the State for wheat growing, and this branch will contribute much increase of freight and travel to the main track. Rochester is a place of milling

importance, and at Hanover station a branch of 1¼ miles will be opened in June to Hanover town a point of extensive business, particularly in produce. Brush Run and Salineville will furnish large quantities of flour for the road, and at Hammondville a plank road is being constructed to Richmond, in Jefferson county, which will tap another fine wheat section. At Rochester the railroad strikes the coal region, 70 miles from Cleveland. Here are a number of veins of good quality. In the valley of Yellow Creek, from Salineville down the Ohio, there are four veins of superior bituminous coal from 3 to 7 feet thick the lowest level with the railroad track, and the highest about 70 feet up the banks. The supply is inexhaustible. There are also beds of cannel coal, iron ore, and fire clay in the Yellow Creek valley. As an indication of what the coal business of the road will become when stock facilities are provided for doing it, we state the fact that the company now have applications for contracts to transport one thousand tons per day! The produce and other freights for the road far exceed the means of transportation on hand, and Western Virginia is but just beginning to send forward her surplus over the route. A large business from the Virginia side of the river will naturally make this road its outlet to the lakes and the eastern markets.

The equipments of the road now consist of nine effective locomotives, and six are to be added by the first of June, two of them powerful coal engines from Baltimore, to burn bituminous coal, and capable of hauling 300 tons of coal each. The company have eight first class passenger cars, 100 freight and platform cars, and 85 gravel cars. Additions will be made to keep pace with the business, as rapidly as possible.

The depots, stations, and other fixtures along the route so far as completed, are neat and commodious. At Cleveland the company own twenty acres on the table land, St. Clair street, on which they have extensive car, engine and machine buildings. On the harbor pier they have a valuable front of 250 feet extending back 350 feet, with a commodious passenger and freight depot. On the lake they have three fronts of 600 feet each, for freight, coal, etc., purposes. The first is west of Water street, from which a pier 150 feet wide will be extended parallel with the pier of the C. C. and C. pier, 1200 feet, this spring, with a track for delivery of coal for steamers. The second front is at the foot of Bank street, where the company are now building a pier 150 feet wide and 1000 feet in length. The third is between Bond and Erie sts. The present value of their coal estate on the river and lake is at least $200,000.

The road was opened to Ravenna, 38 miles, on the 18th of March, 1851; the 5th of November to Hanover, 75 miles; and to Wellsville on the 4th of March, 1852; where connection is formed with Pittsburg by a new splendid steam packet built expressly for that service; and a daily line will also connect the road with Wheeling. By a rule of the company no person using intoxicating liquors or profane or obscene language is employed on the road, and it is hardly necessary to add that prompt, careful management, and courteous, obliging conduct, characterise all the employees. No collision has taken place, and the success of the road is scarcely paralleled. The receipts for passengers and freights so far have more than doubled the estimates of the most sanguine projectors and friends of the important improvement, and the promise for the future is still more cheering.

WHEELING EXTENSION.

The route of the proposed extension from the mouth of Yellow Creek to Wheeling has been surveyed, and is found to be extremely favorable. The distance is 38 miles. No grade exceeds 15 feet per mile, and no curvature with a less radius than 2800 feet. The bridging and masonry are light, and there is no work so heavy as to prevent an early completion. The estimated cost, with one year's equipments, is $18,000 per mile. The extension road will pass through a populous, rich and productive country, and its importance as a connecting link in the great railroad chain was forcibly portrayed in the welcoming address of J. S. Wheat, Esq., at the late Wheeling celebration. He said—"When completed, it will at this point unite with the Baltimore and Ohio railroad, leading to the Monumental City, and the Metropolis of the Union, the Hempfield road leading to the city of Philadelphia, and thence onward to the home of the Pilgrims and the cradle of Liberty, and with the Cincinnati and Marietta road, leading through its Portsmouth branch by way of Lexington and Nashville to the great southwest. It will also here unite with the great Central Ohio road, whose iron way leads through Ohio, Indiana and Illinois, (States that would have been empires in the old world) to a union at the city of St. Louis with the gigantic highway to the Pacific. These roads to which I have thus hastily referred, having their terminus upon the very confines of our country—the Forest City, Cleveland on the North, with her sisters on the lakes;—Boston, New York, Philadelphia, Baltimore and the Metropolis of the Union on the Atlantic border;—the cities of the gulf on the south—and the cities of the Pacific on the west, are so many bands, which with others even stronger than they are, must secure the perpetuity of that political Union, which is at once the basis and safeguard of America's civil and religious freedom."

Collins' Line of Steamers.

From the newspapers received by the last American packets it appears that one of the chief topics of attention at Washington, just at this moment, is the claim of the proprietors of the Collins' line of mail steamers, running between New York and Liverpool, for an increased government allowance. According to the representations of these parties, every voyage which their vessels perform results in a heavy loss, and the national pride is appealed to for a further considerable grant in order that the necessity may be avoided of abandoning the competition with the Cunard line, which is looked upon as a rival fleet supported by the British government. Our system of mail contracts is designated as a mere extension of our naval establishment "under cover of a private commercial enterprise," and in this way a race for superiority, which, if it had been left to the healthy efforts of individual energy, would have led to nothing but the most beneficial emulation, has grown into a struggle between the two nations, in which all the evils of popular jealousy are zealously fomented. The state of affairs has been little dwelt upon in the exposures hitherto put forth of the pernicious consequences of the contract monopolies, but it is perhaps the most lamentable feature connected with them. It exhibits also a striking specimen of the way in which a bad example is made to spread. The American company do not urge for a moment that the system of government grants is in itself *justifiable*, but they insist that America is driven to it in *self-defence*. "We fear no competition," it is said, "with British *enterprise* but when the treasury of Great Britain is brought into competition with our packet service, and seeks to cripple our commerce, and build up at our expense a naval power which will give her the command of the ocean, it is the duty of our government to come to the rescue."

The matter having assumed this inevitable shape the only question now is, how long and to what extent is the contest to proceed, and what will be the position of the mercantile public during its progress? It is the duty of Congress, according to the American view, to sustain the ocean steamers of the United States "wherever they are competing with lines of steamers which draw any portion of their support from the British government." This conclusion being once admitted, we must be prepared to survey the space over which we are called to maintain our pretensions. Australia and China will soon come into the discussion, and the ultimate termination of the battle can only be found in an acknowledgement from one of the two nations that it is exhausted and can go on no longer. When this consummation is likely to be arrived at, or what will be the political feelings which must precede it, are points for the ministry to consider, along with the other conditions which are taken into account whenever a fresh contract is advertised. Meanwhile, the position that awaits the merchants and the travelling public is very plain. Their sailing vessels must continue liable to be driven out of use, not by the natural progress of steam, but by bounty-paid ships forced in particular directions.—*London Times.*

Export of Metals from the United Kingdom.

The board of Trade returns afford the following detailed account of the quantities of metal of home produce and manufacture exported from the United Kingdom during the month ending the 10th of October last, as compared with the corresponding period of the two previous years:

Metals.	1849.	1850.	1851.
Iron—pig....tons	20,309	11 333	18 068
Bar, bolt, and rod	38,451	41,438	47,094
Wire	478	457	505
Cast	1,580	1,812	1,398
Wrought of all sorts	11,688	14,534	13,680
Steel—Unwrought	801	1,171	1,334
Copper, in bricks and pigs....cwts	19,909	24,189	8,854
Sheets, nails, etc, [including mixed or yellow metal for sheathing,]	26,112	30,373	18,792
Wrought of other sorts	1,027	491	1,495
Brass of all sorts	2,593	3,553	2,625
Lead.....tons	2,739	2,345	2,213
Tin—unwrought, cwts.	5,315	4,392	2,514
Tin plates...value	£78,177	£88,254	£71,386

These returns show that the increased movement in the metal trade, noticed for so long a period, has this month received a rather sensible check. The total value of all the metals comprised in the above table is £797,812 this year, against £893,780 in the corresponding period of 1850, and £830,310 in 1849. There is thus a decrease of £95 968 on 1850, and of 32,498 on 1849. On referring to the various items, we find the falling off to extend to copper, lead, tin, and tin-plates, but it is most evident in the first named article, the exports of copper and brass being only £137,808, against £243,218 last year, and £210,326 in 1849. Iron, on the other hand, has largely increased, the aggregate figures being £493,705 this year, against £464,018 and £446,213 in the same month of the two previous years. Steel has also increased; the returns for the nine months ending with the same date, give the total exports as follows:—1851, £7,189,107; 1850, £6,869,076; 1849, £6 316,420; so that the aggregate trade of the year, so far as yet ascertained, shows an increase of £320,031, or 4½ per cent. over the same period of 1850, and an increase of £872,687, or 15 per cent. over the year before. The foreign trade in iron is proved to be steadily extending, as the demand for foreign railways is more sensibly felt. The iron and steel exports are £4,393,076 in 1851 against £4,020,355 in 1850, and £3,667,348 in 1849. Copper figures for only £1,291,407 against £1,429,773 in 1850, and £1,414,377 in the year previous. In the year's returns of tin-plates and lead there is a considerable increase, so that the falling off of the month is only a trifling reaction, but the decrease in tin is continuous.—The exports of foreign and colonial produce for the month ending October 10th, are as follows:

	1849.	1850.	1851.
Copper unwrought and part wrought ...cwts.	1045	3151	1483
Iron, in bars, unwrought. tons	571	758	1171
Steel unwrought	9	23	168
Lead, pig and sheet	742	191	298
Spelter	424	126	205
Tin, in blocks, ingots, bars, or slabs...cwts.	808	849	1460
Quicksilver....lbs.	116,527	29,419	67,332

On the nine months we have a great increase in copper, which stands at 22,569 cwts., against 12,447 in 1849. Taking this result in connexion with the diminished export of our home produce, it is evident that the foreign and colonial supplies of this metal are daily becoming of more importance, the working of the copper mines of Australia producing a sensible effect. Iron has slightly fallen off, whilst steel and tin remain at the reduced range of last year, though this last item is recovering.—Spelter is steadily decreasing, the figures being only 1509 tons, against 3110 tons last year, and 3632 in

1849. The returns of imports for the month ending October 10, are:

Metals.	1849.	1850.	1851.
Copper ore and regulus tons.....	5627	4174	1805
Copper, unwrought, and part wrought...cwts ...	1015	2807	5360
Iron, in bars, unwrought. tons.....	4739	5068	7146
Steel, unwrought.....	102	....	39
Lead, pig and sheet.....	1100	695	1356
Spelter.....	2371	2269	1468
Tin, in blocks, ingots, bars, or slabs...cwts...	3967	539	5704
Quicksilver .....lbs	100,469		

In this instance also, taking the nine months' returns as the basis of comparison, there is exhibited a continuous falling off in the various descriptions of copper, and an increase in iron and steel. Lead and tin have also largely augmented, showing the increased consumption of the country. Spelter has risen to 16,204 tons, against 11,429 last year, and 8722 in 1849; and as the exports of this article are as gradually diminishing, it would appear that the free admission of this metal is bringing it into much more extensive use.—*London Mining Journal.*

Travel on Lake Erie and the Upper Lakes.

Ward's Line.—Season Arrangements.—This morning, we publish, in another column, the programme of arrangements entered into by this line of swift and splendid steamers, in connection with our Central road. It will be seen that the three favorites of the public, the Mayflower, Ocean and Atlantic, are again to be in commission on the North Shore route, between this port and Buffalo, to run in connection with the passenger trains of the Michigan Central railroad. The Caspian, if necessary, relieves the Mayflower, on the opening of navigation, until the latter is in readiness for the service. One of these boats will leave the Central railroad wharf every week day morning, during the season, at 9 o'clock, and will reach Buffalo in ample time for the earliest eastern train of the following morning, without any chance of failure except from unavoidable accident. With such unsurpassed facilities as will be afforded for through travel from Chicago to Buffalo, by our railway and steamers, we have no doubt that the line will continue to be as abundantly patronized as heretofore. Its deserved popularity will be also amply sustained by the indefatigable attentions of all the agents and officers engaged on the route.—*Detroit Free Press.*

Below we copy a portion of the advertisement of the Upper Lakes Line.

The Steamers LONDON and SAM WARD will leave Detroit for the Saut Ste. Marie, touching at Mackinac, WEDNESDAYS and SATURDAYS, at 9 o'clock A. M., in connection with the steamers CLEVELAND and FORREST CITY, running between Cleveland and Detroit, with the ATLANTIC, OCEAN and MAYFLOWER between Detroit and Buffalo, with steamer ARROW between Sandusky and Detroit.

Passengers at Buffalo, Cleveland and Sandusky can procure tickets or ship freight on any of the above boats, with the assurance of a speedy transit to the Saut, and thence to all points on Lake Superior by the steamer Baltimore and Propellers Independence and Napoleon.

The propeller Peninsula will also run regularly between Cleveland and the Saut, touching at Detroit, Lexington, Point au Barks, au Sauble, and at Thunder Bay Islands.

On the 1st of July next a *new low pressure* steamer, of 600 tons, will be placed on the above line, and as much tonnage will be added to the Lake Superior fleet as may be necessary to perform all the service required by the increasing demands of business here.

With the above steamers and their connections, together with the railroad across the portage at the Saut, the proprietors of the lines are enabled to offer the best and surest facilities ever presented to the public for the conveyance of themselves or their freights to the mining regions of Lake Superior, and they confidently hope to perform the service they have undertaken to the satisfaction of those who may favor them with their patronage.

Freights consigned to S. P. Brady or C. A. Troybridge, Detroit, will receive immediate attention.

AGENTS.

Stephen Clement, Detroit; S. McKnight, J. R. Livingston, Saut Ste Marie.

Ohio County Bonds.

Decision of the Supreme Court of Ohio.—We announced last week the decision of the Supreme Court of Ohio, affirming the constitutionality of the Ohio county bonds. We have now read a copy of the decision, which we present to our readers. It does not present the argument of the Court only the conclusions to which it came. The opinion of the Court was unanimous.

The State of Ohio on the relation of the Cincinnati, Wilmington and Zanesville railroad company vs. the county commissioners of Clinton county —Mandamus.

Ranney, J., held:

1. It is the right and duty of the judicial tribunals to determine whether a legislative act drawn in question in a suit pending before them, is opposed to the constitution of the U. States, or of this State; and if so found to treat it as a nullity.

2. In such cases the presumption is always in favor of the validity of the law; and it is only when manifest assumption of authority and a clear incompatibility between the constitution and the law appears, that the judicial power will refuse to execute it.

3. The General Assembly, like the other departments of government, exercises only delegated authority; and any act passed by it not falling fairly within the scope of "legislative power," is as clearly void as though expressly prohibited.

4. The power of the General Assembly to pass laws cannot be delegated by them to any other body, or to the people.

5. The act of March 1, 1851, to authorize the commissioners of said county to subscribe to the capital stock of the relator, does not delegate legislative power, or contravene the constitution of 1802, in providing that the subscription shall not be made until the assent of a majority of the electors of the county is first obtained at an election held for that purpose.

6. It was competent for the Legislature under that constitution to construct works of internal improvement on behalf of the State, or to aid in their construction by subscribing to the capital stock of corporations created for that purpose, and to levy taxes to raise the means, and by an exercise of the same power to authorize a county to subscribe to a work of that character running through, or into such county, and to levy a tax to pay the subscription.

7. Such a tax, when thus authorized, is not beyond the legitimate scope of local municipal taxation; nor is it opposed to article 8, section 4 of the constitution declaring that 'private property ought and shall ever be held inviolate, but always subservient to the public welfare provided a compensation in money be paid to the owner."

8. The taxing power for such persons, under that instrument, was an undeniable legislative function, to be exercised at the discretion of the General Assembly and subject to no limitation but that against poll taxes; and whi'e this court is unanimous in the opinion that such laws may involve an abuse of that power, it possesses no authority to control that discretion, or to correct such abuses by the exercise of a veto power on such legislation.

9. A majority of the electors of Clinton county having decided in favor of the subscription, and the same having been actually made before the adoption of the present constitution; and the commissioners having elected, in pursuance of said act, to deliver the bonds of the county to the company in payment of the subscription, and become bound to do so, and afterwards refusing, upon demand, to deliver them; and showing no cause for such refusal except that the act aforesaid was of doubtful constitutionality; a writ of mandamus is the proper remedy to enforce the delivery.

10. This writ lies in all cases where the relator has a clear, legal right to the performance of some official, or corporate act by public officer, or corporation, and no other adequate, specific remedy.

Peremptory mandamus awarded.

Prosperity of Southern Railroads.

The earnings of the Charleston and Hamburg road, at this time, furnish just theme of gratulation in our neighboring city. It is stated that for the month of February 1852, the gross receipts were $104,000 and upwards, against about 80,000 for the same month in 1851. We are always pleased to chronicle the prosperity of our Southern works.

We requested the President of the Central railroad to furnish for publication, a statement showing the earnings of that road for December, January and February last, being the first quarter of the fiscal year of the company. We have to express our great gratification on reading the following exhibit:

Earnings of the Central railroad for the first quarter of the current year:

	1850.	1851.
December.....	$83,810 33	$103,230 73
	1851.	1852.
January.....	$91,611 20	$101,474 95
February.....	81,794 11	110,946 30
	$257,215 73	$315.651 98
		257,215 73
Gain in three months.....		$58,436 25

The current month of March shows, so far, a greater gain.—*Savannah News.*

Massachusetts.

The annexed table presents the statistics of the railroads for Massachusetts for 1849, 1850 and 1851:

	1849.	1850.	1851.
Number of railways.....	31	36	36
Miles of road and branches.	1,138	1,142	1,150
Gross cost.	$51,801,120	51,873,985	52,595,288
Average cost per mile.....	45,599	$45,421	$45,556
Gross receipts..	6,162,014	6,466.872	6,599,575
Gross expenses.	2,100,694	3,142,945	3,338,905
Net income....	3,061,320	3,323,902	3,360,671
Average net income, per ct. on cost.....	6-09	6 41	6 20
Gross No. of miles run....	4,271,935	4,287,210	4,398,370
Av. receipts per mile run.....	1-41	1-51	1-50
Av. expenses per mile run..	0-71	0-73	0-76
Av. net income per mile run.	0-70	0-78	0-74
No. of pass. carried.....	8,788,589	8,856,656	9,510,858
Do. carried one mile.....	144,305,281	147,888,327	152,916,183
Tons of merchandise carried.....	2,167,754	2,219,050	2,260,316
Do. carried one mile....	70,848,225	72,573,289	70,205,310
Total weight of pass. trains in tons, hauled 1 mile, not including pass.	114,962,615	100,383,950	98,767,749
Total weight of freight trains in tons, haul'd 1 mile, not including fr't..	135,285,503	130,571,531	118,695,509
Total No. of t'ns not including pass. hauled one mile.....	321,078,871	303,528,761	287,667,568

Nine of the companies make their returns for

only eleven months of 1851. If the operations o twelve months were added, it would change the re sult somewhat. The net income per cent. on cost is somewhat less than in 1850. The aggregate traffic of the road shows but a moderate increase over 1850.

The Trade of the Lakes.

Railroad, Direct from the City of Oswego, on Lake Ontario, to Philadelphia, via Syracuse, Binghampton, Scranton, Water Gap, Belvidere etc.

We have frequently spoken of the proposed road from Syracuse to Binghamton as a very important work, not only in its local aspects, traversing, as it does, a fertile and highly cultivated region, but as a *through* route, connecting the coal fields of Pennsylvania with central New York and the lakes, and opening a direct line of railroad between all the New York improvements and Philadelphia. To that city the value of the above road cannot be overestimated, and we are happy to see that it is attracting much attention from her leading citizens who are taking measures to push a road up the Delaware valley to connect with it. That our readers may see in what light the project is viewed in Philadelphia, we copy the following article from a recent number of the *Bulletin* of that city.

We have heretofore referred to the projected railroad from Syracuse to Binghampton, as forming an important link in a direct railway from Lake Ontario to this city. But it was not until recently, that we have had sufficient data to judge with accuracy as to its merits and prospects, and the benefits to result to our own State and city by its construction. We have now a map before us delineating the entire route from Oswego to Philadelphia, together with a table of distances, grades etc., and we are free to say that no project has struck us so favorably for a long time.

It will open a direct communication between the valley of the great lakes and this city by a route much nearer than any other. From Oswego to Syracuse—thirty-five miles—a railroad is in operation. From Syracuse to Binghamton, the distance is 75 miles. A company has been incorporated to construct a railroad between these two places, with a capital of $1,200,000, It is to this particular road we wish to call attention at this time. The route has been surveyed through the rich valleys of Onondaga, Courtlandt and Broom counties, and $600,000 subscribed in the counties of Oswego, Onondaga, Courtlandt and Broom without going abroad for a dollar. From the Engineer's report, it must be a cheap road to make. It intersects the New York and Erie road at Binghamton—thence to the Great Bend, in this State, 15 miles--thence by the Lackawanna and Western railroad, now in full operation, to the great anthracite coal fields at Scranton, 48 miles. From Scranton to the Delaware Water Gap, a distance of 50 miles, a company has been incorporated to construct a railroad, and the stock subscribed.

We are assured that it will be finished during this and the next year. Our citizens understand the state of forwardness of the road from the Water Gap to Easton via Belvidere—thence to Lambertsville, from which latter place, as we all know, a railroad is in successful operation to Philadelphia.

We ask our fellow citizens to look at the map above referred to, which they will find posted at the United States Hotel and at the Exchange.

The distance by this route from Lake Ontario to Philadelphia, is but 316 miles, and this may be reduced 12 miles, by adopting the Doylestown route, while the distance from the same place, via Albany and New York, is 414 miles. The Syracuse and Binghamton road, aside from its being part of a great through line from Lake Ontario, will have local advantages beyond most other roads. Syracuse, in the county of Onondaga, is a city of 25,000 inhabitants, situated in the geographical centre of the State of New York.

The annual report of the Superintendent of the salt springs, shows that five millions bushels of salt are manufactured there, and we are assured that the quantity might be doubled in a single year, could they reach a market—but owing to the present high price of wood ($3 50 to $4 per cord) the manufacture cannot profitably be extended beyond the quantity now made. When the Syracuse and Binghamton road is completed, anthracite coal can be delivered at Syracuse from Scranton, 137 miles, at $3 to $3 50 per ton. This must reduce the present price of fuel at Syracuse one hundred per cent, and when we reflect, that the present salt works, when all in operation, consume two thousand cords of wood daily, in addition to what is used for other purposes by the city, there must be an immense amount of coal transported over this road, and this will increase with the increase of the manufacture of salt. Oswego, a city of fourteen thousand inhabitants, is the chief port on this side of Lake Ontario, having a large and increasing trade with Canada, and the upper lakes, by way of the Welland Canal. It has also an amount of grain mills capable of grinding ten thousand barrels of flour daily.

For the supply of the country bordering upon the lakes and Canada, with anthracite coal, Oswego will require at least half as much as Syracuse.—Their vessels need this article as ballast, and it has, to some considerable extent, been transported as such during the past season, at a very low charge, to Milwaukee, Chicago, etc. The coal thus transported came from Rondout on the Hudson river, at the cost of six dollars per ton at Oswego. As return freight, the flour of Oswego, and salt, gypsum, cement, and lime of Onondaga county, will furnish a very large amount. Add to this, the transportation of the produce of the rich country through which the road is to pass, and it is easy to see, that as a mere *local* road, it must be a good and paying stock—but when it is viewed as a great thoroughfare for passengers, it would seem that no doubt can exist as to its being a very valuable road and a desirable stock for investment. We are indebted for much of our information, as to these details, to the Hon. Henry Stephens, of Courtlandt —the President of the Syracuse and Binghamton road—to Gen. James R. Lawrence, of Syracuse, and L. McWhorter, Esq., of Oswego, who are now here at the United States Hotel, and desire to call the attention of our citizens to this important subject.

The completion of this route from Lake Ontario to this city will open a trade to Philadelphia with the Canadas, the value of which can hardly be overestimated. The value of the Canada trade the past season with New York and Boston, via Oswego, was, according to the books of the Custom House, four millions nine hundred and ninety-seven thousand dollars—being, of imports $1.789,598, and of exports $3,207,811. This trade has heretofore been monopolized by New York and Boston.

But by completing the above route, this city can compete on equal terms for this immense and rapidly increasing business.

This statement does not embrace the coastwise trade of the port of Oswego, which amounted in 1851, to $17,597,837. These facts are well worth the attention of our merchants and business men, and cannot fail to make a deep impression upon every well wisher of Philadelphia.

Raleigh and Gaston Railroad.

We learn that fifteen miles of this road have been laid with heavy iron, and that the work of repairing and relaying is going forward with energy and spirit. Three ships, laden with iron for this road, have recently arrived; and the quantity now being received will, it is supposed, be sufficient to complete the road to Henderson.

We have recently observed, with pleasure, the improvements already made and in progress on the premises of the depot of this road, in this city. A considerable addition has been made to one of the workshops, one of the lots has been enclosed, and some of the buildings repaired, etc.

The prospects of this road are improving and brightening. When completed, it will be one of the best roads in the country; and the stock, it is believed, will yield good dividends.—*Raleigh Star.*

Great Reduction in Canal Tolls.

The board of public works have reduced the tolls on all articles from Cincinnati to Dayton to the uniform rate of *two mills* per mile, and to *one half mill* from Dayton to Cincinnati. The tolls were previously six to ten mills per mile from this city to Dayton, and three to four mills from Dayton down. This change will make a difference in the freight on a barrel of flour from Dayton to Cincinnati of *fourteen cents* per barrel, and in equal proportion to other articles. The change in the price of freight on groceries, iron, manufactures, etc., going up is also great, and the benefit to the trade of Cincinnati will be immense.—*Cincinnati Gazette.*

Illinois.

Galena and Chicago Railroad.—The long hoped for day has at length arrived, when a citizen of Rockford can go into Chicago and return within the space of one day, besides leaving him two or three hours in the evening to transact business.—When the road reaches Rockford, which will be in three or four months, people will be enabled to breakfast here, go to Chicago, and return to tea.

The road is doing an immense business, far exceeding the first calculations of its most ardent friends, and scattering the foolish predictions of its enemies to the winds, enriching community and company as it progresses, and proving the toughest bond to enlarged social convenience and enjoyment.—*Rockford Forum.*

The Sunbury, (Pa.) American of Saturday last says—

The ice dams in the Susquehanna have all passed off without doing any damage. The river is still much swollen, and although some few rafts of timber have passed down, the stage of water is too high for safe navigation. The water has been let into the Susquehanna division of the canal, and boatmen have resumed their labors. Business opens very briskly and promises a favorable season for the coal trade. The severe weather of the past winter has caused a consumption of coal much greater than has taken place for a number of years. A scarcity of that article exists in the market, and the commencement of shipments has been looked for anxiously. Coal is fast taking the place of wood for fuel in the southern cities, and in a few years the immense fields of Shamokin and Mahopoy will scarcely be able to supply the demand.—Preparations have been made by the colliers in those regions to send a large quantity of coal to market during the coming season. The superior quality of this coal has made it deservedly popular and eagerly sought after, and it is rapidly taking the place of all other coal in the Baltimore market.

Roanoke Valley Railroad.

The stockholders in the Roanoke Valley railroad [between Clarksville and Ridgeway,] held their first meeting at Weldon on the 16th inst., and proceeded to organize themselves into a company by the election of the following officers:

President—David Shelton.

Directors—Francis Mallory, of Norfolk; Silas H. Harris, of Clarksville; James Williamson, of Mecklenburg.

[Henry Wood and Samuel D. Booker, appointed Directors by the Board of Public Works.]

E. A. Williams, Secretary and Treasurer.

—— Blanch, Principal Engineer.

John Tunis, Esq., was present at the meeting as the representative of the stock of this city.

[The foregoing was prepared for our last paper, by by one of the many unforseen casualties of printing was omitted.]—*Norfolk Herald.*

Routes West.

We understand, says the Chicago Tribune, that the New York and Erie railroad company have made arrangements with the Michigan Central railroad company, for freighting merchandize, etc., between New York and Chicago. It has heretofore been supposed that this arrangement would be made with the Michigan Southern road. It failed, we believe on account of the Erie company not being

able to secure a line of propellers between Dunkirk and Monroe, Michigan. The consummation o such an arrangement will probably hasten the completion of the Michigan Central railroad to this city by the first day of May.

American Railroad Journal.

Saturday, March 27, 1852.

Ohio and Indiana Railroad.

We have received the first annual report of the President of this road, together with that of the Chief Engineer, from which we learn that the entire work, including the furnishing of all materials except the iron rails and rolling machinery, was put under contract the 28th of January last. It is the expectation of the engineer that the road will be completed in two years, and in order to avoic all delay in obtaining the iron, he advises that it be contracted for as soon as the grading is begun. By this means the iron could be laid on the light work at the eastern end of the road, as soon as it is graded, and the following winter would find the grading completed, and much of the track laid.

The cost of the road is estimated at $1,640,000; to meet which the company have already in county subscriptions $400,000, and an amount secured from private individuals equal to $311,600, making an aggregate sum of $711,600, or nearly one-half the entire cost of the road and equipment.—The remainder can probably be raised without much difficulty, when the road is fairly under weigh, and its construction secured.

The entire length of the road from Crestline, Ohio, to Fort Wayne, Indiana, is 131¼ miles. No curves exist except those caused at towns; the aggregate curvature of the line being only 214 degrees, all of which is at or near the stations. One straight line is over 40 miles long, another 30 mls., and the aggregate length of straight line on the whole distance is 127½ miles. But one curve is used having a radius so small as half a mile.

In gradients the line is also well favored, having no grade greater than 26½ feet to the mile, while 63 miles of the whole road is absolutely level.

The region traversed, though comparatively new in Ohio, is rapidly increasing in wealth and population, more so than in any other part of the State. The decennial increase, according to the census of 1850 was 93 per cent, while that of the whole State was only 32 per cent, or little more than one-third. Allen county, in Indiana, in which Fort Wayne is situated, has in ten years increased nearly 200 per cent in population, and in taxable property 50 per cent in three years. At Fort Wayne, the exports by canal in 1850 were 15,611 tons, (or 63 tons per day,) and the imports 91 tons per day. These facts show the fertility of the soil, and the rapidly increasing population of the counties through which the road passes. It is easy to see that the local traffic will be large. The amount of taxable property along the line is a sufficient surety for this.—If any doubts existed upon the subject, they could easily be solved by referring to the earnings of other roads running through less favorable portions of the State.

The connections the Ohio and Indiana railroad will form with other roads will be of great importance to it. The first of these connections is the Ohio and Pennsylvania railroad, which terminates at Crestline, where the Ohio and Indiana road begins. This road offers the shortest route to Philadelphia and the Atlantic seaboard, and when the proposed connection between Fort Wayne and Chicago is effected will, in conjunction with the Ohio and Indiana railroad, form the most direct line to that important city. The Ohio and Indiana road will also cross the Mad River road (133 miles long) the Troy and Toledo road, the Miami canal (268 miles long) and the Wabash and Erie canal, which will prove a most valuable feeder, from the large amount of traffic which passes over it.

Owing to these connections, the through traffic will be no less profitable than the local, and if the road can only be energetically carried through, it will amply repay the cost of construction.

At the meeting of stockholders the following officers were chosen for the ensuing year:—President, Willis Merriman; Secretary and Treasurer, Franklin Adams. Directors, Willis Merriman, Bucyrus, Crawford county, Ohio; Franklin Adams, do.; Henry Peters, Upper Sandusky, Wyandot county, Ohio; J. K. Jacobs, Lima, Allen co., Ohio; Lester Bliss, Delphos, do.; Samuel Hanna, Fort Wayne, Allen county, Iniana; Pliny Hoagland, do.; Chief Engineer, Jesse R. Straughan; Resident Engineer, Lot Dixon.

Railroad Scales.

There is probably no branch of business carried on, that requires so much care and attention as the manufacture of railroad scales. It is an article that should be perfect in all its parts. There is scarcely any transaction in the commercial world that has not more or less weighing connected with it, and more particularly in all that relate to the transportation of merchandize. It has become an established rule in the transportation of freight, on railroads, to carry it by weight. Hence, the need of an article that will stand the test of complete exactness in all the cases to which it may be applied.

The *railroad track* scale is put in use by most of the companies as the most convenient method of weighing their freight in bulk, in cars; and being placed in the track, it is necessary to have it made in a very strong and substantial manner, and so constructed as to keep in repair.

The Depot Scales, that are placed in the floor of warehouses require to be very exact, as it is often the case that produce is bought and sold by weight upon these scales, as well as freight. Take for instance, *Wheat Scales*, for receiving and discharging wheat. It is of the utmost importance that such scales should be so constructed as to gives them both permanency and correctness. In fact there is no branch of weighing machinery but what should be made of the best material and on the most approved plan. Dollars and cents are at stake in the weight of every article, such as *produce* of every kind, the mineral productions of the earth, coal, iron, zinc, copper, etc., and therates charged for transportation of the same to market, is determined by weight.

Of the leading scale manufacturers in this country, we may name Duryee, Forsyth & Co., of Rochester, New York. The excellence of the scales made by them has led to their adoption by a very large number of our leading railroad companies, by whom they are held in very high favor; and which of itself is the very best certificate of their quality. In another column we have given a list of some of the roads upon which they are in use.

The same firm also manufacture *canal* weigh locks, and have recently placed one upon the Erie Canal at Rochester, the exactness and capacity of which is believed to be without a parallel. The capacity of this lock is 400 tons. Upon this scale, the vast tonnage passing through the canal is all weighed, for the purpose of ascertaining the tolls to which each boat is subject. The accuracy of his scale is such as to "divide the difference of a pound." The same firm are now constructing a lock for the Ohio canal upon the same principle.

The works of Duryee, Forsyth & Co., are located at Rochester, New York, and possess great advantages of position in being able to forward their scales in every direction at a very low cost. They are also well situated for securing the raw material at favorable rates. They keep a large number of operatives at work, which enables them to execute orders with great despatch.

We can safely commend the above firm to our railroad companies; assuring them, that if they want *good* work, and their orders filled with promptness, they cannot go to the wrong place by patronizing the above concern.

American System of Railroads.

J. Disturnell, 179 Broadway, New York, has in preparation an outline map of the United States and Canada, showing all the railroads and lands finished; also, all the unfinished and projected railroads where a survey has been made. The whole has been carefully compiled from the most reliable authorities, and will be published under the patronage of railroad companies and others interested in internal improvements. The price to subscribers, payable in advance, is $5, to non-subscribers, $6.

N. B.—All persons interested in railroads or works of internal improvement, are invited to examine the proof sheets of said map, and patronize the same by giving their names to the publisher, at the Geographical Rooms, 179 Broadway, third story, between Courtlandt and Dey streets.

Stock and Money Market.

We have but little new to add to our last report. Money continues abundant, and there is a good demand for first class securities of new works, which is fully equal to the supply. A good feeling exists toward new projects, and no difficulty exists in negotiating good railroad bonds—such, we mean, as are based upon sufficient security. The prospect for the season is very encouraging for our roads in progress, many of the most important of which will be fairly out of the woods in a few months, should no commercial revulsion take place the present year.

We would urge upon companies the importance of not making their appearance in the market for the purpose of selling their bonds, till their schemes are well matured, and until they shall be in a position to command fair terms. If they cannot do this, they may rely upon it that their project is immature; for it should be borne in mind, that railroads are merely *commercial* enterprises, and are to be conducted upon commercial principles, which never sanction an enormous sacrifice for a contingent good.

The securities most in demand are the convertible bonds of roads just going into operation. These are sought for, under the belief that they will show a rapid advance so soon as the roads shall have had time to demonstrate their capacity for business. There is a strong conviction that the stocks of western roads are to pay much better than bonds, even at the large discount at which they are selling. The convertible clause invests the bonds with a *speculative*, and adds considerably to their market value.

The good effects of the decision relative to the Ohio county bonds are already seen in large purchases that have been recently made of them, for foreign investment.

Pennsylvania Railroad.—The following is a comparative statement of the receipts upon this road during the months of January and February, 1851 and 1852:—

Receipts for freight and passengers in Jan., 1851	$12,435 97
Receipts for tolls	2,238 03
Total January, 1851	$15,674 00
Receipts for freight and passengers in January, 1852	$32 466 45
Receipts for tolls	1,007 21
Total Jan., 1852	$33,473 66
Receipts for freight and passengers in Feb., 1851	$18,523 47
Receipts for tolls	1,586 76
Total Feb., 1851	$20,110 23
Receipts for freight in February, 1852	$79,920 74
Receipts for passengers	71,808 92
Total Feb., 1852	$151,729 66

Macon and Western Railroad.—The earnings of the Macon and Western railroad for the month of January, 1852, were—

Passengers	$9,087 98
Mail	1,177 55
Freight	15,517 67
Total	$25,783 20
January, 1851	24,198 01
Increase	$1,585 19

The receipts of the Galena and Chicago railroad for the month of February were as follows:

Freight	$14,219,48	
Passengers	5,236,30	
Mails	257,15	$19,712,9
Earnings Feb., 1851		7,800,0
Increase		$11,912,23

EARNINGS AURORA BRANCH.

Freight	$1,190,84	
Passengers	633,39	$1,824,23
Earnings Feb., 1851		1,132,10
Increase		$692,13

EARNINGS ST. CHARLES BRANCH.

Freight	$246,53	
Passengers	75,46	$321,99
Earnings Feb., 1851		239,63
Increase		$82,36
Total earnings, Feb., 1852		$21,859,15
" " " 1851		9,172,34
Increase		$12,686,81

The receipts of the Mad river and Lake Erie railroad show a large increase in February, over the same month of last year. The figures for January and February are as annexed:

	1851.	1852.
January	$16 069 57	$15.003 30
February	17,091 16	25,919 42
Total	$33,160 73	$40,922 72
Increase in 1852		7,761 99

The receipts on the Ohio and Pennsylvania railroad in February were:

From passengers	$8 673 75
From freight	2,657 06
Total	$11,330 81
Number of passengers carried in February	9,521
The receipts of the first week in March were	$2,602

It appears from the returns of some of the railroad companies in this State, that the business on the Central line continues to improve. The traffic of the Rochester and Syracuse road in

February, was	$51,994 60
February, 1851	45 986 40
Increase in 1852	$6,008 20

The receipts in February, 1851, were under a reduction to 3c. fare, and in February, 1852, under a further reduction to 2c. per mile.

The receipts of the Harlem railroad notwithstanding the unfavorable winter, show a large gain in the months of January and February over the same months of last year. The gain is especially large in February, being in that month about 30 per cent. The figures are as annexed:

	1851.	1852.
January	$41,163 47	$45,601 03
February	36,818 90	46,286 91
Total	$77.982 37	$91,887 94
Increase in 1851		13,905 57

The gross receipts of the Housatonic railroad for 1851, were $329,041; an increase of $19,000 over 1850. The expenditures were $160,139, showing an excess of receipts over expenditures of $168,962. Deducting the rents of the Berkshire and Stockbridge railroads, $74,808, the net receipts are $74,-094. Interest on bonds, $21,000; paid on floating debt, $57,402. The whole of the floating debt will probably be paid off during the current year.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 27, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	106½
U. S. 6's, 1862	112⅝
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	117½
U. S. 6's, 1868	117⅝
U. S. 6's, 1868—coupon	120
Indiana 5's	88
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	75½
Illinois 6's—interest	47
Kentucky 6's, 1871	107½
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	106½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	109
New York 6's, 1864-'65	114
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	102
New York 5½'s, 1865	104
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	104
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	106½
Ohio 6's, 1860	109
Ohio 6's, 1870	113
Onio 6's, 1875	114½
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847-'53	—
Pennsylvania 6's, 1879	105½
Tennessee 5's	85
Tennessee 6's, 1880	102
Virginia 6's, 1886	108½

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	106
Cincinnati 6's	95½
St. Louis	93½
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	96½
New York 7's, 1857	108
New York 5's, 1858-'60	101½
New York 5's, 1870-'75	102½
New York 5's, 1890	102½
Fire loan 5's, 1880	101½
Philadelphia 6's, 1870-'90	102½
Baltimore 1870-'90	104½
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	94½
Erie convertible bonds, 7's, 1871	92½
Hudson River 1st mort., 7's, 1869	105
Hudson River 2d mort., 7's, 1860	95½
New York and New Haven 7's, 1861	103
Reading 6's, 1870	84½
Reading mortgage, 6's, 1860	81½
Michigan Central, convertible, 8's, 1860	103½
Michigan Southern, 7's, 1860	90½
Cleveland, Col. and Cin. 7's, 1859	103½
Cleveland and Pittsburg 7's, 1860	93
Ohio and Pennsylvania 7's, 1865	95½
Ohio Central 7's, 1861	90

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 17.	Mar. 24.
Albany and Schenectady	100	100½
Boston and Maine	104½	104½
Boston and Lowell	109½	110
Boston and Worcester	101	100½
Boston and Providence	87	88½
Baltimore and Ohio	63	63½
Baltimore and Susquehanna	34	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112	112½
Eastern	97	96½
Erie	85½	85
Fall River	98	98½
Fitchburgh	98½	105
Georgia	—	—
Georgia Central	—	—
Harlem	72½	71½
" preferred	108½	110½
Hartford and New Haven	126	121
Housatonic (preferred)	35	37½
Hudson River	66½	67½
Little Miami	—	—
Long Island	23½	22½
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97½	96½
Michigan Southern	104½	107
New York and New Haven	111	112
New Jersey	126	129
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	56½	57½
Ogdensburgh	27½	26½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29½	29
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	74½	74½
Rochester and Syracuse	109	112½
Stonington	54½	54
South Carolina	—	—
Syracuse and Utica	127½	125
Taunton Branch	115	115
Utica and Schenectady	127½	127½
Vermont Central	20½	20½
Vermont and Massachusetts	22½	20½
Virginia Central	—	—
Western	103½	103½
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Tennessee.

ACT OF THE TENNESSEE LEGISLATURE, LOANING THE CREDIT OF THE STATE TO RAILROAD IMPROVEMENTS.

We give below an abstract of the late act of the Tennessee Legislature, to establish a system of internal improvements in that State.

The first section of the act relates to the East Tennessee and Virginia railroad company. It provides that the Governor of Tennessee shall issue to that company *coupon* bonds of the State to an am't not exceeding $8,000 per mile, whenever they shall have obtained *bona fide* subscriptions to their stock of an amount sufficient to grade, bridge and prepare for the rails, the entire line of the road, and shall have finished a section of 30 miles of said road at either terminus in a good and substantial manner, which section shall not be subject to any lien whatever, other than those created in favor of the State by the acts of 1851-52. These bonds are to be payable at any place the President of the company may designate, bearing an interest of *six per cent per annum*, payable semi-annually, and not having more than forty, nor less than thirty years to mature.

The second section enacts that bonds shall not be used by the company for any other purpose than for procuring the iron rails, chairs, spikes and equipments for said section of the road, and for putting down the rails on the same.

In the third section it is enacted, that so soon as the bonds of the State shall have been issued for the first section of the road, they shall constitute a lien upon that section, including the road bed, right of way, grading and masonry, upon all the stock subscribed for, in the company, and upon the iron rails, chairs, etc., when purchased and delivered. The State of Tennessee shall, by virtue of these bonds, be invested with said lien or mortgage without a deed from the company, for the payment of the bonds, with the interest thereon, as the same becomes due.

Section fourth enacts that when said company shall have prepared a second section, or any additional number of sections, of twenty miles each, in the manner before mentioned, the Governor shall issue to them like bonds of the State of Tennessee for each section upon the same conditions; with the provision, that if the last section of the road shall be less than twenty miles, or if the railroad proposed to be constructed by any company hereinafter specified, shall be less than 30 miles in extent, bonds shall be issued for such section, for an amount proportioned to the distance to be constructed, but upon the same terms and conditions. After the whole road is completed, it is enacted that the State of Tenn. shall be invested with a lien upon it, of the nature specified in the third section. It is also enacted that after the Governor shall have issued bonds for the first section of the road, it shall not be lawful for the company to convey to any persons, or body corporate, any lien or incumbrance whatever, which shall have priority over, or shall come in contact with the lien of the State. In case any such lien is issued, it shall be considered null and void, as against said lien or mortgage of the State.

Section fifth declares that it shall be the duty of the company to deposit in the Bank of Tennessee, at Nashville, at least 15 days before the interest becomes due upon said bonds, an amount sufficient to pay such interest, including exchange and necessary commissions; and in case said company fail to deposit said interest, it shall be the duty of the Governor to appoint suitable persons at the expense of the company, to take possession and control of the road, and all the assets thereof, and manage the affairs of the same, whose duty it shall be to give bond and security to the State of Tennessee for the faithful discharge of their duty, which shall be to receive the rents, issues, profits and dividends of said road, and pay over the same under the direction of the Governor, towards the liquidation of such interest. If the company refuse to deliver up their road to the persons appointed to receive it, the Governor is authorized to issue his warrant, directing the Sheriffs of the counties thro' which the road runs, to take possession of said road, with all the fixtures and equipments pertaining thereto, and to deliver the same to the appointed receivers, who shall hold it until the required interest is discharged.

In section sixth the Governor is authorised to institute a similar course of proceedings against the company if they refuse to pay any of the bonds when they fall due.

In section seventh it is enacted that, at the end of five years after the completion of their road, said company shall set apart one per cent per annum upon the amount of bonds issued to them, and shall use the same in the purchase of bonds of the State of Tennessee, which bonds the company shall pay into the treasury of the State, after assigning them to the Governor, and for which the Governor shall give said company a receipt, and as between the State and said company, the bonds so paid in shall be a credit on the bonds issued to the company.—And bonds so paid in, and the interest accruing thereon, from time to time, shall be held and used by the State as a sinking fund, for the payment of the bonds issued to the company, and should said company repurchase any of the bonds issued to it under the provisions of this act, they shall be a credit as aforesaid and cancelled.

By section eighth, the President of the company is required to make semi-annual reports under oath, to the Governor, until the completion of the road, setting forth, fully, the condition of the road; and after the completion he shall report annually upon the financial condition of the company, giving a statement of the trade and travel upon the road, the receipts and expenditures, etc., and said reports shall be consolidated every two years by the President of said company, and the consolidated reports shall be laid before the Governor by the 1st of September every two years after the completion of the road, and the Governor shall lay such report before the Legislature for its action, at the next meeting thereof after said report is made.

By section ninth all officers of the company are forbidden from engaging in any speculation, either directly or indirectly, along the line of the road, until after its completion, and every officer of the company, before entering upon the duties of his office, is obliged to take an oath that he will not violate the provisions of this act.

In section tenth it is enacted that the provisions of this act shall extend to and embrace the Chattanooga, Harrison, Georgetown and Charleston railroad company, the Nashville and North Western railroad company, the Louisville and Nashville railroad company, the South Western railroad company, the McMinneville and Manchester railroad company, the Memphis and Charleston railroad company, the Nashville and Southern railroad company, the Mobile and Ohio railroad company, the Nashville and Memphis railroad company, the Nashville and Cincinnati railroad company, the East Tennessee and Virginia railroad company, the Memphis and Clarksville and Louisville railroad company, and the Winchester and Alabama railroad company, so far as the main trunk roads to be constructed by said companies lie within the limits of the State of Tennessee; and that the said companies be entitled to all the privileges, and subjected to all the penalties contained in this act. Provided that this act shall not extend to or embrace any more of the Memphis, Clarksville and Louisville railroad than that part which lies between the Kentucky line and the Nashville and North Western railroad, or the Nashville and Memphis railroad. Provided further that this act shall not embrace the East Tennessee and Georgia railroad, unless said company extend their road so as to form a junction with the East Tennessee and Virginia railroad at Knoxville. In case this company fail to refuse to extend their road so as to make said junction, then all the rights and privileges are to be extended to any company that may be hereafter chartered, for the purpose of building a railroad to make such a connection.

It is enacted by section eleventh that the gauge of all the said railroads shall be the same as that of the Nashville and Chattanooga railroad, 5 feet, unless they connect with roads in other States of different gauge; also that the iron rails to be put upon these roads shall not be less than 80 tons to the mile if the U rail be used, and not less than 100 tons to the mile if the T rail be used.

Section twelfth gives power to the State of Tennessee to enact any law, which may be necessary to protect the interests of the State, and to secure the State against any loss, in consequence of the issuance of bonds, under the provisions of this act.

Section 13th enacts, that in case any company shall be convicted of having fraudulently obtained the issuance of bonds of the State, the Circuit Court of that county in which the place of business of the company is situated, shall adjudge and decree that said road lying in the State, with all its assets and property, shall be sold, and the proceeds be paid into the treasury, and it shall be the duty of the Comptroller to vest the same in stocks, creating a sinking fund, as provided for in the 7th section of this act. The company shall be divested of all its rights and privileges, and the stockholders in the road shall be individually liable to pay to the State the amount of the bonds thus fraudulently obtained.

Section fourteenth requires that the Governor shall appoint an agent for the State to attend said sale of the road, who shall protect the interest of the State, and if it be necessary, in order to protect the interest, shall buy said road in the name of the State, and shall appoint a receiver to take charge of it, and use it, as provided for in the fifth section of this act.

By section fifteenth, it is enacted that this act shall be deemed and taken to be a public act as to all purposes of notice; provided, that should any of the companies before mentioned have obtained *bona fide* subscriptions as specified in the 1st section, the State shall have issued bonds to them as hereinbefore prescribed, and provided that no company shall receive more than the amount per mile hereinbefore prescribed. Provided also that the provisions of this act shall only extend to one of the lines of railroad proposed to be constructed by the Nashville and North Western railroad company, and the Nashville and Memphis railroad company, between Nashville and the Tennessee river, and that the company first obtaining *bona fide* sub-

scriptions shall be entitled to the provisions of this act, for the whole distanee from Nashville to its terminus on the Mississippi river, the other company having the power to connect with the one thus entitled at any point they may select, and be ing entitled to the provisions of this act only from the point of connection to their terminus on the Mississippi river. It is further provided that if the Louisville and Nashville railroad company locate their road through Sumner county, by way of Gallatin, then the provisions of this act shall not extend to the Nashville and Cincinnati railroad, and the charter granted to the last named company shall in that event be null and void; also that the State shall not issue bonds to the Louisville and Nashville railroad company, or to the Nashville and Ciacinnati railroad company, unless one of the said companies shall agree to locate and extend their road across Cumberland river, at or convenient to Nashville or South Nashville, within ten years from the date of the passage of this act.

Section sixteenth gives power to all railroad companies, specified in this act, so to construct their roads as to cross or unite with each other, by the main trunks or branches; and declares that it shall be the duty of said companies to receive on their roads and branches the full loaded freight cars from each other, without charging for the transportation of the goods, etc. contained therein, any greater rate of freight than they charge for similar goods etc. in their own cars; provided no companies shall be compelled to receive such cars on their road, unless they are constructed with the same guage and are of equal strength with their own cars.

Section seventeenth enacts that, in all cases where bonds may be issued to any of said companies, the State of Tennessee shall be entitled to two directors in each company, to be appointed by the Governor of the State, to which bonds may be issued.

It is provided by section eighteenth that when the Nashville and Chattanooga railroad company shall have completed 25 miles of their road, in addition to the 80 miles specified in the second section of the act, passed 4th February, 1848, chap. 169, then the Governor shall endorse and guarantee in the name of the State of Tennessee, the bonds of said company, to the amount of $175,000, and, when another 25 miles shall be completed, the Governor shall indorse an additional amount of $175,000, the bonds to be endorsed in the same manner as provided for in the said act of 4th February, 1848.

In section nineteenth it is enacted that, the contemplated aid shall only be extended to one of the roads chartered under the names of the Nashville and Southern railroad company, and the Tennessee and Alabama railroad company, with the provision that either road may intersect with the one first obtaining the necessary subscription, and may become entitled to the same provisions with that road, from the point of intersection to the destined terminus of the road; in the case of the Tennessee and Alabama railroad, from the point of intersection with the Nashville and Southern railroad, to the Alabama State line, and in the case of the Nashville and Southern railroad, from the intersection with the Tennessee and Alabama railroad, to the Tennessee river, the Mississippi State line, or any point between the two, which may be chosen as the terminus of said road. The two companies have also the power of consolidating their stock, if they deem it advisable, and upon such terms as they may mutually agree upon. It is provided that, if the Memphis and Nashville railroad company do not comply with the requirements of this act, and complete 30 miles of their road within 4 years, or if the Nashville and North Western railroad company in like manner fail to complete 30 miles of their road in 4 years, then the Tennessee Central railroad company shall have all the privileges intended to be given by this act to those companies respectively, but the Tennessee Central railroad company shall be allowed two years longer time to complete their 30 miles of road. Any subsequent Legislature has the power to extend the term of 4 years in which to complete any 30 miles of said Nashville and Memphis or Nashville and North Western railroad companies. Each of said companies is required to appoint an agent to whom the bonds of the State shall be delivered, whose duty it shall be to control the bonds, and see that they are applied to the required purposes. The said agent before he receives the bonds of the State shall give bond and security that they shall be applied to the purposes aforesaid. It is further provided, that before any bonds be issued to any agent of any railroad, contemplated by this act, the President of such company shall first deposit in the office of the Secretary of State a full and accurate list of all the stockholders, with the sums subscribed by each stockholder.

Section twentieth and last enacts; that no road embraced in this act shall be entitled to State aid unless it shall within 4 years complete at least one section of 30 miles or the whole length of the road, if less than 30 miles long.

Ohio.

Eaton and Hamilton Railroad.—This road extends from Hamilton, Ohio, through Eaton, the county seat of Preble county, to the west line of the State, where it connects with the Richmond and Miami railroad, running from the State-line west, to Richmond, in Wayne co., Ia.

The Richmond and Miami railroad company was organized for the purpose of constructing the six miles from the State-line to Richmond; and when it is completed, it will be consolidated with the Eaton and Hamilton railroad, making one continuous line from Hamilton to Richmond, of 41 miles, and including the Cincinnati, Hamilton and Dayton railroad, the distance from Cincinnati to Richmond will be 69 miles.

At Richmond the Eaton and Hamilton railroad will unite with the New Castle and Richmond road extending to Logansport.

The distance from Richmond to Newcastle is 27 miles, and from Newcastle to Logansport, by way of Anderson and Kokomo, is 80 miles, making the distance from Cincinnati to Logansport, by a continuous railroad, of the same gauge, 176 miles.—From Logansport to Chicago, by the line of road which will probably be adopted, it is about 113 miles, making the whole distance from Cincinnati to Chicago 289 miles.

The Eaton and Hamilton railroad will also be connected at Richmond with the Indiana Central railroad, by which means Cincinnati will be brog't into communication with the cities of Indianapolis, Terre Haute and St. Louis. This road will soon be completed, and will bring to the Eaton and Hamilton railroad a large amount of through traffic.

The Cincinnati, Hamilton and Dayton railroad company have agreed to furnish the necessary equipment, and run the Eaton and Hamilton railroad when it is finished, so that regular daily trains will immediately run between Cincinnati and Richmond.

The cost of the road from Hamilton to Richmond a distance of 42 miles, is estimated at $713,103 35, including all expenses and interest on bonds up to July next.

The resources of the company are $532,767 00. Deduct this amount from the estimated cost of the road, and there is left a sum of $180,336 35 to be raised by sale of bonds. The amount of work done on the road up to 1st March, 1852, including iron and materials for the road, amounted to $498,161 37. The work remaining to be done amounts to $178,243 11.

The contractors are pressing forward the work vigorously. They intend to complete the division from Hamilton to Eaton, and to open it for use as early as June next. The 17 miles from Eaton to Richmond will be finished in October, if the necessary funds are obtained.

In order to finish the road as soon as possible, and furnish it with the necessary equipment, the company have issued 7 per cent bonds to the am't of $300,000, payable in 15 years, and convertible within five years, which are secured by a mortgage on the road, with its superstructure, fixtures, etc.

The whole liens upon the road, including the loan of Cincinnati, ($150,000) which has 27 years to run, at 6 per cent, and the $300,000 bonds, just mentioned amount to only $450,000, leaving a margin of nearly $300,000. When the proceeds of the loan now proposed are expended on the road it is the opinion of the company that the security will in fact be double the amount of the mortgage debts.

It is proposed to sell only $100,000 of the bonds at present, leaving the residue to be sold during the year, after the road from Hamilton to Eaton shall be finished and in use, and as the work progresses between Eaton and Richmond.

The prospects of the road are considered by the company to be very favorable. The value of the taxable property of the three counties of Hamilton, Butler and Preble in Ohio, which will be tributary to this line, amounted in 1851 to $71,352,959. In the two last counties alone, there were produced in 1850 more than 1,000,000 bushels of wheat and 3,300,000 bushels of corn.

Hamilton, situated upon the Cincinnati, Hamilton and Dayton railroad, and at the southern end of the Eaton and Hamilton railroad, is a flourishing town, containing, with Rossville on the opposite side of the river, a population of six thousand. A hydraulic power has been created at Hamilton, which is not surpassed by any water power in the State.

The Great Miami river has been brought upon the town plat by a large canal four miles in length. The whole water of the river can be used over a fall of thirty feet. Several large paper mills, foundries, cotton mills, machine shops, flouring mills, and other manufacturing establishments, are now in successful operation. The advantages possessed by Hamilton for manufacturing, and its proximity to Cincinnati, must make it the Lowell of the west.

At Richmond, and along Seven Mile Creek, and White Water, there is a large amount of water power, which might be brought into use. At present, quite a number of flouring mills and other manufacturing establishments have been built upon these streams, and there will probably be many more erected.

From these sources the Eaton and Hamilton railroad will derive a profitable local traffic, and from the important connections it will form with other roads, a through traffic no less profitable may be expected.

The Newcastle and Richmond railroad, is the most important connecting line. This road runs from Richmond to Newcastle, and from thence to Logansport, on the Wabash river. At that place it connects with the Logansport and Lake Michigan railroad, running from Logansport to Chicago. The distance from Cincinnati to Logansport, as has been already stated, is 176 miles, and to Chicago, 289 miles.

The whole line from Richmond to Logansport is now under contract, and stock sufficient to ensure the speedy construction of the road has been subscribed. The road from Logansport to Chicago has not yet been put under contract, but there is no doubt it will be constructed, now that the line from Cincinnati to Logansport is determined upon.

The immense business that will be transacted between Cincinnati and Chicago is a sufficient guarantee for the success of any line of road connecting these two cities, and as the Eaton and Hamilton railroad will form an important part of the proposed line between Cincinnati and Chicago, there is every reason to believe that it will derive a profitable business from its position.

Another and no less important connection for the Eaton and Hamilton railroad is that which it will form with the Indiana Central railway. In conjunction with that road it will form the best route between Cincinnati and St. Louis, and the travel that will pass from one city to the other will be attracted to it in preference to other routes. The beauty, high state of improvement, and great wealth and population of the country through which the Indiana Central railroad passes, as well as the favorable alignment of the road, will render it an important line, and the connection which the Eaton and Hamilton railroad will form with it, will be of advantage to both roads.

From these circumstances, the company argue a brilliant future for their road, and we see no reason why they should be disappointed in their expectations.

To Contractors.

We learn that the Illinois Central R.R. Co. have advertised the grading, masonry, bridging, superstructure, or either of them, with or without materials, on the following divisions of the Illinois Central railroad, to wit:

First division, from Cairo to Big Muddy river.....60 miles.
Second division from Big Muddy river to Township No 1, north of the base line of the 3d principal meridian.....53 miles.
Sixth division from Bloomington to the Illinois river.....60 miles.
Eighth division from Freeport to Dubuque67 miles.
Ninth division, from Chicago to Kankakee river.....55 miles.
Tenth division, from Kankakee river to Urbana.....70 miles.

The proposals must be for the entire length of each division, and will be received at the office in Chicago, as follows:

For the ninth and tenth divisions, until April 15, 1852, at noon.

For the sixth division, until April 22, 1852, at noon.

For the eighth division, until April 29, 1852, at noon.

For the first and second divisions, until May 27, 1852, at noon.

Profiles, plans, and approximate estimates of quantities, and specifications, will be ready for inspection, and blank forms for proposals, and statements of the mode and terms of payment, will be furnished at the office, over the New York and New Haven railroad passenger Station, No. 33 Canal st., New York city, and at the office of the Chief Engineer, R. B. Mason, in Chicago, Illinois, on and after March 25, 1852.

Railroad Connection between Lake Michigan and the Gulf of Mexico.

The announcement that the Illinois Central railroad company are about to place some portions of this line under contract, naturally turns our attention to the subject of a railway connection between Lake Michigan and the two great gulf cities of Mobile and New Orleans. Lake Michigan being the western limit of lake navigation, there must always exist a very large commerce between it and the gulf of Mexico. Upon the latter are produced in abundance the fruits of the tropics, and upon the the lake, all those that belong to the temperate, also to high northern latitudes. The *natural* direction of commerce is between the two, and in this respect coincides with the existing routes We propose briefly to examine this subject, for the purpose of developing the route which is likely to become the medium of communication between these important termini.

The Illinois Central railroad, in connection with the Mobile and Ohio, has been regarded as the shortest and most appropriate route between the lake and the gulf, simply from the fact that public attention has been called to this route, through the efforts of the above companies, and because no other competing lines have been proposed. The merits of the above as a through route, rest only upon an assumption of its superiority. This assumption can easily be disproved by pointing out another, which has the advantage, not only in distance, but still more so in all its attractions. The conditions that determine the best route between Chicago and the gulf are, first, the physical characteristics, second, its through business, and third the local attractions. A business man in passing from one to the other, would take the route that would carry him through the leading commercial points. The tourist and pleasure traveller would take the routes most inviting for their natural features, and the objects of interest to be met with.—The merchant would use that as the channel of commerce, which could carry at the cheapest rates, and this, all other things being equal, would depend upon length of lines, amount of grade and curvature.

Now the route between Chicago and Mobile, New Orleans, that fulfills this condition in preference to any other, is one, running from Chicago to the Wabash river, either at Lafayette or Terre Haute, thence down the valley of the Wabash to Evansville, thence by the proposed Henderson and Nashville railroad to *Nashville*, thence by the proposed road from Nashville running in a southwesterly direction to the bend of the Tennessee river, or to Florence, to connect the Mobile and Ohio, and New Orleans and Nashville railroad, of the latter of which, the above named road from Nashville is to form a part. Let us see in what constitutes the superiority of this route.

The Wabash valley and river are the most destinctive features of Western Indiana and Eastern Illinois. The river was formerly the principal, and is now an important channel for the commerce of the portions of the States named. The facilities afforded by the river have been vastly increased by the Wabash canal, which follows its bank for nearly its entire length. The two are the outlets of a very extended section of country. Upon their banks we find the depots of the produce, and the great points of trade, for the adjoining States. Lafayette, Terre Haute, and Evansville, which may be considered a Wabash town, are already large places, and are rapidly taking high rank among the leading western towns. On going south from the Ohio, the first town of any considerable importance is Clarksville, Tennessee, which is a large depot for the produce for northern Tennessee and southern Kentucky. But the most important and attractive place is Nashville the political capital of the State, and which must always remain one of its largest towns. From Nashville to Mobile and New Orleans, no very important place is met with. As far as leading points and the character of the country are concerned, it certainly will compare favorably with the more western route, until they shall become united in one in northern Alabama, or Mississippi.

We believe that no other route in the west can be presented more important in all its aspects, or more inviting both to the business man and the traveller. The road traverses a most beautiful and productive country; the great depots of trade and commerce, and of course the most populous cities between the Miami canal on one side, and the Mississippi river on the other. It possesses superior advantages in the numerous lines of railroad it will intersect with, affording the traveller the opportunity of moving in any direction he may chose. At Nashville a choice of routes is presented between the southern Atlantic and gulf cities.

Memphis and Charleston Railroad.

The Huntsville Advocate contains a brief statement of the President of this company, Geo. P. Beirne, which presents a most gratifying report of the progress of the work. The road from Crow Creek to Tuscumbia has been placed under contract, and the prospect for an early completion of the work is indeed cheering. We give the following extracts for the information of our readers.

"It is known to the stockholders, that, heretofore, purchases were made of the "Memphis and Lagrange company," and the State of Tennessee of their interest in the Memphis and Lagrange track, and also the interest of the "Tennessee Valley railroad company," with all its rights and privileges in what was formerly known as the Tuscumbia, Courtland and Decatur railroad. That these roads were made a part of the main trunk of the Memphis and Charleston railroad,—that iron rails of the most approved T. pattern, to the amount of 8,500 tons, were brought for the purpose of constructing these roads. That contracts have been entered into for the purpose of putting them in running order.

"It is now announced that the estimated cost of the Lagrange portion, in running order, was found to be $360,000, the Valley railroad $276,000, making the aggregate cost of these 92 miles of the Memphis and Charleston railroad, $636,000. That, the grading, cross-ties, Engines, burden cars, laying the track, etc., contracted for at prices known, insures the completion of that portion of the road within the estimate of the engineer. And the question is confidently asked where can 52 miles of railroad in the United States, through so productive a country, be built for the same money!"

The board of Directors at a late meeting ordered that contracts be entered into for the grading, etc., of that portion of the said road from its intersection with the Nashville and Chattanooga railroad to Decatur, and sections Nos —— west of Tuscumbia. For all of which bids were made [including the bridge at Decatur] by responsible contractors. That the President directs a survey to b emade from Lagrange, Tennessee, to the most suitable point on the Tennessee river in said State, and from

a suitable point west of Tuscumbia to the most suitable point on the Tennessee river in the State of Alabama, below obstructions to navigation, and then to ascertain the most practicable way of connecting these two points on the Tennessee river.

Massachusetts.

Barre and North Brookfield Railroad.—The Barre papers contain an account of a meeting of committees of the Worcester and Western railroads, with delegations from Barre and North Brookfield, to take into consideration the building of a branch road from Barre to intersect with the Western railroad at Brookfield. It was represented that the cost of construction would be about $200,000, one-half of which sum was pledged from the towns along the line, if the two corporations represented would raise the remainder. The Patriot informs us that those corporations have so agreed, and that a petition for a charter has been presented to the Legislature with high hopes of its being granted.

Pennsylvania.

Cumberland Valley Railroad.—We learn from the seventeenth annual report of the President, that since the re-construction of this road, the financial condition of the company has been much improved. The rates of passenger fare for the past year were reduced about 30 per cent., and the tolls for freight were very considerably diminished. The result is as follows:

Amount of receipts for freights and tolls in 1851	$108,199 56
" in 1850	92,755,78
Difference in favor of 1851	$15,443.78
Number of tons carried in 1851	51,674
" " " " in 1850	37,574
Difference in favor of 1851	$14,100

The total receipts of the company for the year 1851 were $199,754,06. The current expenses for the same period were $40,287,15; leaving a balance of $159,466.91.

The company have during the past year added to the motive power of the road by the purchase of two new locomotives, weighing 8 tons each, at a cost of $7,644,38. To meet this expense, together with that of completing the relaying of the road, the board of managers authorized the president at the beginning of the year to sell at par 300 shares of first preferred stock, which had been originally authorised for the reconstruction of the road, and which remained undisposed of. It was found necessary to sell only 131 shares, leaving the residue to be disposed of when the exigencies of the company may require it.

The contract made with the York and Cumberland railroad company to furnish the latter with motive power, has been rescinded, on account of the insufficiency of the locomotives of the Cumberland Valley railroad to surmount the high grades of the York and Cumberland road. The Baltimore and Susquehanna railroad company, who are possessed of a heaviermotive power, have taken up the contract, andhave performed the work thus far satisfactorily to all parties.

The company state that the facilities for the advantageous transaction of their business are not as yet complete. It has long been deemed necessary to erect substantial warehouses at several points, and the company hope they will soon be enabled to build them. Thus far they have spent the residue of their earnings, after the payment of current expenses and dividends upon preferred stock, in improving their road, and putting it in a condition to be worked efficiently and with economy. Now, that their road is in good order they will probably be able soon to make all other necessary improvements, and to prepare themselves in every way for the increase of business which they have good reason to expect.

The officers of the road for 1852, are:

President: Frederic Watts.

Managers: William S. Cobean, Wm. M. Biddle, D. O. Gehr, George Cadwalader, Wm. M. Henderson, Henry J. Biddle, Frederic Byers, J. N. Hutchinson, Daniel Tyler, James M'Cormick, David Lapsley, J. P. Hutchinson.

Secretary and Treasurer, Edward M. Biddle.

Ohio and Pennsylvania Railroad.

The ceremony of opening this road to *Massillon*, 108 miles from Pittsburg, took place on the 11th instant, with all those manifestations suited to the occasion. The excursion patty, consisting of the directors of the road, accompanied by a numerous body of the leading men of Pittsburg, and of the counties contiguous to the line of the road, were entertained by a grand dinner, provided by the authorities of Massillon, at which a number of speeches were made, and the following, among other *deservedly* complimentary toasts, were drunk:—

The Ohio and Pennsylvania Railroad.—Its commencement July 4th, 1849, and the completion of *one hundred and eight miles* from Pittsburg to Massillon within the brief period of *thirty-two months*, furnish substantial proof of the energy and efficiency of the President and directors of the company.

S. W. Roberts, Esq., Chief Engineer of the Road.—By the skill, energy, promptitude, and fidelity, exhibited in its construction, he may well challenge the world, both for expedition and superiority of structure.

Jesse R. Straughan, Esq.—In the efficient discharge of his duties, and gentlemanly deportment as Local Engineer, is eminently entitled to the thanks of the company and the confidence of the public.

Toasts complimentary to Arnold Lynch, and Zadock Street, Esqs., directors, to Mr. Warner, superintendent of the first division of the road, and to other leading men connected with the enterprise, were given, and, as well as those already quoted, were received with great enthusiasm, and the day wound up in the happiest manner for all concerned.

We are happy to add our meed of praise to that already bestowed upon those entrusted with the management of this great work, for the energy and ability with which they have carried it forward, which is not only to be an inestimable boon to the region it traverses, but which has contributed, by the reputation it has acquired, not a little towards the success of similar western projects. The Ohio and Pennsylvania railroad company has fairly earned the reputation it enjoys, which has caused its securities to be eagerly sought for, not only in this country, but in Europe.

We confidently expect that the close of the present year will witness the opening of the entire line.

North Carolina.

The Wilmington and Manchester Railroad.—The Wilmington, (North Carolina,) Commercial says: Twenty-five miles of the Wilmington and Manchester railroad will soon be in operation. On and after the first of April, the mail and passenger trains on the Wilmington and Manchester railroad will run to Mary's station, twenty-five miles from its junction with the Camden Branch railroad.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from Cairo to Big Muddy River	60 miles.
Second	"	" Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian	53 "
Sixth	"	" Bloomington to the Illinois River	60 "
Eighth	"	" from Freeport to Dubuque	67 "
Ninth	"	" Chicago to Kankakee river	55 "
Tenth	"	" Kankakee river to Urbana	70 ".

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

CHILLED WHEELS

FOR RAILROAD CARS AND LOCOMOTIVE ENGINES.

Bush & Lobdell,

Wilmington Delaware,

ARE prepared to execute, promptly, orders to any extent, for their celebrated Wheels, (with or without axles,) the character of which is well known.

For the information of parties interested, they make known that George W. Eddy, of Waterford, N. Y., Lyman Kinsley, of Canton, Massachusetts, and Bush & Lobdell, of Wilmington, Delaware, are the only persons authorized to manufacture Wheels, by using the Elgar Patent, the Eddy Patents, and the Kinsley Patent.

Wilmington, Del., March 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction - India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agent.

Lithographic Printing,

169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer.

Engineer's Office, Pittsburgh, March 22, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan. 22, 1852.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.

THOS. H. CALLAWAY, Prest.

Railroad Office, Athens, Tenn., 1st March, 1852.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the Importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG.

Boston, November 29th. 1m

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WARREN ST.
New York, March 5, 1852.

F. M. RAY, Esq.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rochester Scale Works.

THE Subscribers are prepared to furnish upon order RAILROAD SCALES of every size and description.

Railroad Track and Depot Scales.
Hay, Coal and Wheat Scales.
Dormant and Portable Scales.
Canal Weigh Lock Scales—150 to 600 tons.
Warehouse Trucks, a superior article
Manifest Presses, and Copying Books.

Every article made of the best material and *warranted.* The superiority of these Scales has given them a reputation world-wide. We are prepared to fill orders promptly. Persons wishing any of the above articles would do well to give us a call before purchasing elsewhere. Reference is made to the following railroads that have them in use:—

New York and Erie,	Michigan Central,
New York and Harlem,	Mad Riv. & Lake Erie,
New York and N. Haven,	Patterson & Hudson R.,
Sand'ky, Mans. & New'k,	Cin., Ham. and Dayton,
Ind. and Bellefontaine,	Buffalo and Rochester,
Syracuse and Utica,	Rochester & Syracuse,
Columbus and Xenia,	Louisville & Frankfort,
Lexington and Frankfort,	Chicago and Galena,
Hillsboro' and Cincinnati,	Dayton and Western,
Greenville and Miami,	Central Ohio,
Cayuga and Susquehanna,	Chemung,
	Illinois Coal Co.

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

DURYEE, FORSYTH & CO.
Rochester, N. Y.

WILLIAM T. PINKNEY, Jr., 166 Pearl St., N. Y.
THOMAS ELDER, St. Louis, Mo.
RAYMOND WARD & Co., Chicago, Ill.
W. A. OTIS & Co., Cleveland, Ohio.
March 21, 1852.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me. and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.



The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.



The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. Co.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

CAUTION.

India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE & HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of $800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near, Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburg, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburg, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill reglons, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactories, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Columbia, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.

Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it every where on the road.

Yours, very respectfully, G. A. NICOLLS, Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER, Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH, Sup't Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities. JOHN TUCKER, President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER, Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 23d Jan., 1852

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 14] SATURDAY, APRIL 3, 1852 [WHOLE No. 833, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

General Railroad Law of New York.....109, 216
Tolls on the New York Canals.....214
Columbus, Piqua and Indiana Railroad.....214
Railroad Connection in Ohio.....215
Sodus Point and Southern Railroad.....215, 221
Railroad from Greenville to Union.....215
Virginia and Tennessee Railroad.....215
Rock Island and Chicago Railroad.....215
Hillsboro' Railroad.....215
Indiana Central Railroad.....216
Cleveland and Pittsburg Railroad.....216
Penobscot and Kennebec Railroad.....216
Stock and Money Market.....217
Grants of Lands for Railroads.....218
Railroads in Tennessee and Kentucky.....219
Pittsburg and Steubenville railroad.....219
Railroad from Lafayette to Burlington.....220
Ohio and Mississippi Railroad.....220
Hempfield Railroad.....220
Delaware and Hudson Canal.....221

American Railroad Journal.

Saturday, April 3, 1852.

New General Railroad Law.

An Act to Authorize the Formation of Railroad Corporations, and to Regulate the same.—Passed April 2d, 1850.

§ 1. Any number of persons not less than twenty-five, may form a company for the purpose of constructing, maintaining and operating a railroad for public use in the conveyance of persons and property, or for the purpose of maintaining and operating any unincorporated railroad already constructed, for the like public use; and for that purpose may make and sign articles of association, in which shall be stated the name of the company; the number of years the same is to continue; the places from and to which the road is to be constructed, or maintained and operated; the length of such road as near as may be, and the name of each county in this State through or into which it is made, or intended to be made; the amount of the capital stock of the company, which shall not be less than ten thousand dollars for every mile of road constructed, or proposed to be constructed, and the number of shares of which said capital stock shall consist, and the names and places of residence of thirteen directors of the company, who shall manage its affairs for the first year, and until others are chosen in their places. Each subscriber to such articles of association shall subscribe thereto his name, place of residence, and the number of shares of stock he agrees to take in said company. On compliance with the provisions of the next section, such articles of association may be filed in the office of the Secretary of State, who shall endorse thereon the day they are filed, and record the same in a book to be provided by him for that purpose; and thereupon the persons who have so subscribed such articles of association, and all persons who shall become stockholders in such company, shall be a corporation by the name specified in such articles of association, and shall possess the powers and privileges granted to the corporations, and be subject to the provisions contained in title three of chapter eighteen of the first part of the Revised Statutes, except the provisions contained in the seventh section of the said title.

§ 2. Such articles of association shall not be filed and recorded in the office of the secretary of state, until at least one thousand dollars of stock for every mile of railroad proposed to be made is subscribed thereto, and ten per cent paid thereon in good faith, and in cash, to the directors named in said articles of association; nor until there is endorsed thereon, or annexed thereto, an affidavit made by at least three of the directors named in said articles, that the amount of stock required by this section has been in good faith subscribed, and ten per cent paid in cash thereon as aforesaid, and that it is intended in good faith to construct or to maintain and operate the road mentioned in such articles of association; which affidavit shall be recorded with the articles of association as aforesaid.

§ 3. A copy of any articles of association filed and recorded in pursuance with this act, or of the record thereof, with a copy of the affidavit aforesaid endorsed thereon or annexed thereto, and certified to be a copy by the secretary of this state, or his deputy, shall be presumptive evidence of the incorporation of such company, and of the facts therein stated.

§ 4. When such articles of association and affidavit are filed and recorded in the office of the secretary of state, the directors named in said articles of association may, in case the whole of the capital stock is not before subscribed, open books of subscription to fill up the capital stock of the company, in such places and after giving such notice as they may deem expedient, and may continue to receive subscriptions until the whole capital stock is subscribed. At the time of subscribing, every subscriber shall pay to the directors ten per cent on the amount subscribed by him, in money; and no subscription shall be received or taken without such payment.

§ 5. There shall be a board of thirteen directors of every corporation formed under this act, to manage its affairs. Said directors shall be chosen annually, by a majority of the votes of the stockholders voting at such election, in such manner as may be prescribed in the by-laws of the corporation, and they may and shall continue to be directors until others are elected in their places. In the election of the directors, each stockholder shall be entitled to one vote for each share of stock held by him. Vacancies in the board of directors shall be filled in such manner as shall be prescribed by the by-laws of the corporation. Every corporation formed under this act shall be subject to the regulations concerning the election of directors of moneyed corporations, contained in article second of the second title of the eighteenth chapter of the first part of the Revised Statutes. The inspectors of the first elections of directors shall be appointed by the board of directors named in the articles of association. No person shall be a director, unless he shall be a stockholder, owning stock absolutely in his own right, and qualified to vote for directors at the election at which he shall be chosen. At every election of directors, the books and papers of such company shall be exhibited to the meeting, provided a majority of the stockholders present shall require it.

§ 6. The directors shall appoint one of their number president; they may also appoint a treasurer and secretary, and such other officers and agents as shall be prescribed by the by-laws.

§ 7. The directors may require the subscribers to the capital stock of the company to pay the amount by them respectively subscribed, in such manner and in such instalments as they may deem proper. If any stockholder shall neglect to pay any instalment as required by a resolution of the board of directors, the said board shall be authorised to declare his stock, and all previous payments thereon, forfeited for the use of the company; but they shall not declare it so forfeited, until they shall have caused a notice in writing to be served on him personally, or by depositing the same in the post-office, properly directed to him at the post-office nearest his usual place of residence, stating that he is required to make payment at the time and place specified in said notice; and if he fails to make the same, his stock, and all previous payments thereon, will be forfeited for the use of the company; which notice shall be served as aforesaid, at least sixty days previous to the day on which such payment is required to be made.

§ 8. The stock of every company formed under this act shall be deemed personal estate, and shall be transferable in the manner prescribed by the by-laws of the company, but no shares shall be transferable until previous calls thereon shall have been fully paid in; and it shall not be lawful for such company to use any of its funds in the purchase of any stock in its own or any other corporation.

§ 9. In case any capital stock of any company formed under this act, is found to be insufficient for constructing and operating its road, such company may, with the concurrence of two-thirds in amount of all its stockholders, increase its capital stock from time to time, to any amount required for the purposes aforesaid. Such increase must however be sanctioned by a vote in person, or by proxy, of two-thirds in amount of all the stockholders, called by the directors of the company for that

purpose, by a notice in writing to each stockholder to be served on him personally, or by depositing the same, properly folded and directed to him, at the post-office nearest his usual place of residence, in the post-office, at least twenty-days prior to such meeting. Such notice must state the time and place of the meeting, and its object, and the amount to which it is proposed to increase the capital stock. The proceedings of such meeting must be entered on the minutes of the proceedings of the company, and thereupon the capital stock of the company may be increased to the amount sanctioned by a vote of two-thirds in amount of all the stockholders of the company as aforesaid.

§ 10. Each stockholder of any company formed under this act, shall be individually liable to the creditor of such company, to an amount equal to the amount unpaid on the stock held by him, for all the debts and liabilities of such company, until the whole amount of the capital stock so held by him shall have been paid to the company; and all the stockholders of every such company shall be jointly and severally liable for all the debts due or owning to any of its laborers and servants, for services performed for such corporation; but shall not be liable to an action therefor, before an execution shall be returned unsatisfied in whole, or in part, against the corporation; and then the amount due on such execution shall be the amount recoverable, with costs, against such stockholders.

§ 11. No person holding stock in any such company, as executor, administrator, guardian or trustee, and no person holding stock as collateral security, shall be personally subject to any liability as stockholders of such company; but the person pledging such stock shall be considered as holding the same, and shall be liable as a stockholder accordingly; and the estates and funds in the hands of such executor, administrator, guardian or trustee, shall be liable in like manner, and to the same extent as the testator, or intestate, or the ward or person interested in such trust fund would have been, if he had been living and competent to act, and held the same stock in his own name.

§ 12. As often as any contractor for the construction of any part of a railroad, which is in progress of construction, shall be indebted to any laborer, for thirty or any less number of days labor performed in constructing said road, such laborer may give notice of such indebtedness to said company in the manner herein provided; and said company shall thereupon become liable to pay such laborer the amount so due him for such labor, and an action may be maintained against said company therefor. Such notice shall be given by said company, within twenty days after the performance of the number of days labor for which the claim is made. Such notice shall be in writing, and shall state the amount and number of days labor, and the time when the same was performed, for which the claim is made, and the name of the contractor from whom due, and shall be signed by such laborer, or his attorney; and shall be served on an engineer, agent or superintendent employed by said railroad company, having charge of the section of the road on which such labor was performed, personally, or by leaving the same at the office or usual place of business of such engineer, agent or superintendent, with some other person of suitable age. But no action shall be maintained against any company under the provisions of this section, unless the same is commenced within thirty days after notice is given to the company of such laborer as above provided.

§ 13. In case any company formed under this act is unable to agree for the purchase of any real estate reqired for the purposes of its corporation, it shall have the right to acquire title to the same, in the manner and by the special proceedings prescribed in this act.

§ 14. For the purpose of acquiring such title, the said company may present a petition, praying for the appointment of commissioners of appraisal, to the supreme court, at any general or special term thereof held in the district in which the real estate described in the petition is situated. Such petition shall be signed and verified according to the rules and practice of such court. It must contain a description of the real estate which the company seek to acquire; and it must, in effect state that the company is duly incorporated, and that it is the intention of the company, in good faith, to construct and finish a railroad from and to the places named for that purpose in its articles of association; that the whole capital stock of the company has been in good faith subscribed as required by this act; that the company has surveyed the line or route of its proposed road, and made a map or survey thereof, by which route or line is designated, and that they have located their road according to such survey, and filed certificates of such location, signed by a majority of the directors of the company, in the clerks' office of the several counties through or into which the said road is to be constructed; that the land described in the petition is required for the purpose of constructing or operating the proposed road; and that the company has not been able to acquire title thereto, and the reason of such inability. The petition must also state the names and places of residence of the parties, so far as the same can by reasonable diligence be ascertained, who own or have, or claim to own or have estates or interests in the said real estate; and if any such persons are infants, their ages as near as may be, must be stated; and if any such persons are idiots, or persons of unsound mind; or are unknown, that fact must be stated, together with such other allegations and statements and liens or incumbrances on said real estate as the company may see fit to make. A copy of such petition, with a notice of the time and place the same will be presented to the supreme court, must be served on all persons whose interests are to be affected by the proceedings, at least ten days prior to the presentation of the same to the said court.

1. If the person on whom such service is to be made, resides in this state, and is not an infant, idiot or person of unsound mind, service of a copy of such petition and notice must be made on him or his agent or attorney, authorised to contract for the sale of the real estate described in the petition, personally, or by leaving the same at the usual place of residence of the person on whom service must be made as aforesaid, with some person of suitable age.

2. If the person on whom such service is to be made resides out of the state, and has an agent residing in this state, authorised to contract for the sale of the real estate described in the petition, such service may be made on such agent, or on such person personally out of the State; or it may be made by publishing the notice, stating briefly the object of the application, and giving a description of the land to be taken, in the state paper, and in a paper printed in the county in which the land to be taken is situated, once in each week for one month next previous to the presentation of the petition. And if the residence of such person residing out of this state, but in any of the United States, or any of the British colonies in North America, is known, or can by reasonable diligence be ascertained, the company must, in addition to such publication as aforesaid, deposit a copy of the petition and notice in the post office, properly folded and directed to such person at the post-office nearest his place of residence, at least thirty days before presenting such petition to the court, and pay the postage chargeable thereon in the United States.

3. If any person on whom such service is to be made is under the age of twenty-one years, and resides in this state, such service shall be made as aforesaid on his general guardian; or if he has no such guardian, then on such infant personally, if the same is over the age of fourteen years; and if under that age, then on the person who has the care of, or with whom such infant resides.

4. If the person on whom such service is to be made is an idiot, or of unsound mind, and resides in this State, such service may be made on the committee of his person or estate; or if he has no such committee, then on the person who has the care and charge of such idiot or person of unsound mind.

5. If the person on whom such service is to be made is unknown, or his residence is unknown, and cannot by reasonable diligence be ascertained, then such service may be made, under the direction of the court, by publishing a notice, stating the time and place the petition will be presented, the object thereof, with a description of the land to be affected by the proceedings, in the state paper, and in the paper printed in the county where the land is situated, once in each week for one month previous to the presentation of such petition.

6. In case any party to be affected by the proceedings is an infant, idiot, or of unsound mind, and has no general guardian or committee, the court shall appoint a special guardian or committee to attend to the interests of such person in the proceedings; but if a general guardian or committee has been appointed for such person in this state, it shall be the duty of such general guardian or committee to attend to the interests of such infant, idiot or person of unsound mind; and the court may require such security to be given by such general or special guardian or committee, as it may deem necessary to protect the rights of such infant, idiot or person of unsound mind; and all notices required to be served in the progress of the proceedings, may be served on such general or special guardian or committee.

7. In all cases not herein otherwise provided for, service of orders, notices and other papers in the special proceedings authorised by this act, may be made as the supreme court shall direct.

§ 15. On presenting such petition to the supreme court as aforesaid, with proof of service of a copy thereof and notice as aforesaid, all persons whose estates or interests are to be affected by the proceedings may show cause against granting the prayer of the petition, and may disprove any of the facts alleged in it. The court shall hear the proofs and allegations of the parties, and if no sufficient cause is shown against granting the prayer of the petition, it shall make an order for the appointment of five disinterested and competent persons who reside in the county where the premises to be appraised are situated, commissioners to ascertain and appraise the compensation to be made to the owners or persons interested in the real estate proposed to be taken in such county for the purposes of the company, and to fix the time and place for the first meeting of such commissioners. The parties whose lands are to be appraised, or their attorneys, may, in case they appear, name six other persons, and the company a like number, provided they do so, and the court shall appoint two of the commissioners from each of the six so named, in case there is no legal objection to such appointment, and the other commissioner shall be appointed by the court in its discretion.

§ 16. The commissioners shall take and subscribe the oath prescribed by the twelfth article of the constitution. Any one of them may issue subpœnas, administer oaths to witnesses, and any three of them may adjourn the proceedings before them from time to time, in their discretion. Whenever they meet, except by the appointment of the court or pursuant to adjournment, they shall cause reasonable notice of such meeting to be given to the parties who are to be affected by their proceedings, or their attorney or agent. They shall view the premises described in the petition, and hear the proofs and allegations of the parties, and reduce the testimony, if any is taken by them, to writing; and after the testimony is closed in each case, and without any unnecessary delay, and before proceeding to the examination of any other claim, a majority of them, all being present and acting, shall ascertain and determine the compensation, which ought justly to be made by the company to the party or parties owning or interested in the real estate appraised by them; and in determining the amount of such compensation they shall not make an allowance or deduction on account of any real or supposed benefits which the parties in interest may derive from the construction of the proposed railroad. They, or a majority of them, shall also determine and certify what sum ought to be paid to a general or special guardian or committee of an infant, idiot or person of unsound mind, or to an attorney appointed by the court to attend to the interest of any unknown owner or party in interest, not personally served with notice of the proceedings, and who has not appeared, for costs, expenses and counsel fees. They shall make a report to the supreme court, signed by them or a majority of them, of the proceedings before them, with the minutes of the testimony taken by them, if any. Said commissioners shall be entitled to three dollars for their expenses and services for each day they are engaged in the performance of their duties, to be paid by the company.

§ 17. On such report being made by said commissioners, the company shall give notice to the parties or their attorneys to be affected by the proceedings, according to the rules and practice of said court, at a general or special term thereof, for the confirmation of such report; and the court shall thereupon confirm such report, and shall make an order, containing a recital of the substance of the proceedings in the matter of the appraisal, and a description of the real estate appraised for which compensation is to be made; and shall also direct to whom the money is to be paid, or in what bank, and in what manner it shall be deposited by the company.

§ 18. A certified copy of the order so to be made as aforesaid, shall be recorded at full length in the clerk's office of the county in which the land described in it is situated; and thereupon, and on the payment or deposit by the company of the sums to be paid as compensation for the land, and for costs, expenses, and counsel fees as aforesaid, and as directed by said order, the company shall be entitled to enter upon, take possession of, and use the said land for the purposes of its incorporation, during the continuance of its corporate existence, by virtue of this or any other act; and all persons who have been made parties to the proceedings shall be divested and barred of all right, estate and interest in such real estate during the corporate existence of the company as aforesaid. All real estate acquired by any company under and pursuant to the provisions of this act, for the purposes of its incorporation shall be deemed to be acquired for public use. Within twenty days after the confirmation of the report of the commissioners, as provided for in the seventeenth section of this act, either party may appeal, by notice in writing to the other, to the supreme court, from the appraisal and report of the commissioners. Such appeal shall be heard by the the supreme court, at any general or special term thereof, on such notice thereof being given, according to the rules and practice of said court. On the hearing of such appeal, the court may direct a new appraisal before the same or new commissioners in its discretion; the second report shall be final and conclusive on all the parties interested. If the amount of the compensation to be made by the company is increased by the second report, the difference shall be a lien on the land appraised, and shall be paid by the company to the parties entitled to the same, or shall be deposited in the bank, as the court shall direct; and if the amount is diminished, the difference shall be refunded to the company by the party to whom the same may have been paid; and judgment therefor may be rendered by the court, on the filing of the second report against the party liable to pay the same. Such appeal shall not affect the possession by such company of the land appraised; and when the same is made by others than the company, it shall not be heard, except on a stipulation of the party appealing not to disturb such possession.

§ 19. If there are adverse and conflicting claimants to the money, or any part of it, to be paid as compensation for the real estate taken, the court may direct the money to be paid into the said court by the company, and may determine who is entitled to the same, and direct to whom the same shall be paid; and may, in its discretion, order a reference to ascertain the facts on which such determination and order are to be made.

§ 20. The court shall appoint some competent attorney to appear for, and protect the rights of any party in interest, who is unknown, or whose residence is unknown, and who has not appeared in the proceedings by an attorney or agent. The court shall also have power at the time to amend any defect or informality in any of the special proceedings authorized by this act, as may be necessary; or to cause new parties to be added, and to direct such further notices to be given, to any party in interest, as it deems proper; and also to appoint other commissioners in place of any who shall die, or refuse, or neglect to serve, or be incapable of serving.

§ 21. If, at any time after an attempt to acquire title by appraisal of damages or otherwise, it shall be found that the title thereby attempted to be acquired is defective, the company may proceed anew to acquire or perfect such a title in the same manner as if no appraisal had been made; and at any stage of such new proceedings, the court may authorise the corporation, if in possession, to continue in possession, and if not in possession, to take possession, and use such real estate during the pendency and until the final conclusion of such new proceedings; and may stay all actions or proceedings against the company on account thereof, on such company paying into court a sufficient sum, or giving security as the court may direct, to pay the compensation therefor when finally ascertained; and in every such case, the party interested in such real estate may conduct the proceedings to a conclusion, if the company delays or omits to prosecute the same.

§ 22. Every company formed under this act, before constructing any part of their road into or through any county named in their articles of association, shall make a map and profile of the route intended to be adopted by such company in such county, which shall be certified by the president and engineer of the company, or a majority of the directors, and filed in the office of the clerk of the county in which the road is to be made. The company shall give written notice to all actual occupants of the land over which the route of the road is so designated, and which has not been purchased by or given to the company, of the route so designated. Any party feeling aggrieved by the proposed location, may, within fifteen days after receiving written notice as aforesaid, apply to a justice of the supreme court, out of court by petition, duly verified, setting forth his objections to the route designated; and the said justice may, if he considers sufficient cause therefor to exist, appoint three disinterested persons, one of whom must be a practical engineer, commissioners to examine the proposed route, and after hearing the parties, to affirm or alter the same, as may be consistent with the just rights of all parties and the public; but no alteration of the route shall be made except by the concurrence of the commissioner who is a practical civil engineer. The determination of the commissioners shall, within thirty days after their appointment be made and certified by them, and the certificate filed in the office of the county clerk. Said commissioners shall each be entitled to three dollars per day for their expenses and services, to be paid by the person who applied for their appointment; and if the proposed route of the road is altered or changed by the commissioners, the company shall refund to amount so paid.

§ 23. The directors of every company formed under this act may, by a vote of two-thirds of their whole number, at any time alter or change the route or any part of the route of their road. If it shall appear to them that the line can be improved thereby; and they shall make and file in the clerk's office of the proper county, a survey, map and certificate of such alteration or change; and shall have the same right and power to acquire title to any lands required for the purposes of the company, in such altered or changed route, as if the road had been located there in the first instance; and no such alteration shall be made in any city or village, after the road shall have been constructed, unless the same is sanctioned by a vote of two-thirds of the common council of said city or trustees of said village; and in case of any alteration made in the route of any railroad after the company has commenced grading, compensation shall be made to all persons for injury so done to any lands that may have been donated to the company. All the provisions of this act relative to the first location, and to acquiring title to land, shall apply to every such new or altered portions of the route.

§ 24. Whenever the track of a railroad constructed by a company formed under this act shall cross a railroad, a highway, turnpike or plank road, such highway, turnpike or plank road may be carried under or over the track, as may be found most expedient; and in cases where an embankment or cutting shall make a change in the line of such highway, turnpike or plank road desirable, with a view to a more easy ascent or descent, the said company may take such additional lands for the construction of such road, highway, turnpike or plank road on such new line as may be deemed requisite by the directors. Unless the lands so taken shall be purchased for the purposes aforesaid, compensation therefor shall be ascertained in the manner prescribed in this act for acquiring title to real estate, and duly made by said corporation to the owners and persons interested in such lands. The same when so taken, shall become part of such intersecting highway, turnpike or plank road, in such manner and by such tenure as the adjacent parts of the same highway, turnpike or plank road, may be held for highway purposes.

§ 25. The commissioners of the land office shall have power to grant to any railroad company formed under this act, any land belonging to the people of this state, which may be required for the purposes of their road, on such terms as may be agreed on by them; or such company may acquire title thereto by appraisal, as in the case of lands owned by individuals; and if any land belonging to the county or town is required by any company for the purposes of the road, the county or town officers having the charge of such land may grant such land to such company, for such compensation as may be agreed upon.

§ 26. In case any title or interest in real estate required by any company formed under this act, for the purpose of its incorporation, shall be vested in any trustee not authorized to sell, release and convey the same, or in any infant, idiot or person of unsound mind, the supreme court shall have power, by a summary proceeding on petition, to authorize and empower such trustee, or the general guardian or committee of such infant, idiot or person of unsound mind, to sell and convey the same to such company for the purposes of its incorporation, on such terms as may be just; and in case any such infant, idiot or person of unsound mind, has no general guardian or committee, the said court may appoint a special guardian or committee for the purpose of making such sale, release or conveyance, and may require such security from such general or special guardian or committee as said court may deem proper. But before any conveyance or release authorised by this section shall be executed, the terms on which the same is to be executed shall be reported to the court, on oath; and if the court is satisfied that such terms are just to the party interested in such real estate, the court shall confirm the report, and direct the proper conveyance or release to be executed, which shall have the same effect as if executed by an owner of said land, having legal power to sell or convey the same.

§ 27. No company formed under this act shall lay down or use in the construction of their road, any iron rail of less weight than fifty-six pounds to the lineal yard, except for turnouts, sidings and switches.

§ 28. Every corporation formed under this act, shall in addition to the powers conferred on corporations in third title of the eighteenth chapter of the first part of the Revised Statutes, have power.

1. To cause such examination and surveys for its proposed railroad to be made, as may be necessary to the selection of the most advantageous route; and for such purpose, by its officers or agents and servants, to enter upon the lands or waters of any person, but subject to responsibility for all damages which shall be done thereto.

2. To take and hold such voluntary grants of real estate and other property as shall be made to it, to aid in the construction, maintainance and accommodation of its railroad; but the real estate received by voluntary grant shall be held and used for the purposes of such grant only.

3. To purchase, hold and use all such real estate and other property as may be necessary for the construction and maintainance of its railroad, and the stations and other accommodations necessary to accomplish the objects of its incorporation; but nothing herein contained shall be held as repealing, or in any way affecting the act entitled "An act authorizing the construction of railroads upon Indian lands," passed May 12, 1836.

4. To lay out its road not exceeding six rods in width, and to construct the same; and for the purposes of cuttings and embankments, to take as much more land as may be necessary for the proper construction and security of the road, and to cut down any standing trees that may be in danger of falling on the road, making compensation therefor as provided in this act for lands taken for the use of the company.

5. To construct their road across, along, or upon any stream of water, water-course, street, highway, plank road, turnpike, or canal, which the route of

its road shall intersect or touch; but the company shall restore the stream or water course, street, highway, plank road and turnpike thus intersected or touched, to its former state, or to such state as not unnecessarily to have impaired its usefulness. Every company formed under this act, shall be subject to the power vested to the canal commissioners by the seventeenth section of chapter two hundred and seventy-six of the session laws of eighteen hundred and thirty-four. Nothing in this act contained shall be construed to authorize the erection of any bridge, or any other obstruction across, in or over any stream or lake navigated by steam or sail boats, at the place where any bridge or other obstructions may be proposed to be placed; nor to authorise the construction of any railroad not already located in, upon or across any streets in any city, without the assent of the corporation of such city.

6. To cross, intersect, join and unite its railroad with any other railroad before constructed, at any point on its route, and upon the grounds of such other railroad company, with the necessary turnouts, sidings and switches, and other conveniences in furtherance of the objects of its connections.—And every company whose railroad is or shall be hereafter intersected by any new railroad, shall unite with the owners of such new railroad in forming such intersections and connections, and grant the facilities aforesaid; and if the two corporations cannot agree upon the amount of compensation to be made therefor, or the points and manner of such crossings and connections, the same shall be ascertained and determined by commissioners to be appointed by the court as is provided in this act in respect to acquiring title to real estate.

7. To take and convey persons and property on their railroad by the power or force of steam or of animals, or by any mechanical power, and to receive compensation therefor.

8. To erect and maintain all necessary and convenient buildings, stations, fixtures and machinery for the accommodation and use of their passengers, freights and business.

9. To regulate the time and manner in which passengers and property shall be transported, and the compensation to be paid therefor; but such compensation, for any passenger and his ordinary baggage, shall not exceed three cents per mile.

10. From time to time to borrow such sums of money as may be necessary for completing and finishing or operating their railroad, and to issue and dispose of their bonds for any amount so borrowed, and to mortgage their corporate property and franchises to secure the payment of any debt contracted by the company for the purposes aforesaid; and the directors of the company may confer on any holder of any bond issued for money borrowed as aforesaid, the right to convert the principal due or owing thereon, into stock of said company, at any time not exceeding ten years from the date of the bond, under such regulations as the directors may see fit to adopt.

§ 29. Whenever the railroad of any company formed under this act shall run parallel or nearly parallel to any canal of this state, and within thirty miles of such canal, the company owning such railroad shall pay to the canal fund, on all property transported upon its railroad other than the ordinary baggage of passengers, the same tolls upon that portion of the road running parallel to the canal, that would have been payable to the state if such property other than baggage had been transported on any such canal; and every such company shall make returns, at such times and in such manner as the commissioners of the canal fund shall prescribe, of all the property transported on its railroad, except ordinary baggage of passengers; and the said commissioners are authorised to prescribe the manner in which tolls so payable to the canal fund by such company, shall be collected and paid, and to enforce the collection and payment thereof, and to make such regulations as they shall deem proper for that purpose; and every such company that shall neglect or refuse to comply with any such regulations, shall forfeit to the people of this state the sum of five hundred dollars for every day it shall so neglect or refuse; and in every case of such forfeiture, it shall be the duty of the attorney general to prosecute such company for the penalty, in the name of the people.

§ 30. Every conductor, baggage master, engineer, brakeman, or other servant of any railroad corporation employed in a passenger train, or at stations for passengers, shall wear upon his hat or cap a badge, which shall indicate his office, and the initial letters of the style of the corporation by which he is employed. No conductor or collector without such badge shall be entitled to demand or receive from any passenger any fare or ticket, or to exercise any of the powers of his office; and no officer or servant, without such badge, shall have authority to meddle or intertere with any passenger, his baggage or property.

§ 31. Every railroad corporation formed under this act, shall make an annual report to the state engineer or surveyor of the operations of the year ending on the thirteenth day of September; which report shall be verified by the oaths of the treasurer, or president, and acting superintendent of operations, and be filed in the office of the state engineer and surveyor by the first day of December in each year, and shall state:

1. The amount of capital as by charter;
2. The amount of stock subscribed;
3. The amount paid in as by last report;
4. The total amount now of capital stock paid in;
5. The funded debt by last report;
6. The total amount now of funded debt;
7. The floating debt as by last report:
8. The amount now of floating debt;
9. The total amount now of funded and floating debt;
10. The average rate per annum of interest on funded debt;

Cost of road and equipment.

11. For graduation and masonry by last report;
12. The total amount now expended for the same;
13. The amount for bridges by last report;
14. The total amount now expended for the same.
15. The amount for superstructure, including iron, by last report.
16. Total amount now expended for the same;
17. For passengers and freight stations, building and fixtures, by last report;
18. Total amount now expended for the same.
19. For engine and car houses, machine shops, and machinery and fixtures, by last report;
20. Total amount now expended for the same.
21. For land, land damages and fences, by last report.
22. Total amount now expended for the same.
23. For locomotives and fixtures and snow plows, by last report;
24. Total amount now expended for the same;
25. For passenger and baggage cars, by last report.
26. Total amount now expended for the same.
27. For freight cars, as by last report;
28. Total amount now expended for the same.
29. For engineering and agencies, by last report.
30. Total amount now expended for the same.
31. Total cost of road and equipment.

Characteristics of road.

32. Length of road;
33. Length of road laid;
34. Length of double track, including sidings;
35. Length of branches owned by the company laid;
36. Length of double track on the same.
37. Weight of rail by yard on main track.
38. The number of engine houses and shops; of engines and cars, and their character.
39. It shall also be the duty of each corporation to transmit to the state engineer and surveyor the following maps, profiles and drawing exhibiting the characteristics of their road; the map to show the length and direction of each straight line, and the length and radius of each curve; also the point of crossing of each town and county line, and the length of line in each town and county accurately determined by measurements to be taken after the completion of the road. The profile to be on the map, and shall show the grade line and surface of ground in the usual method, also the elevation of grades above tides at each change in the inclination thereof. The maps and profile to be made on a scale of five hundred feet to one tenth of a foot; vertical scale of five hundred feet to one tenth of a foot. For all roads or parts of roads now done, or in operation, the said maps shall be returned on or before the first day of January next; and for all roads now in progress, or which may hereafter be constructed, the said maps and profiles shall be returned within three months after the same or any portion thereof shall be in use.

Doings of the Year in Transportation, and Total Miles Run.

40. Miles run by passenger trains;
41. Miles run by freight trains;
42. The rate of fare for passengers, charged for the respective classes per mile;
43. Number of passengers carried in cars;
44. Number of miles travelled by passengers;
45. Number of tons of two thousand pounds of freight carried in cars;
46. Number of miles carried, or total movement of freight in miles: all to be accurately compiled from the daily records or evidences of earnings, manifest and way bills.
47. Average rate of speed adopted by ordinary passenger trains, including stops;
48. Average rate of speed adopted by ordinary passenger trains when in motion.
49. Average rate of speed adopted by express trains including stops;
50. Average rate of speed adopted by express trains when in motion.
51. Average rate of speed adopted by freight trains, including stops;
52. Average rate of speed adopted by freight trains when in motion.
53. Average weight in tons of two thousand pounds of passenger trains, exclusive of passengers and baggage;
54. Average weight in tons of freight trains, exclusive of freight.
55. The amount of freight, specifying the quantity in tons, of the products of the forest, of animals, of vegetable food, other agricultural products, manufactures, merchandise and other articles.

Expenses of Maintaining the Road, or Real Estate of the Corporation.

56. For repairs of roadbed and railway, excepting cost of iron, which shall be the cost of labor and materials used during the year; also use and cost of engines engaged in ballasting; also the renewal and repairs of gravel and stone cars, and all items of cost connected with keeping the road in order.
57. For depreciation of way;
58. Length, in feet, of iron used in renewals, with weight and cost;
59. Repairs of buildings;
60. Repairs of fences and gates;
61. Taxes on real estate;
62. Total expenses of maintaining road or real estate for the year;
63. Expenses of machinery or personal property of the corporation;
64. Repairs of engines and tenders;
65. Depreciation of engines and tenders;
66. Repairs of passenger and baggage cars;
67. Depreciation of passenger and baggage cars.
68. Repairs of freight cars;
69. Depreciation of freight cars;
70. Repairs of tools and machinery in shops;
71. Incidental expenses, including fuel, oil, clerks, watchmen about shops;
72. Total expenses of repair of machinery;
73. Office expenses, stationery;
74. Agents and clerks;
75. Labor handling freight, loading and unloading.
76. Porters, watch and switchmen;
77. Wood and water station attendance;
78. Conductors, baggage and brakemen;
79. Enginemen and firemen;
80. Fuel (first cost, and labor preparing for use);
81. Oil and waste for engines and tenders;
82. Oil and waste for freight cars;
83. Oil and waste for passenger and baggage cars;
84. Loss and damage of goods and baggage;
85. Damages for injuries of persons;
86. Damages to property, including damages by fire, cattle killed on the road;
87. General superintendence;
88. Contingencies;

89. Total expenses of operating road;
90. The above statements are to be made without reference to the sums actually received or paid during the year. The following statement of the earnings and cash receipts and payments are required:
91. From passengers;
92. From freight;
93. From other sources;
94. The above to be stated without reference to the amount actually collected;
95. Receipts during the year from freight;
96. From passengers;
97. From other sources, specifying what in detail.
98. Payments for transportation expenses;
99. For interest;
100. Dividends on stock, amount and rate per cent.
101. Payments to surplus fund, and the total amount of said fund.
102. The number of persons injured in life and limb, and the cause of the injury, and whether passengers or persons employed.

Whether any such accidents have arisen from carelessness or negligence of any person in the employment of the corporation, and whether such person is retained in the service of the corporation.

103. It shall be the duty of the state engineer and surveyor to arrange the information contained in such reports in a tabular form, and prepare the same, together with the said reports, in a single document, for printing, for the use of the legislature, and report the same to the legislature on the first day of its session in each year.

104. All the items under the heads of expenses of maintaining the road or real estate of the corporation, expenses of machinery or personal property of the corporation, expenses of use of road and machinery or operating the road, shall be carried out under two heads, the one showing the cost of freight transportation, the other the cost of passenger transportation.

105. The provisions of this section shall apply to all existing railroad corporations; and the report of said existing railroad corporations, made in pursuance of the provisions of this section, shall be deemed a full compliance with any existing law or resolution requiring annual reports to be made by such corporation.

§ 32. Any such corporation which shall neglect to make the report as is provided in the preceding section, shall be liable to a penalty of two hundred and fifty dollars, to be sued for in the name of the people, for their use.

§ 33. The legislature may, when any such railroad shall be opened for use, from time to time, alter or reduce the rate of freight, fare, or other profits upon such road; but the same shall not, without the consent of the corporation, be so reduced as to produce with said profits less than ten per centum per annum on the capital actually expended; nor unless on an examination of the amounts received and expended, to be made by the state engineer and surveyor, and the comptroller, they shall ascertain that the net income derived by the company from all sources for the year then last past shall have exceeded an annual income of ten per cent upon the capital of the corporation actually expended.

§ 34. Any such corporations shall, when applied to by the postmaster general, convey the mails of the United States on their road or roads respectively; and in case such corporation shall not agree as to the rate of transportation therefor, and as to the time, rate of speed, manner and condition of carrying the same, it shall be lawful for the governor of this state to appoint three commissioners, who, or a majority of them, after fifteen days' notice in writing of the time and place of meeting to the corporation, shall determine and fix the prices, terms and conditions aforesaid; but such price shall not be less for carrying the mails in the regular passenger trains, than the amount which such corporation would receive as freight on a like weight of merchandise transported in their merchandise trains, and a fair compensation for the postoffice car. And in case the postmaster general shall require the mail to be carried at other hours, or at a higher speed than the passenger trains are run, the corporation shall furnish an extra train for the mail, and be allowed an extra compensation for the expenses and wear and tear thereof, and for the service to be fixed as aforesaid.

§ 35. If any passenger shall refuse to pay his fare, it shall be lawful for the conductor of the train and the servants of the corporation to put him and his baggage out of the cars, using no unnecessary force, at any usual stopping place, or at any dwelling house, as the conductor shall elect, on stopping the train.

§ 36. Every such corporation shall start and run their cars for the transportation of passengers and property, at regular times, to be fixed by public notice; and shall furnish sufficient accommodation for the transportation of all such passengers and property, as shall within a reasonable time previous thereto being offered for transportation at the place of starting and the junctions of other railroads, and at usual stopping places established for receiving and discharging way passengers and freights for that train; and shall take, transport and discharge such passengers and property at, from and to such places, on the due payment of the freight or fare legally authorized therefor; and shall be liable to the party aggrieved, in an action for damages, for any neglect or refusal in the premises.

§ 37. A check shall be affixed to every parcel of baggage, when taken for transportation by the agent or servant of such corporation, if there is a handle, loop or fixture, so that the same can be attached upon the parcel of baggage so offered for transportation, and the duplicate thereof given to the passenger or person delivering the same on his behalf, and if such check be refused on demand, the corporation shall pay to such passenger the sum of ten dollars, to be recovered in a civil action; and further, no fare or toll shall be collected or received from such passenger, and if such passenger shall have paid his fare, the same shall be refunded by the conductor in charge of the train; and on producing said check, if his baggage shall not be delivered to him, he may himself be a witness in any suit brought by him, to prove the contents and value of such baggage.

§ 38. In forming a passenger train, baggage, freight, merchandise, or lumber cars shall not be placed in rear of the passenger cars; and if they or any of them shall be so placed, the officer or agent who so directed, or knowingly suffered such arrangement, and the conductor of the train, shall be deemed guilty of a misdemeanor, and be punished accordingly.

§ 39. A bell shall be placed on each locomotive engine, and be rung at the distance of at least eighty rods from the place where the railroad shall cross any travelled public road or street, and be kept ringing until it shall have crossed such road or street; or a steam whistle shall be attached to each locomotive engine, and be sounded at least eight rods from the place where the railroad shall cross any such road or street, except in cities, and be sounded at intervals until it shall have crossed such road or street, under a penalty of twenty dollars for every neglect of the provisions of this section, to be sued for by the district attorney of the county, within ten days after such penalty was incurred; one-half thereof to go to the informer, and the other half to the county; and said corporation shall also be liable for all damages which shall be sustained by any person by reason of such neglect, one-half of which penalty shall be chargeable to, and collected by the company, of the engineer having charge of the train, where the omission of duty consists in not sounding the whistle or ringing the bell.

§ 40. Every such corporation shall cause boards to be placed, well supported by posts or otherwise, and constantly maintained across each travelled public road or street where the same is crossed by the railroad, on the same level. Said boards shall be elevated so as not to obstruct the travel, and to be easily seen by travellers; and on each side of such boards shall be painted in capital letters of at least the size of nine inches each, the words, "Railroad crossing, look out for the cars." But this section shall not apply to streets in cities or villages, unless the corporation shall be required to put up such boards by the officers having charge of such streets.

§ 41. If any person shall, while in charge of a locomotive engine running upon the railroad of any such corporation, or while acting as the conductor of a car or train of cars on any such railroad, be intoxicated, he shall be deemed guilty of a misdemeanor.

§ 42. If any person or persons shall wilfully do, or cause to be done, any act or acts whatever, whereby any building construction or work of any railroad corporation, or any engine, machine or structure, or any matter or thing appertaining to the same, shall be stopped, obstructed, impaired, weakened, injured or destroyed, the person or persons so offending shall be guilty of a misdemeanor, and shall forfeit and pay to the said corporation treble the amount of damages sustained by means of such offence.

§ 43. All penalties imposed by this act may be sued for in the name of the people of the state of New York: and if such penalty be for a sum not exceeding one hundred dollars, then such suit may be brought before a justice of the peace, and may be commenced by serving a summons on any director of such company.

§ 44. Every corporation formed under this act, shall erect and maintain fences on the sides of their road, of the height and strength of a division fence required by law, with openings or gates or bars therein, and farm crossings of the road for the use of the proprietors of lands adjoining such railroad; and also construct and maintain cattle guards at all road crossings, suitable and sufficient to prevent cattle and animals from getting on to the railroad. Until such fences and cattle guards shall be duly made, the corporation and its agents shall be liable for all damages which shall be done by their agents or engines, to cattle, horses, or other animals thereon; and after such fences and guards shall be duly made and maintained, the corporation shall not be liable for any such damages, unless negligently or wilfully done; and if any person shall ride, lead or drive any horse or other animal upon such road, and within such fences and guards, other than at farm crossings, without the consent of the corporation, he shall for every such offence forfeit a sum not exceeding ten dollars, and shall also pay all damages which shall be sustained thereby to the party aggrieved. It shall not be lawful for any person, other than those connected with or employed upon the railroad, to walk along the track or tracks of any railroads, except where the same shall be laid along public roads or streets.

§ 45. Every corporation shall, within a reasonable time after their road shall be constructed, cause to be made:

A map and profile thereof, and of the land taken or obtained for the use thereof, and file the same in the office of the state engineer and surveyor; and also like maps of the parts thereof located in different counties, and file the same in the offices for recording deeds, in the county in which such parts of said road shall be. Every such map shall be drawn on a scale, and on paper, to be designated by the state engineer and surveyor, and certified and signed by the president or engineer of such corporation.

§ 46. In case any passenger on any railroad shall be injured while on the platform of a car, or on any baggage, wood, or freight car, in violation of the printed regulations of the company posted up at the time in a conspicuous place inside of its passenger cars then in the train, such company shall not be liable for the injury: provided, said company at the time furnished room inside its passenger cars sufficient for the proper accommodation of the passengers.

§ 47. If any corporation formed under this act shall not, within two years after its articles of association are filed and recorded in the office of the secretary of state, begin the construction of its road, and expend thereon ten per cent on the amount of its capital, or shall not finish the road and put it in operation in five years from the time of filing its articles of association as aforesaid, its corporate existence and powers shall cease.

§ 48. The legislature may at any time annul or dissolve any corporation formed under this act; but such dissolution shall not take away or impair any remedy given against any such corporation, its stockholders or officers for any liability which shall have been previously incurred.

§ 49. All existing railroad corporations within this state, shall respectively have and possess all the powers and privileges contained in this act;

and they shall be subject to all the duties, liabilities and provisions not inconsistent with the provisions of their charter, contained in sections nine, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty, twenty-one, twenty-three, twenty-four, twenty-five, twenty-six, twenty-seven twenty-eight, (except sub-division nine,) thirty, thirty-one, thirty-two, thirty three, thirty four, thirty-five, thirty-six, thirty-seven, thirty-eight, thirty-nine, forty, forty-one, forty-two, forty-three, forty-four, forty-five, forty-six, of this act.

§ 50. The act entitled, "An act to authorize the formation of railroad corporations, passed March 26, 1848, and the acts amending the same are hereby repealed; but all railroad companies formed under said act are hereby continued in existence, in the same manner as if said acts were not repealed, and such companies shall be subject to all the provisions, and shall have the same powers, rights and privileges, and be subject to the same duties, as if they had been incorporated under this act; and the time limited by said act, for the expenditure of ten per cent of their capital stock, is hereby extended two years from the passage of this act; and the time limited in said section of said law for their completion, is hereby extended to five years from the passage of this act; and also the time for completing any railroad organized previous to March 27, 1848, whose road was under contract prior to February 1, 1850, to be completed within the time prescribed by its charter, is here extended for one year.

§ 51. Nothing in this act contained shall authorize or permit the New York and Erie railroad company to abandon the use of their road in the county of Rockland, east of Suffern's depot.

§ 52. This act shall take effect immediately.

Amendatory Act in Relation to Railroad Corporations—Passed February 13, 1851.

§ 1. Whenever two railroad companies shall, for a portion of their respective lines, embrace the same location of line, they may, by agreement, provide for the construction of so much of said line as is common to both of them by one of the companies, and for the manner and terms upon which the business thereon shall be performed. Upon the making of such agreement, the company that is not to construct the part of the line which is common to both, may alter and amend its articles of association, so as to terminate at the point of intersection, and may reduce its capital to a sum not less than ten thousand dollars for each mile of the road proposed to be constructed in such amended articles of association.

§ 2. Whenever, after due examination, it shall be ascertained by the directors of any railroad company, organized under the act entitled an "act to authorize the formation of railroad corporations, and to regulate the same," passed March 26, 1848, or under the act entitled an "act to authorize the formation of railroad corporations, and to regulate the same," passed April 2, 1850, that a part of the line of their railroad proposed to be made between any two points in this state, ought to be located and constructed in an adjoining state, it may be so located and constructed, by a vote of two thirds of all the directors, and the sections of the said railroad, within this state, shall be deemed a connected line according to the articles of association, and the directors may reduce the capital specified in their articles of association, to such amount as may be deemed proper, but not less than the amount required by law for the number of miles of railroad to be actually constructed in this state.

§ 3. Any railroad company formed under the act entitled an "act to authorize the formation of railroad corporations," passed March 26, 1848, and which is duly continued in existence, when at least ten thousand dollars for every mile of its railroad proposed to be constructed in this state, shall be in good faith subscribed to its capital stock, and ten per cent thereof paid in, may apply to the court for the appointment of commissioners, and the court shall thereupon appoint commissioners, and all subsequent proceedings may be had to obtain the title to lands necessary for its construction to the same extent and in the same manner, as if the whole amount of the capital stock specified in its articles of association was in like manner subscribed.

§ 4. In case any railroad shall occupy or cross any turnpike or plank road, the railroad company shall pay such turnpike or plank road company, all damages the turnpike or plank road company may sustain by reason of the occupancy or crossing such turnpike or plank road, the damages to be ascertained and paid in the same manner as is provided by law for the assessment and payment of damages in case of taking private property for the use of railroad companies.

§ 5. This act shall take effect immediately.

New York Canals.

Rates of Toll for 1852; *to be computed upon the weight* ("*per* 1000 *pounds per mile.*")

	cts.	m.	fr.		cts.	m.	fr.
Anchors	0	4	0	Apples	0	1	0
Ashes, pot	0	4	0	Ashes, leached	0	0	5
Bacon	0	1	5	Barilla	0	4	0
Barley	0	3	0	Barrels	0	1	0
Barytes	0	8	0	Beans	0	3	0
Beef	0	3	0	Beer	0	4	0
Bleaching powders	0	4	0	Bloom iron	0	2	0
Bones for manure	0	0	5	Bran	0	2	0
Brick	0	1	0	Bones, other than for manure	0	2	0
Broom corn	0	2	0	Buffalo skins	0	5	0
Bundles of iron	0	4	0	Butter	0	3	0
Carts	0	3	0	Car axles	0	3	0
Car wheels, iron	0	3	0	Casks, empty	0	1	0
Castings, all iron castings, except machines, and the parts thereof	0	3	0	Castings, br'k'n.	0	2	0
				Cattle, live	0	2	0
				Cement	0	2	0
				Chain cables	0	4	0
				Charcoal	0	0	5
Cheese	0	1	5	Cider	0	3	0
Clams	0	4	0	Clay	0	1	0
Clover seed	0	4	0	Coal	0	0	5
Coffee	0	4	0	Copperas	0	4	0
Copper ore	0	0	5	Copper, pig	0	1	0
Corn	0	2	0	Corn meal	0	2	0
Cotton	0	1	0	Crockery	0	4	0
Deer skins	0	5	0	Drain tile	0	2	0
Domestic spirits, going from tide water	0	4	0	Domestic spirits, going to tide water	0	3	0
Domestic cottons	0	4	0	Dried fruit	0	4	0
" woollens	0	4	0	Drill barrows	0	4	0
Dye woods	0	4	0	Earth	0	1	0
Esculent roots	0	1	0	Fanning mills	0	4	0
Fish	0	4	0	Flax seed	0	4	0
Flint ware	0	4	0	Flour	0	3	0
Flour, from tide-water	0	1	0	Furniture, for stoves	0	6	0
Furs	1	0	0	Gas pipes	0	2	0
Glass ware	0	4	0	Grass seed	0	4	0
Grease	0	1	5	Gypsum, dom	0	1	0
Gypsum, foreign	0	3	0	Harrows	0	4	0
Hay	0	1	0	Heading, transported in boats	0	1	0
Hemp	0	1	0				
Hides, domestic	0	3	0	Hides, imported	0	5	0
Hogs, live	0	2	0	Hoofs	0	2	0
Horns	0	2	0	Horses	0	3	0
Horse shoes	0	4	0	Ice	0	1	0
Iron ore	0	1	0	Iron in sheets or bars	0	4	0
Junk	0	3	0				
Kelp	0	4	0	Lard	0	1	5
Lard oil	0	1	5	Lead	0	0	5
Leather	0	4	0	Lime	0	1	0
Mahogany	1	5	0	Manganese	0	4	0
Manilla	0	4	0	Manure	0	1	0
Mineral water	0	4	0	Molasses	0	4	0
Moose skins	0	5	0	Mowing mach.	0	4	0
Nailrods	0	4	0	Nails	0	4	0
Oakum	0	4	0	Oats	0	2	0
Oil	0	4	0	Oil cake	0	2	0
Oil meal	0	2	0	Onions	0	1	0
Oysters	0	4	0	Passengers	0	0	5
Peas	0	3	0	Pig copper	0	1	0
Pig iron	0	2	0	Pitch	0	4	0
Plough castings	0	3	0	Ploughs	0	4	0
Pork	0	1	5	Potatoes	0	1	0
Rags	0	3	0	Railroad chairs	0	1	5
Railroad iron	0	1	5	Rails for fences	2	0	0
Reaping mach.	0	4	0	Roots	0	1	0
Rosin	0	4	0	Rye	0	3	0
Salt, foreign	0	5	0	Salt, domestic	0	1	0
Sand	0	1	0	Scrap iron	0	2	0
Sheep, live	0	2	0	Sheep skins	0	4	0
Sheet iron	0	4	0	Shingles	0	1	5
Ship knees	0	1	0	Ship stuffs	0	2	0
Slate	0	2	0	Sleighs	0	3	0
Soda ash	0	4	0	Spikes	0	4	0
Staves	0	1	0	Steel	0	4	0
Stone for lime	0	1	0	Stone, wrought	0	2	0
Stone, unwrought	0	1	5	Stone ware	0	4	0
Stove furniture	0	6	0	Stove pipe	0	6	0
Stoves	0	3	0	Sugar	0	4	0
Tallow	0	3	0	Tan bark per cord	0	5	0
Tar	0	4	0	Thr'shing mach.	0	4	0
Tiles	0	4	0	Tin	0	4	0
Tobacco, going to tide water	0	1	0	Tobacco, going from tide water	0	4	0
Turnips	0	1	0	Turpentine	0	4	0
Veneering	0	8	0	Vinegar	0	3	0
Wagons	0	3	0	Ware, flint	0	4	0
Water pipes	0	2	0	Wheat	0	3	0
Window glass	0	4	0	Window sashes	0	5	0
Wood	0	5	0	Wool	0	4	0

LUMBER No. 1.—Transported in boats by weight, per 1000 pounds per mile:

	cts.	m.	fr.
White pine, white wood, bass wood and cedar	0	1	5
Oak, hickory, beech, sycamore and black walnut	0	1	0
Spruce, maple, ash and elm	0	1	2
Cherry	0	1	4
Hemlock	0	0	6

LUMBER No. 2.—Transported in boats by measurement, per 1000 feet per mile:

	cts.	m.	fr.
Boards, plank, scantling and sawed timber, reduced to inch measurement, all kinds of red cedar, cedar posts, estimating that a cord, after deducting for openings, will contain 1000 feet, and all siding, lath and other sawed stuff, less than one inch thick (except such as are enumerated in lumber No. 3)	0	4	0
Lumber No. 1 and 2, transported in rafts, per 1000 feet per mile	2	0	0
Hemlock, per 1000 feet per mile, when not weighed	0	2	5

LUMBER No. 3.—Transported in boats by weight, per 1000 pounds per mile:

	cts.	m.	fr.
Sawed lath of less than ten feet in length, split lath, hoop poles, hand spikes, rowing oars, broom handles, spokes, hubs, tree nails, fellies, boat knees, plane stocks, pickets for fences, stuff manufactured, or partly manufactured for chairs and bedsteads, hop poles, brush handles, brush backs, looking glass backs, gun stocks, plough beams and plough handles	0	2	0
Sawed stuff for window blinds, not exceeding one-fourth of an inch in thickness	0	5	0

TIMBER, per 100 cubic feet per mile, transported in boats:

	cts.	m.	fr.
Squared and round	0	4	0
Squared and round, transported in rafts	1	0	0
On the same if cleared after the 1st of June and arriving at tide water before the 15th of August inclusive, per 100 cubic feet per mile	0	7	0

Ohio.

Columbus, Piqua and Indiana Railroad.—We are indebted to M. G. Mitchell, president of the Columbus, Piqua and Indiana railroad, for a copy of his exhibit, showing the condition of this road. We are surprised to learn that subscriptions amounting to over $500,000 have been made, to aid in the construction of this work, and that a large amount of the earth work is already done between Columbus and Covington, a distance of seventy-eight miles; that the masonry, at the crossing of the Great Miami and Whetstone, is nearly completed; the cross-ties are now being delivered on the Eastern division of 46 miles; that the bridges for the entire line are in progress; and that the iron and locomotives for about one-half the road have been purchased. This road is to pass from Columbus, Ohio, nearly due west, through a densely populated and highly cultivated part of the State, crossing the Mad river and Sandusky railroad at Urbana, in Champaign county, and the Miami canal at Piqua, and thence west through Covington to Union, at the State line, connecting with the Indianapolis and Bellefontaine road at that point.—*Indiana State Journal.*

Important Railroad Connection.

We are gratified to learn that arrangements have been concluded between the officers of the Indianapolis and Bellefontaine, and the Columbus, Piqua and Indiana railroad companies, for a permanent connection of these important railways, in the same depot buildings, at Union, on the State line.

By this contract the two roads are constituted one through line between the capitals of the States of Ohio and Indiana, each company being authorized to give through tickets and freight bills upon the entire line; and the arrangement contemplates the running of express passenger trains between Indianapolis and Columbus, east or west, daily, making the distance, which is 185 miles, in seven hours.

This is an important link in the great Eastern and Western thoroughfare, which is constantly extending, and will, much sooner than many now anticipate, connect the great agricultural States of the West with the commercial and manufacturing States of the East, through this central railway.

The exhibits of these two roads, which for through passengers and freight are now constituted one line, indicate that there is not a continuous railway in the United States, of the same length, with so little curvature and so easy grades as this 185 miles; and as the Indianapolis and Terre Haute road, which is now in operation, and the Atlantic and Mississippi road, which it is understood is to be immediately pushed forward to an early completion, are much of the same character, the time is not far distant when the cities of St. Louis and New York will be brought very near together, so far as their business relations are concerned.

Contemplating this line with its Eastern and Western connections, as forming a continuous railway from St. Louis to New York, passing through the great producing States of Illinois, Indiana, Ohio, and Pennsylvania, to New York, and thence to Boston, and the conclusion is inevitable that it must do an immense through business, especially in the transportation of live stock and hogs, which must be a very important item in the earnings of Western railroads.

Should the other roads, east or west, adopt a similar arrangement, it would be a great convenience to the public travel, and lessen the expense of transportation, as well as a security against the loss or damage of freight.—*Indiana State Journal.*

New York.

Sodus Point Railroad.—We are rejoiced to learn from a stockholder and an active friend of this enterprise, that the requisite amount of stock has been subscribed, and instalments paid in, to organize the company under the general law, for the construction of the road. It is intended, we further understand, to commence the work as soon as the season will permit, and hasten it to completion.—We would bespeak for this great local improvement the confidence and liberality of those who may be invited to subscribe for the balance of the stock remaining untaken. It must ultimately become one of the most important and best paying lateral railroads in the State; and as a local improvement, all must desire its accomplishment.—*Wayne Sentinel.*

Illinois.

Terre Haute and Alton Railroad.—We learn that on Monday, the 1st inst., the county of Montgomery voted in favor of a county subscription of $50,000 to the stock of this road. This, we understand, makes the entire sum—and something over—of the $500,000 required by the charter, to be subscribed previous to the commencement of work upon the road. We suppose that nothing now remains to be done, but to elect a new board of directors, and commence the construction of the road. The citizens of Montgomery deserve great credit, for the enterprise and public spirit which they have manifested. This road will benefit them beyond measure, and its construction will trebly repay them, for all their exertions in its behalf. County subscriptions to railroads, have become decidedly popular with the people, and are the most equitable and least burdensome means of raising funds for the purpose.

Shelby county has not yet taken stock, but it is believed, she will soon follow the example that has been set her by Edgar, Coles, Montgomery, and the city of Alton. Much praise is due to the directors of this road, and particularly the President, the Hon. Cyrus Edwards, for the energy which has characterized their efforts to promote the interests of the company; and we rejoice to see so strong evidences that their labors are to be crowned with success. Success to the Terre Haute and Alton railroad! Its completion will mark a new era in the prosperity and advancement of Central Illinois. Again, we wish it all the success its importance deserves.—*Macoupin Statesman.*

Ohio.

Railroad from Greenville to Union.—P. Pomeroy, Esq., returned on Saturday from Greenville, having been engaged in making a preliminary survey for the contemplated railway connection between Greenville and Union, a point on the Indianapolis and Bellefontaine railway. The country is favorable, and a perfectly straight line been run. The distance is about 11 miles. The road can be graded at a small cost, owing to the favorable nature of the country through which it passes.

We understand that $34,000 in the stock of the Greenville and Miami railway, under the charter of which this link will be made, has been subscribed in Cincinnati. Dayton is expected to take $10,000. It is understood that the Indianapolis and Bellefontaine company will furnish the iron. If put under contract soon, the cars may be running before the close of the year, and a connection by railway thus early established between Indianapolis and Cincinnati—as it is confidently believed that the Indianapolis and Bellefontaine railway will be completed to Union before the close of 1852. The local business will be large on this piece of railway, even when it ceases to be valuable as a section of the through line from Indianapolis, on the completion of the Indiana Central and Dayton and Western railways.—*Dayton Journal.*

Pennsylvania.

Allegheny Valley Railroad.—The board of managers of the Pittsburg, Kittanning, and Warren railroad company, met yesterday, and appointed W. Milnor Roberts Esq., Chief Engineer, and George E. Eichbaum, Esq., prineipal assistant engineer.

The board directed that three several engineering parties should be organized, who are to be employed as soon as possible in prosecuting the necessary surveys. One of these parties is to examine and locate the route between this city and Kittanning, and one between Kittanning and the State line.

On motion, it was resolved

"Resolved, That the engineers are instructed to survey routes to the town of Kittanning by way of the east and west sides of the Allegheny river, and the so-called Leechburg route, and north of Kittanning—four principal routes, viz: The 'Clarion,' 'Red Bank,' 'Mahoning,' 'Cowanshannock' routes, and such others as may seem desirable.—*Pittsburg Gazette.*

Virginia and Tennessee Railroad.

The Jonesboro' (Tenn) R. R. Journal states that the board of directors of the East Tennessee and Virginia railroad have recently held a meeting at Greenville, which was characterized by great harmony and an entire absence of sectional jealousy. The Greenville Spy states that the board unanimously agreed that they would certify to the Governor of the State, that they had an amount of *bona fide* stock sufficient to entitle them to the provisions of the recent act of the Assembly, appropriating *three hundred thousand dollars* in State bonds, to build bridges and construct masonry on the E. T. and Va. railroad. It was a provision of that bill, that before the company could realize the amount therein specified, the board must certify that they have an amount of good and valid subscriptions sufficient to grade the whole line.

The board also authorized the president to require the Chief Engineer to have the road graded from the Virginia line to the town of Jonesboro', and a committee in connection with the President of the Board was appointed to confirm contracts already made, and also to make new contracts for the letting of that part of the line. To meet the heavy expenses of the coming year, the board have made *four calls* in the next year, one dollar on each share.

New York.

Railroad to Charlotte.—A movement is on foot for the construction of a railroad from this city to the mouth of the river, and subscriptions to the amount of $20,000, we understand, are already procured. We are informed that if $50,000 can be raised here, the remainder of the sum necessary to build and equip the road, can be secured in New York. It will be built as a branch of the Lockport and Niagara Falls road, and have its connection at the main depot of that company. To accommodate the millers, however, tracks can be built through Mill street, and the wheat which will doubtless be brought by the road, if built, deposited at their mill doors without cartage.

A principal object in having such a road, would be to induce vessels on the lakes to bring their cargoes at once to this port, instead of unlading at Buffalo. The bulk of the wheat brought from the west for manufacture is floured here, and it is now brought by railroad and canal from Buffalo. It would be a matter of considerable benefit to this city, if shippers could be induced to make this port the point for discharging their cargoes, and with our present harborage, some considerable portion of the large business might be attracted and accommodated. The railroad seems to be a settled conclusion; and it is even declared that one will not be sufficient. The people on the east side of the river think they will have their road also, as soon as that now proposed shall get into operation. Enterprise will make business, where it does not exist, and increase it where it does. Let's have the road.—*Rochester Democrat.*

Rockford and Rock Island Railroad Convention.

A large and respectable delegation of the citizens of the various counties bordering on Rock river, met at Sterling on the 26th ultimo, to take into consideration the importance and practicability of the construction of a railroad from Rockford to Rock Island, with an extension to some point on the Wisconsin State line. There were some three hundred delegates in attendance. Col. Jno. Dement, acted as Chairman, and Wait Talcott, Secretary. A series of resolutions were passed urging the importance of a railroad between Rockford and Rock Island, and committees appointed at various points along the line to aid the committees appointed under the act incorporating said company, in soliciting and obtaining stock to this road. The west is certainly waking up to the importance of railroad communications, as preferable to steamboat facilities, even where the latter exists as a means of transportation.—*Chicago Tribune.*

Rock Island and Chicago Railroad.

We are happy in being able to announce that the contract for building the Rock river bridge has been let, to a responsible firm, (Messrs. Warner & Sherwood) who will commence the work as soon as the weather will permit. Also, that the whole road, as far as Peru is to be let on Thursday next. On the 21st ult., the city of Peru, by an almost unanimous vote, subscribed for $10,000 of the stock of this company. These facts are of the most encouraging nature for the people here. Messrs. Farnum and Sheffield have now completed the Michigan Southern railroad, and are ready to devote their entire energies to the Chicago and Rock Island road, and those who know how rapidly the former work has been pushed forward, will want no assurance from any one, that the latter will soon be opened to the Mississippi, at this point.—*Davenport Banner.*

Ohio.

Hillsboro' Railroad.—The "Iron Horse" is advancing towards our beautiful town with rapid and steady pace, each day lessening by nearly half a mile, the distance which yet remains to be overcome. The track-layers reached Westborough, distance about 17 miles from this place, on Friday last, since which they have probably advanced between two and three miles. Mr. Arthur, the efficient chief engineer, is pushing the work with all the resources at his command. There is little doubt of the road's being finished to Lynchburg by

the 24th or 25th. Many of our merchants intend having their Spring goods brought up to that point on the railroad, and we understand arrangements will be made to accommodate them. This will leave but 10 miles of waggoning, instead of 55 formerly required. The completion of the road to Hillsborough by the 1st of May is now as certain as anything can be.—*Highland News.*

American Railroad Journal.

Saturday, April 3, 1852.

Indiana.

Indiana Central Railroad.—In our last, we briefly alluded to the very favorable reception which this company had met with, and the rapid progress it had made in securing the means for its construction. We are happy in being now able to state, that contracts have been completed for the purchase of iron, with an ample equipment for the whole line, upon the most favorable terms, and that the bonds of the road have been received with more favor than any similar western project, in a similar stage of progress.

It is only a little more than a year since the Central road was organised. The whole line is now under contract (with the exception of about nine miles,) the grading of which is partially completed. Under this state of things, Messrs. Newman and Meredith, agents and directors of the company, came to this city a few weeks since, for the purpose of securing the requisite means for the purchase of the iron and equipment; the company with their own means being able to prepare the road for the iron. After securing the favorable attention of the public, Mr. Newman's duties called him back to Indiana, leaving Mr. Meredith to carry out the negotiations, which he has concluded, and on terms most advantageous to the company, involving much less loss by way of discount than is usually submitted to by western roads. The stock and debt of the Central road will very nearly represent its *cost*. This result has been secured by the able and satisfactory manner in which the merits of the project have been presented to the public by Mr. Meredith, who has not only made contracts for the disposal of a large amount of the company's bonds, but has obtained a large quantity of *cash* stock to the road in the eastern cities. Could the bonds have been seasonably prepared, he could probably have disposed of a greater part of the issue before his return home. During his short sojourn east, Mr. Meredith not only won for himself the esteem and confidence of our capitalists, but secured ample means for the speedy completion of the road, which we expect to see in operation within about a year from the present time.

Lithographing.

We invite attention to the advertisement of Britt & Co., of Philadelphia, who offer their services to the public, in the *Lithographing* line. We can assure our readers that the work executed by this firm is of the highest character for elegance and finish, and all employing them may depend upon having their orders executed with dispatch. Philadelphia is a very convenient point of access for a large number of our Engineers and railroad companies, to whom we can commend the above firm as skilful and accomplished lithographers.

To Contractors.

Pittsburg and Steubenville Railroad.—Contractors are referred to the advertisement of letting upon this road in another column.

New York General Railroad Law.

We publish this week a copy of the New York General Railroad Law. We publish it entire in one number, for the greater convenience of reference. The subject of general laws for the regulation of railroad enterprises, is attracting much attention, particularly in the Western States. The Legislature of Ohio, now in session, will probably take some steps in reference to a general law before its adjournment. We hope the same will be the case with Indiana. Illinois has already enacted one, but with a proviso, which completely negatives its most valuable features.

In respect to her railroad legislation, New York stands far ahead of all the other States. Railroads with us, are as free to be built as are our ordinary town roads; the only condition necessary to secure the right of construction, is the subscription of $1,000, and the payment of $100, per mile, into the company's treasury. All our roads are placed upon the same level. There can exist no monopoly in this State; neither are our people put to the expense and inconvenience of obtaining special charters from the Legislature. One of the most fruitful causes of log-rolling corruption is effectually taken from that body.

With a general law, railroad companies are by no means so liable to make unwise and injudicious moves, as when acting under special charters, in which are generally inserted conditions, requiring certain steps to be taken, within a given time. When such happens to be the case, companies frequently act without due consideration. They are urged forward by a great many considerations, which do not exist under general laws. When men are left free, and when nothing is to be lost by waiting, they generally act with caution and discretion. They do not move till they have thoroughly considered every step to be taken. The result is, that the end justifies the course adopted.

Another argument in favor of free railroading is, that when men do not expect a LEGAL monopoly, they will be much more careful to secure the monopoly that a wise selection of routes, and a judicious application of money, is certain to secure. They start with the knowledge that priority gives no privileges; and that if they commit a blunder, another company will be certain to correct it; and that the only way to guard against competition and rivalry, is to take such a course as shall defy both.

Railroads are fast becoming the great interest in this country, and the only way to effectually secure the public against the abuses of enormous vested rights, is to place railroad projects upon the same footing with all other industrial pursuits.

Cleveland and Pittsburg Railroad.

We learn that a vigorous effort is to be made to secure the completion of the Wheeling extension of the above road, during the present year. The cost of grading and bridging is very light, and can easily be completed in six months. We learn that the *Brady's Bend Company* will furnish the iron from their mill at reasonable rates. All that is now wanting is, that the city of Cleveland should contribute her part towards the project, which promises to become of great importance to that city. The Baltimore and Ohio railroad is to be completed to Wheeling by Jan. 1st, 1853, so that with the Wheeling extension completed at the same time, an uninterrupted railroad communication would be opened with Baltimore and the southern cities. Will not our Cleveland friends take hold of the matter in earnest?

Railroad between N. York and the Lakes.

This city is soon to be well accommodated with railroads connecting her with the lakes. Through the southern part of the State, we have the Erie, which after reaching the valley of the Susquehanna, spreads out into four lines; the main trunk running to Dunkirk; the Buffalo and New York City branching off from Hornellsville; the Conhocton Valley road branching off at Erving, and the Canandaigua and Niagara Falls road, which leaves the Erie at Elmira. These four independent lines are equivalent to two double track roads. There is every probability that we shall soon have a line parallel to the Erie between this city and the Susquehanna valley, which only wants the construction of the road from the Water Gap to Scranton to complete it. This would give us two parallel lines following the general direction of the Erie route.

For the more northern route by way of Albany, we have two roads to Schenectady. From Schenectady to Syracuse there is one of the best double track roads in the Union. From Syracuse to Rochester a new road is building upon the direct route, making two roads between these cities, both of which will be in constant operation. From Rochester we have the Rochester and Buffalo road, and shall soon have another road running direct to the Falls. All the above roads, with the exception of the road from the Water Gap to Scranton, will be completed in a few months, so that by the close of navigation New York will have what is about equivalent to four lines of railroad between herself and Lake Erie, the capacity of which must be fully equal to all the wants of travel and business. No other Atlantic city can make so good a show of western connections, as far as railroads are concerned.

The city is also equally well connected with Lake Ontario, which is fast becoming the route of western commerce. To connect ourselves with this, we have the Oswego road, the Rome and Watertown, the route by way of Vermont, and the Ogdensburgh railroad. New York has thus thrown out her iron arms in every direction, and she is in the best position to monopolize the trade of the great lakes, which are fast becoming the depots of western trade.

Maine.

Penobscot and Kennebec Railroad.—There now appears to be a strong probability that the above road will soon be commenced. The city of Bangor proposes to loan its credit to it to the amount of $400,000, upon the security of a first mortgage. The balance necessary to complete the road is to be furnished by the Atlantic and St. Lawrence and the Androscoggin and Kennebec roads, and by the people on the route. The new road will be about 50 miles long, and will cost about $1,000,000.

The proposed road is a very important project for the Atlantic and St. Lawrence and the Androscoggin and Kennebec roads, being a virtual extension of their lines *east*; but it is still more so to Bangor. The only way by which that city can extend roads *east*, is to first secure *western* connections. The capital invested in roads lying to the west, will to a certain extent, become available for the extensions east. That city must now identify herself with the railroad system of the State, or she must retrograde instead of advancing. She is now in a position to command the aid and support of the companies named, which support she will be likely to lose, should she delay to avail herself of it at the present time.

Opening of the Hudson River to the Lakes.

After an unusual delay, navigation has again been resumed upon the Hudson river and the lakes, and the commerce of the country is again returning to its natural routes. We have, in a measure, been isolated from the west during the winter, for the want of the short line of railroad between Erie and Cleveland. This gap will be closed up in a short time, so that long before the close of navigation New York will be directly connected with every western railroad, and her trade and commerce will be entirely independent of the seasons. As soon as Cleveland shall be reached, we come in contact with the western system of roads, which will in a few years bring us into intimate connection with every inconsiderable town in the west. New York will have all the advantage to be derived from being the first to complete her connection, but other cities will not be far behind with theirs, so that all will soon be placed on equal footing, leaving the prize for which all are struggling, to reward the strongest competitor.

Illinois.

The Central Railroad.—Location of the Chicago Branch.—The fact has at length transpired of the location of the point of divergence of the Chicago branch on the main trunk of the Central railway. This point is fixed in Marion county, in section six, township one north, about eight miles southwest from Salem.

Stock and Money Market.

We continue to report a very favorable money market, with an active demand for best class convertible railroad bonds, which in fact exceeds the supply. The demand is chiefly confined to best class western bonds, of roads in operation, or of such as are nearly completed. These securities are rapidly taken out of the market for investment, chiefly in foreign account. We have no doubt that the demand will continue till it carries the best western bonds up to par. In the present state of the markets, all deserving projects will find but little difficulty in supplying their wants, but they must continue to pay high rates for money, in consequence of the immense number of projects constantly upon the market. This fact gives the lender the advantage. New York is now supplying the means for the construction of nearly every road in progress in the United States. And the great choice of securities thus presented, has a strong tendency to depress prices. There is an upward movement noticeable in all sound stocks.

The Bellefontaine and Indiana bonds which were sold by Winslow Lanier & Co. on the 30th inst., went off at unexpectedly high rates. We subjoin a list of bids and bidders.

	Bonds.	pr.ct.		Bonds.	pr.ct.
Wm. M. Dunn.	10	92·65	J. Ferguson....	10	91·65
Wm. M. Dunn.	10	92·55	W. H. Calhoun	5	91·57
J. Ferguson.....	10	92·25	H. Seymour...	10	91·56
H. Seymour....	10	92·19	J. A. Stevens..	10	91·56
Chubb & Bros..	10	92·16	J. J. Palmer...	25	91·55
D. D. Howard..	10	92	Chubb & Bros.	10	91·46
A. Wright.....	3	92	C. S. Francis..	3	91.45
Chubb & Bros..	10	91·86	Moran & Iselin	25	91·35
Moran & Iselin.	25	91·80	M. Lusk.....	1	91·26
Chubb & Bros..	10	91·76	W. H. Calhoun	5	91·26
W. H. Calhoun.	5	91·76	DeLaunay, Ise-		
W. H. Calhoun.	5	91·76	lin & Clark..	28	91·26

The above sale is a pretty good index of the feeling which prevails in reference to Western projects. The roads in that section of the country are first securing to themselves the public confidence, and as money is abundant for investment in *undoubted* 7 per cent. securities at par, there can be no doubt that the best western bonds will soon go up to this comparatively high figure.

The traffic on the Madison and Indianapolis road shows a very great gain over last year. In February the earnings were..... $37 087
February, 1851..... 21,150

Increase, over 50 per cent..... $12,937
During the last week they were..... 10,106
Same week last year..... 6,400

The receipts of the Cleveland, Painsville, and Ashtabula railroad, for the month of February, were $5,733 39, and for the first week in March, were over $2,000. The February receipts were, in part, on only 29 miles of road- 42 miles are now in operation—viz: from Cleveland to Madison, from whence to Erie, Pa., passengers are conveyed in stages.

The receipts on the Columbus and Xenia railroad for February, were $14,500, being full 50 per cent. increase on the corresponding month of last year.

The receipts on the Cleveland, Columbus, and Cincinnati railroad, for the month of February, were $29,781 48, and for the year ending February 29, were $525,358 18.

The earnings of the Michigan Central railroad, for January 1852, were, for

Freight..... $13,296,04
Passengers..... 11,837,29

Total..... $25,133,33
Earnings January, 1851..... 25,103,36

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, APRIL 3, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	107
U. S. 6's, 1862	113
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	117⅞
U. S. 6's, 1868	117½
U. S. 6's, 1868—coupon	121
Indiana 5's	87½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	75½
Illinois 6's—interest	48
Kentucky 6's, 1871	108½
Massachusetts sterling 5's	105½
Massachusetts 5's, 1859	106½
Maine 6's, 1855	103
Maryland 6's	102½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18·0-'61-'62	110
New York 6's, 1864-'65	114
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	104
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	104
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	105
Ohio 6's, 1856	106
Ohio 6's, 1860	108½
Ohio 6's, 1870	113
Ohio 6's, 1875	114½
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	90
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	105½
Tennessee 5's	86
Tennessee 6's, 1880	103
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	105½
Cincinnati 6's	95½
St. Louis	93½
Louisville 6's 1880	94
Pittsburg 6's, 1860-1871	96½
New York 7's, 1857	108
New York 5's, 1858-'60	102
New York 5's, 1870-'75	102½
New York 5's, 1890	103
Fire loan 5 s, 1886	101½
Philadelphia 6's, 1876-'90	103
Baltimore 1870-'90	104½
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	104⅞
Erie income 7's, 1855	96
Erie convertible bonds, 7's, 1871	92½
Hudson River 1st mort., 7's, 1869	105
Hudson River 2d mort., 7's, 1860	96½
New York and New Haven 7's, 1861	103
Reading 6's, 1870	84½
Reading mortgage, 6's, 1860	81½
Michigan Central, convertible, 8's, 1860	103½
Michigan Southern, 7's, 1860	93
Cleveland, Col. and Cin. 7's, 1859	103½
Cleveland and Pittsburg 7's, 1860	93
Ohio and Pennsylvania 7's, 1865	95½
Ohio Central 7's, 1861	91

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 31.	Mar. 24.
Albany and Schenectady	100	100½
Boston and Maine	104½	104½
Boston and Lowell	109	110
Boston and Worcester	100½	100½
Boston and Providence	87	88½
Baltimore and Ohio	64½	63½
Baltimore and Susquehanna	32½	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	111	112½
Eastern	97	96½
Erie	86	85
Fall River	99	98½
Fitchburgh	104½	105
Georgia	—	—
Georgia Central	—	—
Harlem	71½	71½
" preferred	111	110½
Hartford and New Haven	126	121
Housatonic (preferred)	35	37½
Hudson River	67½	67½
Little Miami	—	—
Long Island	21½	22½
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	96	96½
Michigan Southern	113	107
New York and New Haven	111½	112
New Jersey	129	129
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	56½	57½
Ogdensburgh	25½	26½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	29
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	71½	74½
Rochester and Syracuse	112½	112½
Stonington	54	54
South Carolina	—	—
Syracuse and Utica	125	125
Taunton Branch	115	115
Utica and Schenectady	127½	127½
Vermont Central	20½	20½
Vermont and Massachusetts	20½	20½
Virginia Central	—	—
Western	103	103
Wilmington and Raleigh	57½	56½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

To the Editor of the American Railroad Journal.

Grants of Lands for Railroads.

St. Louis, March 18, 1852.

H. V. Poor, Esq:

Dear Sir—At the risk of some repetition, will you permit me to keep before your readers the current facts and propositions in regard to the public lands (New Mexico, California and Oregon excepted,) and the relative extent of the grants of land sought for by the western States in aid of their internal improvements. The data are derived chiefly from the speech of Senator Bell, in the debate on the Iowa land bill.

On the 30th September, 1849, the lands in the new states and territories (New Mexico, California and Oregon excepted,) exclusive of lands settled or appropriated by the old French and Spanish grants, were stated to be as follows:

	Acres.	
Surveyed		312,116,000
Unsurveyed		70,000,000
Total		382,523,000
Sold by the United States	101,386,694	
Donated to schools and colleges	11,119,000	
Donated to deaf and dumb asylums	42,000	
Donated to internal improvements in the new states	8,474,000	
Appropriated at 30th Sept., 1849	121,501,000	
Appropriated since the above date:—		
Swamp lands to the States	37,500,000	
Bounty lands and entries in 1850 and 1851	5,000,000	
Outstanding bounty warrants	17,000,000	
		181,001,000
Balance		201,019,000
Include Minesota territory		50,000,000
		251,019,000
Deduct for barren or unproductive lands		50,000,000
Available lands at this date		201,019,000

Of this, there are in the five northwestern states—Iowa, Wisconsin, Michigan, Illinois, and Missouri—about 100,000,000 acres.

These five states are asking, in aid of their internal improvements, about	5,000,000
Arkansas, and the southwestern states, are asking for about	5,500,000
The state of Illinois received in 1850	3,500,000
	13,000,000

Making in all three and a half millions of acres already granted, and nine millions of acres now asked for, towards the construction of railroads into the interior, out of 200 millions of disposable lands, some of which have been from 20 to 30 years in the market, and unsaleable from the want of suitable means of access to them.

In the state of Missouri there remained unsold on the 31st January, 1851, 29,000,000 acres.

In the state of Iowa, unsold on the 1st January, 1852, 27,600,000.

The holders of the public lands may be divided into three classes:

1st. Those who have settled in the neighborhood of the navigable rivers, and who are the producers of the western country, for the reason that what they raise finds a market through these rivers.

2d. Those who have settled at a distance from the water courses. These settlers are scattered over the interior, and do little more than support themselves. What such farmers produce is of little value, unless converted into some kind of stock.

3d. The holders of unimproved lands, embracing those who have purchased on *speculation*, and who are chiefly *absentees*.

The first class are the great contributors to the common wealth. The second and third are of little account, as regards the commerce and revenues of the country, because the lands held by them are beyond the reach of market.

The lands throughout the western country, on which produce can be *profitably* grown at present, are nearly all taken up. There remains but little on which a farmer can settle, and (while they remain as inaccessible) make fair laborers wages from throughout the year.

The mass of the lands remaining unsold constitute the interior lands of the country, which must be made easily accessible by artificial communications, before they can be cultivated to any advantage. These interior lands are very fertile, and are the most healthily situated.

The building of railroads through these lands, makes them attractive to settlers, renders them therefore valuable and productive, adds to the trade and wealth of the river cities on which they terminate, and increases sensibly the revenues of the general government.

The interest which these cities have in receiving new streams of trade from these hitherto untouched sources, makes them the chief contributors to the funds necessary for the construction of these interior railroads.

The different interests benefitted by their construction may be classed as follows:—

1. The cities connected with them.
2. The landholders of the districts through which they will run.
3. The States through which they pass.
4. The United States government, by the increase of its revenues.
5. The United States government, by the value they will give to the lands previously unsaleable.

Of these five classes, constituting four parties, the three first contribute liberally towards the construction of our western railroads. The last party, the government, declines to contribute, unless the full value of its contribution is in some shape restored without crediting any benefits received, and at this moment it is very questionable whether it will consent to be of any service in any shape.

The railroad land bills before Congress propose to compensate the government for any grant of land it might make towards their construction, in two ways:—

1st. By doubling the price of the alternate sections reserved—putting these sections up at public sale, where a greater price is likely to be obtained.

2d. By providing for the transportation of its troops and stores on the railroads free of charge. This last gratuity to the government is meant to compensate for any lands taken beyond the limits first prescribed, (six miles in width), but it forms an item of income which would very soon greatly exceed any receipts from such outside lands.

By these two provisions, the government secures a certain monetary advantage, in addition to payment for every acre of land which the bills may give. This advantage will depend on the price obtained for the reserved lands, and on the amount of stores and troops transported.

Great merit is claimed for the proposition now before Congress to give a certain amount of land "*in aid*" for a little more than it would be otherwise worth, clogged besides with subordinate conditions calculated to make the gift as little capable of improvement as possible. The policy which deplores and deprecates any assistance being given to internal improvements by the general government, is here faithfully carried out.

If the government makes no sacrifice the individual does and must.

Money is worth ten per cent in these western cities, and this can readily be obtained for it. Our individual subscriptions towards our railroads are notwithstanding more liberal in proportion to our means and population than with you.

All the counties and cities assist by subscriptions. The State assists by a loan of its credit.—Every party but the greatest beneficiary puts its shoulder to the wheel, willingly. Grants of land, if made on liberal conditions, would fill up the deficiency of means, for the construction of our railroads, which otherwise must be obtained by railroad bonds, and contractor's stock at a great sacrifice.

The public lands are held in trust by the government to be applied for the benefit of all the States. This does not preclude such an application of portions of them as will conduce to the rapid settlement and sale of the rest.

A proposition is before the Senate, to give to the old States for railroad purposes, the same quantities of land as have been and may be this session, applied in that way in the Western States, (13,000,000 acres.)

This would be a one-sided gift, unless it can be shown that the grants of land above mentioned have not been necessary to open these lands to settlers, and have not otherwise been paid for by special provisions to that end.

Nevertheless the appropriation of this land towards the internal improvement debts of the old states, could not be otherwise than beneficial.

A proposition has been made in the House of Representatives to distribute the whole of the public lands among the States.

Another proposition gives to every settler, being the head of a family, a homestead of 160 acres without charge. This inducement would increase the number of emigrants from Europe and would tend to fill up the States rapidly. But the policy of it is very questionable if not dangerous. All foreign emigrants must undergo a certain amount of educational training before they can become good practical citizens. During this intermediate state, they must be sufficiently in a minority to be entirely under the influence at least, if not the control, of the American population. They are so now. But their numbers might by such offers of free lands, so much increase as to obtain the control of a state, of a western state for instance, and in that case their mere want of the corrective caution of political experience would jeopardize the political institutions of the State and lead to the commission of all sorts of follies. Their presence here in a certain proportion is a blessing to themselves and to us, but beyond that proportion it might be made to become a positive evil, and lead thence to their entire exclusion for a generation from the rights of citizenship. It is neither for their interest nor ours that such a dangerous experiment should be made.

Another proposition, not intended to be liberal, has been hinted at in the debates in the Senate on the land bills, viz; that the privilege of purchasing the amounts of land now proposed to be donated should be given to the proper states for their specific railroads, on paying the regular government price. If such a privilege were combined with a credit of five years (a pre-emption right of five years,) and, for the protection of the community, a specified

time, within which the said lands must be sold at public sale, if not previously disposed of, it might afford more valuable aid to our railroads than the bills now before Congress with their very illiberal provisions and restrictions. Respectfully,

C.

Railroads in Tennessee and Kentucky.

A convention was held at Nashville, Tennessee, on the 16th ult., to consider the project of constructing a railroad from the city of Danville, Kentucky. V. K. Stevenson, President of the Nashville and Chattanooga railroad, was chosen chairman of the meeting, and E. P. McGinty and F. K. Zollicoffer, Secretaries.

A paper was read from the delegates of Marion county, Kentucky, stating that if the road in question were to be constructed through Lebanon, the county seat, the county of Marion would take stock enough to make the road through that county, 25 miles; that Greene and Taylor counties would contribute $200,000: and in short, but little difficulty would be experienced in raising means to construct the road from Danville to Little Barren river, 60 miles. Should the road be located by Bowling Green, they stated that large means would be contributed by Warren and Simpson counties, leaving but a small gap to be provided for in Kentucky, which would be supplied by Lexington and Cincinnati. If the road should be constructed by Glasgow, they stated that Nashville, Davidson and Sumner counties in Tennessee would probably unite with Allen and Barren counties in Kentucky, in furnishing the requisite means. They expressed a preference for the Bowling Green route over the Glasgow route, but would unite with the friends of either.

Maj. James Barbour, President of the Lexington and Danville road, addressed the convention in favor of the proposed connection between Nashville and Danville, which he considered in fact to be a connection between Nashville and Cincinnati, of which line 130 miles (from Cincinnati to Danville) were already provided for, leaving 170 miles to be constructed between Nashville and Danville.

He considered the Danville route for many reasons preferable to the Louisville route, especially as regarded the resources of the counties passed through. To support his statement, he quoted from the Auditor's report for 1851 the valuations of the counties on either route.

The taxable property in reach of the direct influence of the Louisville and Nashville railroad was stated to be $84,469,773; that on the Nashville and Cincinnati road, $184,930,408. Eight or ten of the counties are common to both lines. The aggregate wealth of the counties in reach of both lines is about $230,000,000, near ⅓ of the taxable property of Kentucky. The Mayor wished Nashville to awake to the value of this road, for it was the only route she would ever have for the *through travel* from the northeast to the southwest. This route would command a large portion of that travel against all competition, and become a great *national thoroughfare.*

Gen. Leslie Combs, of Kentucky, then spoke in favor of the project; and resolutions were adopted: expressing a lively interest in the movements made by the people of Covington, Maysville, Lexington, and Danville, to construct a central line through Kentucky, from Cincinnati as far south as Danville in the direction of Nashville; declaring that such a line of road is regarded as in no way conflicting with the Louisville and Nashville railroad, or the Bowlinggreen and Washington railroad, which are so earnestly regarded as promotive of the highest interests of these important commercial points as well as of the intermediate country; expressing also the readiness of the people of Tennessee to unite with the people of Kentucky upon either or both of these great lines of railroad, by building the Tennessee portion of the same, so soon as it may be determined that the works can be certainly accomplished beyond the borders of that State.

It was also resolved by the members of the convention to call upon their fellow citizens of Davidson county to prepare to organize at an early day for taking the question on the railroad tax, authorized by the recent act of the Tennessee Legislature, in aid of all the leading railroad lines leading out from Nashville in the various directions, and that it is the sense of this meeting that the county should not hesitate one moment to make large and liberal appropriations to be equitably apportioned among works destined to exert so powerful an agency in the future prosperity of the city and country.

Pennsylvania.

Pittsburg and Steubenville Railroad.—We have received a recent report of the engineers of this road, giving an account of the location of the line between Pittsburg and Steubenville, together with a statement of the condition and prospects of the company.

The entire length of the road is 41¼ miles, and though passing through a region heretofore pronounced impracticable for railroad purposes, it has been found upon trial to present no extraordinary engineering difficulties. Although the surface of the country is very much broken up and irregular in certain places, yet it has yielded to a location which will compare favorably with most of our eastern roads in alignment. The curves average about 2000 feet radius, no curves having less than 955 feet, with the exception of a short distance at the Monongahela bridge, where a curve of 500 feet on a level grade has been found necessary. The maximum grade allowed is 52 8-10 feet per mile. It is stated by the engineers that the cost of the road would have been much less had not this limit been adhered to, for at many points on the line deep ravines are encountered, requiring heavy fills to reduce the grade to even 52 8-10 feet. An important item of expense is the construction of the bridge over the Ohio river at Steubenville. This bridge is estimated to cost about $300,000, and it is suggested by the board that it be built by an independent subscription of stock, and that it be made to accommodate the common travel, as well as the railway transit over the river. The cost of the entire line, exclusive of the bridge at Steubenville, is estimated at $1,296,229.

The business prospects of the road when completed are considered by the company as very favorable. Although there are other roads in process of construction, which will compete with the Pittsburg and Steubenville railroad, yet such is the immense amount of traffic between the east and west, that it will require quite a number of lines to accommodate it. The position of Pittsburg is very favorable for a connection with the western roads of Ohio and Indiana. She stands at the nearest approach of the navigable waters of the Mississippi basin to our eastern cities, and on the route of the shortest communication between the Atlantic and the cities of Chicago and St. Louis. She is already connected by railroad with Philadelphia and New York, and will soon be connected by the proposed road up the Allegheny valley, with Rochester and the western part of the State of New York. The distance between Cincinnati and New York by the Cleveland and Columbus, and Erie railroads is 866 miles, while by way of Steubenville and Pittsburg it is 746 miles, making a difference of 120 miles in distance in favor of the Pittsburg route.

When the proposed railroad between Steubenville and Columbus is constructed, it will form with the Pittsburg and Steubenville railroad a part of the shortest connection between Philadelphia and Cincinnati; consequently the travel between those cities will be most likely to take that route.

By the extension of the Steubenville and Indiana railroad, to connect with the Bellefontaine and Indiana road, a short connection will be offered to Philadelphia and Pittsburg with the cities of Indianapolis and St. Louis. Of this connection the the Pittsburg and Steubenville railroad will form an important part.

From these data the through business of the road can readily be estimated. Let us now see what the prospects of local traffic are.

One of the most important items in the business of the road will be the transportation of coal. According to the engineer's statement, there are mines of a superior quality along the whole route, which its construction will bring into use. The coal will pass almost entirely on descending grades, no where exceeding 52 8-10 feet per mile, and the cost of carriage will be reduced to a low rate. It can be transported from the mines on the route eastward to Pittsburg and westward to the river at Steubenville, at 1½ cents per ton per mile. It can be delivered in the cars on the railroad for 2¼ cents per bushel, making the cost at Pittsburg or at Steubenville 3 cents per bushel. Under these circumstances it is estimated that sales to the amount of 4,000,000 bushels might be effected at the points designated. This would yield an annual income of $30,000. The coal trade is a rapidly increasing business, and will be of great importance to the road.

The traffic in wheat, corn, wool, cattle, and other agricultural products will be great on account of the richness and fertility of the soil between Columbus and Pittsburg and the thickly settled population of that region. The value of the agricultural products that will be tributary to the Steubenville and Columbus railroad is $12,362,091, without including oats, rye, barley, tobacco, potatoes, turnips, fruits, butter, cheese, etc.

The value of the yearly surplus is estimated at $6,500,000, and the amount of freight which will be derived therefrom at 210,000 tons. Of this, it is believed that at least 65,000 tons will pass over the Pittsburg and Steubenville railroad, and that the rate for freighting could be put as low as 2¼ cents per ton per mile. This on 42 miles would be $1 05 per ton, and on 65,000 tons the receipts would be $68,250. The passenger traffic from the same region is estimated at $32,000 per year.

Adding together the different sources of revenue the annual receipts would be, at least, $221,250.—Deduct from this amount $112,125 for expenditures, and we have left a sum of $112,125 for net income. This is about 7½ per cent on a capital of $1,500,000, without including the through trade and travel arising beyond Columbus.

With such prospects before them, it is to be hop-

ed that the company will persevere in their endeavors to construct a first class road.

For the American Railroad Journal.

Railroad from Lafayette to Burlington.

Among all the projects in northern or central Illinois, this is the only road seeking a direct connection with Cincinnati or with that net work of roads which from central or southern Ohio concentrate at Indianapolis. The Chicago and Galena, Chicago and Rock Island, Aurora extension Military Central and Western branch of the Illinois Central, are all conduits into the Lake Shore lines, and furnish no direct accommodation for the the mighty masses who will be moving westward from the Middle States and centralwise. By the ensuing autumn, there will be an uninterrupted railroad communication from the seaboard, through the capitals of Ohio and Indiana, to the Wabash river at Lafayette. Thence extending the line on a parallel of latitude through Peoria and Burlington, we strike the heart of the Mississippi valley in the very theatre of its enterprise. It is from that region that much of the wealth of that valley is sent eastward for exchange. Let any one note the statistics of trade for a thousand miles on the Mississippi, and he will see that Burlington is in the very centre of production. It is there, and in towns immediately surrounding, both on the Mississippi and Illinois rivers, that most of the pork trade of those rivers originates. This is a large item of commerce. This too, and further south, is the region for grazing. North of it the prairies are too cold and the winters too long. It is the latitude best adapted to the various species of grain. In fact if any one point were assumed as a centre to illustrate the agricultural wealth of the Mississippi valley, it would be Burlington. It is too well known to need the statement, that the road above named follows the leading emigrant line.

It is not to be expected that travel between the Ohio river, the States of Indiana, Kentucky, Pennsylvania, Virginia, Maryland, Delaware and New Jersey in the east, and this attractive country in the west, (which opens at once to the best parts of Illinois, Missouri and Iowa, and on the direct transit line to Oregon,) will go out of its way to the lake shore and Chicago, when this central line is presented through the heart of Ohio and Indiana. We need only refer to the travel by stage for many years past from Baltimore and Philadelphia respectively, to Wheeling and Pittsburg, to prove what a *railroad* will do running west through the centre of the plain that connects the lakes with the Ohio river.

It is a lucky feature of this line, too, that it takes the table land, or dividing ridge of the waters running northward and southward, and for the whole distance from Lafayette to Peoria requires scarcely a bridge, but at the Illinois river, and very few to Burlington, with a grade throughout not to exceed 25 feet to the mile. The distance from Lafayette to Burlington is two hundred and fifty miles.

Another commanding feature is that at its *termini*, and in its progress, it taps three navigable rivers and one canal.

The attention of commercial men at the east has lately been aroused to the extension of the Lafayette road towards Burlington and Council Bluffs. Resolutions have passed the Boards of Trade of Cincinnati, Philadelphia and Baltimore respectively, in favor of the objects, selecting this thoroughfare for the patronage of the government, in case grants of land should be made for railroads; but as the selection must be made almost exclusively in Illinois, the liberal grant to the "Illinois Central" is set up as an estoppel, although the proposed road running east and west would accommodate quite a different interest, and is much more national in its aspect than the north and south road.

A route so marked by centrality and general convenience cannot remain long unoccupied. Private enterprize is already at work, not in direct continuation from the Wabash, on account of the intervention of the "Grand Prairie;"; but between Peoria and Burlington, a distance of 93 miles, for which we are informed subscriptions, individual and corporate, have been raised to the amount of $700,000; and the whole or greater part of the grade is now under contract, and in process of construction.

The estimate for this road, with rolling stock complete, is $12,000 per mile, thus leaving but little more than half the amount to be raised by bonds that has been provided for by stock subscription at home.

The penetration of the "Grand Prairie" by the two lines of the "Illinois Central," will soon stimulate its east and west counterpart over the same prairie, between Lafayette and Peoria.

Central Illinois.

Canandaigua and Niagara Falls Railroad.

At a meeting of the stockholders of the Canandaigua and Niagara Falls railroad company, held at the office of Gilbert and Johnson, March 18th, 1852, the following gentlemen were elected directors for the ensuing year: W. H. Townsend, H. A. Johnson, Robert Bayard, Isaac Seymour, J. P. Giraud Foster, New York; F. W. Paul, Canandaigua; Ira Godfrey, Lima; Samuel March, Stafford; Simeon Benjamin, Elmira; George Wright, East Bloomfield; Samuel Rand, Honeoye Falls; Benjamin Pringle, Batavia; Angus S. Porter, Niagara Falls. The directors subsequently he'd a meeting and elected Benjamin Pringle, President; William H. Townsend, Vice President; Samuel Rand, Secretary; Isaac Seymour, Treasurer.

Ohio and Mississippi Railroad.

We learn, says the Indianapolis Sentinel, that the Ohio and Mississippi railroad company have overcome all the difficulties which have so long retarded their action on the line between Lawrenceburgh and Cincinnati. It seems that this company have for some time past been seeking a route to Lawrenceburgh across the hills, to avoid the river and the high damages which were demanded for right of way. The prospect of success attending the effort has brought the river interest to its senses, and now a contract has been concluded by which the railroad track is to occupy the tow path of the canal from North Bend to Cincinnati.

We presume the company will now proceed actively with the construction.

Railroad to Bristol, Rhode Island.

Measures are in progress to secure a survey of the route for a railroad from the Providence road to Bristol, Rhode Island, a distance of about twelve miles. Bristol is but little off from the present steamboat route to Fall river, and as it possesses an excellent harbor, the friends of the new project claim that upon opening a connection with the Providence road, it would be selected as a portion of the through route between New York and Boston, in preference to the Fall River road. The survey of the route is now going on under the charge of Geo. S. Greene, Esq., late Engineer of the Kennebec and Portland Railroad.

For the American Railroad Journal.

Hempfield Railroad.

It will be gratifying to those who take an interest in the improvements of the country to learn that active operations are to commence immediately on this important link in the chain of railroad connection between the great west and the Atlantic cities. The Chief Engineer has been directed to put under contract the heavy sections of the road between Wheeling and a point two miles east of Washington, and bids will be received till the 25th of April. After that the work will be commenced and be prosecuted vigorously to completion. The determination of this board, it is understood, is to carry it through as rapidly as possible.

This road, as is known to many of your readers, (for favorable notice of it has frequently been taken in your paper,) leaves the Central railroad of Pennsylvania at Greensburg, 31 miles east of Pittsburg, and runs directly through a rich, well improved, and thickly settled country, abounding in inexhaustible mines of bituminous coal, to the city of Wheeling, on the Ohio river. There it will connect with a system of railroads running to Cleveland on the north, through the centre of Ohio, to the cities of Cincinnati and St. Louis, and to the southwest of Ohio, Kentucky and Tennessee. An inspection of any accurate railroad map will demonstrate that the route from St. Louis to Cincinnati, thence by the Wilmington and Zanesville road, the Central railroad of Ohio, the *Hempfield* railroad, and the Central railroad of Pennsylvania to Philadelphia and New York is decidedly the shortest and most direct route between these points. It will be found to be almost an air-line. Start at Cincinnati and follow the Ohio and Pennsylvania railroad by Pittsburg to those cities, or take the Lake Shore route, and compare either of them with the line of the *Hempfield*, and the great difference in distance will be apparent. The importance of the Hempfield railroad is unquestionable, and that its stock will be a good paying one is equally certain. From its position and advantageous connections, it must necessarily command an immense amount of travel and traffic from Cincinnati and St. Louis, and the west and south west, and how can the stock be otherwise than valuable?

To aid in carrying on this work, which is interesting to the Atlantic cities, interesting to the country through which it passes, and interesting to the valleys of the Ohio and Mississippi, the counties of Washington, Pennsylvania, and Ohio, in Virginia, have subscribed five hundred thousand dollars to the capital stock of the company, and it is understood that part of the bonds issued upon the subscription will be offered for negotiation in the money market during the summer. Capitalists can have no safer or better security, and it is believed that these bonds should command fair and full prices.

Washington county is a large, populous, fertile and highly cultivated agricultural county. *It is the best wool growing county in the United States.*— The real value of its taxable property is not less than from fifteen to twenty millions of dollars, and the county is *entirely free from debt.*

Ohio county, Virginia, embraces within its territory the city of Wheeling, which is a flourishing manufacturing city, and possesses a valuable taxable property, which will furnish ample security for the redemption of her bonds which may be registered.

A Friend to Western Improvements.

Delaware and Hudson Canal.

The annual election of the Delaware and Hudson Canal Company took place on the 30th ult., at which the following gentlemen were elected Managers:—

John Wurts,	Maurice Wurts,
Wm. M. Halsted,	Lora Nash.
Silas Holmes,	Ed. J. Woolsey,
Jacob R. LeRoy,	Wm. Musgrave,
Wm. S. Herriman,	G. T. Olyphant,
Chas. N. Talbot,	D. B. Fearing,

Robert Ray.

John Wurts, President.

Wm. Musgrave, Vice-President.

Isaac N. Seymour, Treasurer.

G. A. Smith, Secretary.

Messrs. Olyphant, Fearing and Ray are new members.

The report states that the profits of the company during the past year have been $459,281 40, equal to 6¾ per cent on the capital stock. During that time there have been brought to tide-water 472,692 tons of the company's coal, and 315,803 tons for the Pennsylvania Coal Company. But a very small amount of coal will be left unsold on the reopening of the canal. The managers attribute the unsuccessful business of the past year to the competition between the great Schuylkill companies, which forced the Delaware and Hudson to reduce its prices, and they caution the stockholders agn'st an under estimate of the value of the property, based upon the returns of the year just closed.—They anticipate a much more favorable business this year. The following is a statement of the business of the year ending 1st March, 1852:—

Statement of the business of the Delaware and Hudson Canal Company, for the year ending March 2, 1852:

To coal on hand, March 1, 1851....		$305,116 73
To mining coal.....		250,053 61
To railroad transportation and repairs.....		287,439 48
To freight of coal to Rondout.....		450,972 71
To canal repairs and superintendence.....		129,734 39
To labor and expenses at Rondout..		39,696 94
To rents, salaries, current expenses, etc., New York Office.....		25,123 49
To expenses of coal yards, taxes, interest accounts, etc.....		102,176 23
Balance.....		459,281 40
Total.....		$2,078,594 98
By sales of coal.....	$1,553,973 05	
By canal and R.R. tolls.	$41,758 52	
By tolls from Penn. Co...	116,683 44	
		158,441 96
By profits of barges, real estate, etc..		56,191 90
By coal on hand.....		309,088 07
Total.....		$2,078 594 98
Balance		$459,281 40

Sodus Point and Southern Railroad.

We learn that the company to build this road has been organized, a sufficient sum to the stock having been subscribed for this purpose.

This road when completed will form a new route between the Erie road and Lake Ontario, and will become a very important avenue for supplying the latter with coal from the Pennsylvania coal fields. It traverses a beautiful country, and will receive a large local business. Sodus Bay forms one of the best ports on the lake, and the road could not fail to render it a very important commercial point. The road can be built at a very low cost, and if the people interested can raise $200,000, they can easily secure its construction.

News from Europe in Five Days.

Intelligence has just reached us, says the Evening Post, of a grant having been made by the public authorities of Newfoundland to Mr. H. B. Tibbatts and associates, of this city, of the exclusive right to construct and use the magnetic telegraph across that island, for the period of thirty years.

This grant is designed to facilitate Mr. Tibbatts in his scheme for the establishment of steam and telegraphic communication between New York and Liverpool or London *in five days*, which now appears to be perfectly practicable. We have already telegraphic communication between this city and Halifax. Mr. Tibbatts proposes to intersect that line at the nearest point with his line, which is to terminate at St. Johns. The distance from St. Johns to Cape Ray across Newfoundland, is four hundred and fifty miles. The distance across the St. Lawrence is about forty-eight miles, and from thence to the intersection with the Halifax line, about fifty miles, making in all, about five hundred and fifty miles, of which forty-eight only are sub-marine. The navigable distance from St. Johns to Galway is one thousand six hundred and forty-seven miles, or about five days' sail. The telegraphic communication between Galway and London will be complete during the current year, when without difficulty or any special effort, the New York merchant can communicate with his London correspondent in about half the time now usually consumed.

But this is upon the supposition that a line of steamers will be established to do the ocean part of the business. Mr. Tibbatt's is now asking of the legislature of this state, an act of incorporation for the New York and Galway Steamship company, which will doubtless soon be granted, as there is no imaginable objection to his application. When that event occurs, suitable steamers, we venture to believe, will not be long in making their appearance.

What the plans of the company are as to the steamers, we do not know precisely, but from the proposals submitted some months since to Congress, and now under the consideration of the Post Office committee of the two houses, we learn that they are not to be of less than two thousand tons capacity, and are to have no connexion whatever with the Navy, or with the General Government; unless they are asked to carry the mails between this port and Liverpool, which they will do for $10,000 the round trip, or about half what is now paid to the Collins' line.

We presume that, in view of the organization of a company like this, possessed of the exclusive telegraphic privileges in Newfoundland of which we have spoken, we shall be no longer threatened with the loss of all our transatlantic commerce in case the Collins company are compelled to withdraw their steamers from the ocean.

We presume it will not now be questioned that other boats will fill their places, which can not only run faster than their British rivals, but pay their expenses without the aid of government. When we accomplish both these results our maritime triumphs will be complete.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from Cairo to Big Muddy River.....	60 miles.
Second	"	" Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian...	53 "
Sixth	"	" Bloomington to the Illinois River....	60 "
Eighth	"	" from Freeport to Dubuque.....	67 "
Ninth	"	" Chicago to Kankakee river.....	55 "
Tenth	"	" Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,
Of elegant designs and colors.
GERMAN CLOTH FOR CAR LININGS.
The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold.	These goods can be furnished in any dimensions req'd.
" " Silver.	
Do. Silver ground velvet printed.	

CURLED HAIR
Of every description and quality.
New York, 1850. 1y16

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Ca: Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, JR.,
Chief Engineer.

Engineer's Office, Pittsburgh, March 22, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan. 22, 1852.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.

THOS. H. CALLAWAY, Prest.

Railroad Office, Athens, Tenn., 1st March, 1852.

LOWMOOR
LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but *one weld*, and at a cost to the importer of less than *ten cents per pound* for the heaviest weights.

WM. BAILEY LANG

Boston, November 29th. 1m

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr, Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully.
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

Railroad Iron.

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports of the United States.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

—

Philaddphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country. H. D. BIRD.
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH.
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction.

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON.

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON.
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$100 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Lithographic Printing,
169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction - India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agent.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, In October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering. These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER, Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic Railroad Company,
Montreal, 22d Jan., 1852

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 15] SATURDAY, APRIL 10, 1852 [WHOLE No. 834, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Vermont Central Railroad.....225
Statistics of Railroads in the United States—
By J. C. G. Kennedy, Commis'er of Census.226
Cleveland, Columbus and Cincinnati Road....228
Western routes of Transportation.....228
Buffalo and State Line Railroad.....229
Ohio and Pennsylvania Railroad.....229
Covington and Lexington Railroad.....230
Michigan Southern Railroad.....231
Richmond, Fredericksburg and Potomac R.R..231
Toledo, Norwalk and Cleveland Railroad.....231
Steubenville and Indiana Railroad.....231
Rutland and Washington Railroad.....231
Gauge of Railroad from Buffalo to Erie.....232
Bangor and Oldtown Railroad.....232
Stock and Money Market.....232
Accidents on Railroads.....234
Wilmington and Manchester Railroad.....234
Indiana Central Railroad.....234
Cleveland and Wheeling Railroad.....235
Alleghany Valley Railroad.....235
Duryee, Forsyth & Co.'s Scales.....235
Tehuantepec Railroad.....236

American Railroad Journal.

Saturday, April 10, 1852.

Mr. Quincy and the Vermont Central Railroad.

We have received a copy of Mr. Quincy's recent letter to the stockholders of the above company upon the subject of his recent difficulties with their directors. He commences by reciting the motives that induced him to accept the post of Treasurer of the company, which are stated as follows:—

On the 24th day of July, 1849, Ex-Governor Paine of Vermont called upon me, and requested me to take the office of Treasurer of the Vermont Central railroad, of which he was President. I at first decidedly refused. I wished for no addition to my income, and was not inclined to involve myself in so vast an undertaking.

I was afterwards urged by members of the board of directors of the Vermont Central, and by eminent men, interested in the whole line of northern roads, to accept the office.

I was reminded of the important enterprises already accomplished—that the South Cove which added seventy acres to the territory of Boston, and the Western railroad which had added millions to its property, had been carried through, in large measure, by my credit and influence—and that besides many other public works of minor importance my exertions had greatly contributed to the introduction of the waters of the Cochituate, which had given health and purity to my native city.—One great enterprise, I was told, alone remained—the connection of Boston by railroad with Lake Ontario at Ogdensburg, and with the St Lawrence at Montreal.

An opportunity, it was said, was thus offered, such as no man had ever had before, or would have again, of advancing the prosperity of the city and of all New England.

I was told that my acceptance of the office of Treasurer would insure the immediate completion of this great enterprise, and that I should save the proprietors of the stock in these roads from an almost total loss of their investments.

At the time of accepting his trust, Mr. Quincy states that the directors of the company represented to him that the debt of the company was only about $250,000 above the assets, and that the further sum of $1,580,000 only would be required to complete the Central, and the Vermont and Canada roads. Under these representations, and by the advice of the leading capitalists of Boston, he accepted the office.

At the time of assuming the duties of Treasurer, the work upon the Central road had been nearly suspended, for want of funds. The Vermont and Canada had not been commenced, and Mr. Quincy claims, that but for his efforts, the latter road could not have been opened for years.

The finances and credit of the company being at a very low ebb at the time of Mr. Quincy's appointment, and he being looked upon as the only available person who could resuscitate the concern, he claims, and shows pretty conclusively, that a *carte blanche* was given him to use the securities and credits of the company, and in such a manner as he saw fit; that he might pledge them for his own individual liability, provided such a step became necessary to provide means for the company. It is under this understanding that Mr. Quincy holds, and refuses to surrender a large amount of the company's bonds, which have been pledged for his own liabilities.

But what seemed to be all sunshine in the beginning, soon settled into a storm. Instead of the sum of $1,580,000, stated by the directors as necessary to complete the road, there has been raised the sum of $4,750,000! Some idea may be formed of the condition of the company, and the nature of Mr. Quincy's duties, from the fact, that from the 1st of September, 1849, to Jan. 1, 1852, a period of 28 months, his cash payments amounted to the sum of $31,000,000!!! The payments were chiefly for money *borrowed*. It was for the use of the bonds of the company as security for his own liabilities, that led, as we understand the matter, to the breach between Mr. Quincy and the directors. That Mr. Quincy has lost largely by his connection with the road, there can be no doubt. He is a large holder of the stock, which he purchased at a much higher figure than the present market rates, but it does not appear that he supposed at the time of the purchase, he was paying more for his stock than its worth.

The company claim that having paid all the liabilities incurred by Mr. Quincy on behalf of the company, together with his stipulated salary, he having relinquished all claim for additional compensation for endorsing the company's paper, that he has no right to retain its property, having been virtually removed from the office of Treasurer. On the other hand, Mr. Quincy claims that having had a full right to pledge the securities for his own liabilities, has a right to retain them, till all the equities between him and the company are adjusted. Mr. Quincy complains that he has been very badly treated by the directors; on the misrepresentations that have been made to him; in being removed from his office at the moment the financial difficulties of the company had been surmounted, and that, too, by his own efforts; and by having his name trumpeted to the world, as the cause of the repudiation of the company's liabilities, and winds up by declaring his willingness to submit the whole matter in dispute to the arbitration of disinterested men.

The above is in brief the substance of Mr. Quincy's letter. We presume it will be followed by a reply, in which the other side of the story will be told. But from Mr. Quincy's statement it does not appear to us how he could have lost money by the company, except by the purchase of its stock, and by neglecting his own private affairs. Against this we presume will be urged the fact that his mistakes are those of his own judgment, for which the company shall not be liable; that if he was satisfied to serve the company for a salary of $5,000 per annum, he can have no just claim for what he suffered by neglecting his private business.

The truth of the whole matter we suppose is mainly this. Mr. Quincy looked upon the Central

road as a very promising enterprise; that he believed himself able to carry it through; that he entirely overrated the capacity of the road and the value of its stock, and that he lost largely by investing in it. Had the scheme turned out equal to his expectations, and had he made, instead of losing money by it, we probably would never have heard of any difficulty between himself and the directors. But every one who has had anything to do with the Central road, has lost money by it, and consequently is in the best possible humor to quarrel with somebody else. In the management of the Central road there has been grievous misconduct somewhere, and the contest now is to see who shall be made the scape-goat for its many sins.

Mr. Quincy went into the concern with a double motive, to make money, and to aid the completion of what he believed to be a highly important and laudable enterprise. That he acted from any but an honorable motive, we do not believe. That he grossly deceived himself in reference to the results predicated upon the work, there is no question; but his error was shared by nearly all the shrewdest men of Boston. That he has any legal redress against the company, we doubt. Whether he has not an equitable claim, is by no means so clear.

But Mr. Quincy's skirts are not entirely clear. We presume that his reputation as a railroad man and his high standing in society led a great many persons to invest in the Central road, upon his representations, that it would prove another *western* road, and that it could not fail to pay handsomely in the end. We believe that the subscriptions to the stock at 50 and 30 dolls. a share could not have been effected without his efforts, and the credit attached to his statements. He has placed these men in the same category with himself; and if they have no remedy, why should he be entitled to any?

Mr. Quincy and the road have fallen a sacrifice to the delusion upon which the city of Boston has wasted vast sums of money, that of making her the *exporting* port of the produce of the west. Some few men who early acquired reputations as being safe guides in railroad matters, assumed as proved, the ability of that city to compete successfully with New York for the western trade. It was upon this assumption that the Western railroad was built.—As that failed to accomplish the object intended, they turned their attention in another direction, and convinced the public, that the reason why the Western road failed to secure the object of its construction, was the fault of its route, and not of the idea upon which it was based. So they went to work to open a route by the way of Lake Champlain. The success they have met with in their last efforts is the best commentary upon the soundness of their schemes. The city of Boston is perhaps the better off for having built the Vermont Central railroad, notwithstanding all she has suffered by it. But she should no longer delude herself by acting upon an idea which has no foundation in the nature of things.

Pennsylvania.

The citizens of Allentown and Pottstown are moving in the matter of a railroad connection between these points, to connect with the Reading road at the latter town. In relation to this route, the Pottstown Ledger says:

"It will require but 28 miles of the new road to connect Allentown with Philadelphia, and as almost the whole route is very favorable for its location, it will cost not more than $500,000. The travel and freight thereon, in the event of its construction, would not fail, we think, to pay a handsome dividend. The transport of coal, lumber, lime, iron, flour, and merchandise, would be very considerable, independent of the trade of Allentown and vicinity, a town which will soon enter the list of cities of our State. It will be recollected, also, that this route will bring Allentown 20 miles nearer Philadelphia than the route via Easton, and New Jersey roads."

Statistics of Railroads in the United States.

CENSUS OFFICE, WASHINGTON,
March 1st, 1852.

In compliance with your request, I proceed to answer your inquiries concerning railroads in the United States.

The number of miles of railroad in operation in the United States, January, 1st, 1852, was as nearly as can be ascertained, 10,814¼. At the same time there was in course of construction an extent of railroad amounting, according to the most reliable estimates, to 10,898¼ miles. By far the greatest portion of the lines commenced, but now incomplete, will be finished within the ensuing five years. The length of railroad brought into operation since January 1st, 1848, is 5,224 miles. Within the last year 2,153 miles have been finished. Nearly all the lines in progress have been commenced since 1848. It is supposed that from one thousand miles additional to the 10,898 now known to be in progress will be put under contract during 1852.

There never existed greater activity in the making of railroads in the United States than at the present time. Many of the lines projected have taken the place of plans for the construction of canals and turnpike roads. Accordingly, these works of public improvement are not prosecuted with the same ardor and energy as formerly, although much activity exists in the construction of plank roads. The labor and capital which they would require are absorbed in the numerous and almost colossal schemes of railroad building. Since 1848 the extent of railroad opened for travel and transportation has nearly doubled, and there is reason to believe that the increase in the length of road brought into use will not be less rapid during the next period of four years. By the year 1860, we may expect that the territory of the United States will be traversed by at least 30,000 miles of railroad.

It is very difficult to form an estimate of the average expense per mile of building railroads in the United States. In fact, no average can be assumed as applicable to the whole country. The cost of the roads in New England is about $45,000 per mile; in New York, Pennsylvania and Maryland, about $40,000. But in the interior of these States the surface of the country is broken, rendering the cost of grading very heavy; and nearer the sea, wide and deep streams interrupt the lines of travel, and make the expense of bridging a serious item.

In New England, and the more densely inhabited parts of all the old States upon the Atlantic, as in all European countries, the extinguishment of private titles to the real estate required for railroads frequently forms a large part of the expenses included in the item of construction. In the Southern States and the valley of the Mississippi $20,000 per mile is considered a safe estimate. There, in most cases, all the lands necessary for the purposes of the companies are given them in consideration of the advantages which private proprietors expect from the location of the roads in the vicinity of their estates.

In many of the Western States the cost of grading a long line of road does not exceed $1,000 per mile, the cost of timber amounting to nothing more than the expense of clearing it from the track. For these reasons, the expense of building railroads in the Southern and Western States is now much less than it wil be when the country becomes as densely settled as the older States of the Union.

The Central railroad of Illinois is an enterprise which furnishes a remarkable example of the energy and spirit of improvement in the new States. Illinois was admitted into the confederacy as a State, in 1818, with 30,000 inhabitants. It has 55,105 square miles of territory, and a population, according to the census of 1850, of 851,470 The Central railroad is to extend from its southwestern extremity, at the confluence of the Mississippi and Ohio rivers, to the north line of the State, with two diverging branches, and is to be six hundred and eighty miles long. The cost is estimated at $20,000 per mile, or $13,600,000 for the entire work, without equipments for operating it. This is the longest continuous line of road now in contemplation in the United States, of which there is any probability of speedy completion. It has been commenced with such facilities for executing the plans of its projectors that there is no reasonable doubt that it will be finished within a few years.

Mr. Asa Whitney proposed to construct a railroad from St. Louis, or some other place on the Mississippi river, to the Pacific ocean, terminating either at San Francisco, in California, or at the mouth of the Columbia river in Oregon. He solicits the patronage of the national government for this prodigious work, and petitions for the grant of a tract of land equal in extent to sixty miles in width by two thousand miles in length. His plans were first laid before Congress in 1842, and he has since been continually occupied in recommending them to the favorable attention of the government and the people, with great ability and zeal; but with what success remains yet to be seen. Without expressing any view with reference thereto, it may be said that his project is generally considered impracticable, from the fact that of the two thousand miles of territory which his route across the country must traverse, a large portion consists of desert or of sterile and very elevated mountain districts, in which can be found no materials of construction, and which would afford no business for the support of the road, were the difficulties of building it overcome. Many intelligent men, however, are convinced of its practicability and expediency.

The railroad system of the United States may be considered to have commenced in 1830. The first one put in operation was a short road built for the transportation of ice from a small lake to the sea, in the State of Massachusetts. The length of this work was four miles. It was finished in 1830. In the same year the State of South Carolina caused to be commenced a road from Charleston, its principal port, to Augusta, in Georgia. The distance is 135 miles. The work was finished in 1833, at the very remarkably small cost of $1,336,615, which sum included also the expense of furnishing the road with engines and passenger and freight cars, and all other necessary equipments. This was the first railroad of any considerable length constructed in the United States, and it is believed to have been the cheapest and most successful.

The longest continuous line of railroad in the world, and that in which the construction of the greatest natural obstacles have been overcome, is that which extends from the Hudson river, through the southern counties of New York, to Lake Erie. Its length is four hundred and sixty-nine miles, and it had branches of an aggregate additional length of sixty-eight miles. Nearly its whole course is through a region of mountains. The bridges by which it is carried over the Delaware and Susquehanna rivers and other streams, and the viaducts upon which it crosses the valleys that intercept its route, are among the noblest monuments of power and skill to be found in our country. The most of these works are of heavy masonry, but one of them is a wooden bridge one hundred and eighty-four feet in height, and having but one arch, the span of which is two hundred and seventy five feet. One of the viaducts is 1200 feet long and 110 feet high. The aggregate cost of this important work was $23,580,050, and the expense of the construction was $43,333 per mile. The road was originally suggested in 1829; a company was organised in 1832; surveys were made in the same year, and operations were begun by grading a part of the route in 1833. It was finished in May, 1851, and opened with great ceremony, for travel and transportation in that month. The state advanced six millions of dollars toward the work, and afterwards released the company from the obligation to pay the loan. It will thus be seen that the execution of this great improvement was pursued through nineteen years, and it was not accomplished without calling into requisition both the resources of the state and the means of her citizens.

In the infancy of the American railroad system, and for ten years thereafter, it was the rule to ex-

tend to every important enterprise of that character the assistance of the state in which it was to be built.

Pennsylvania, Michigan, Illinois, Mississippi and some other states, adopted extensive systems of improvements, consisting of railroads and canals, which they pursued until their credit failed; an event which happened in most cases before any of the works had been completed and brought into profitable use. But the general practice was to charter companies, each of which was charged with the execution of some particular work, and to aid them by loans of state stocks. Although this practice has fallen into so much disfavor in some of the states, that the citizens have incorporated in their constitutions articles prohibiting advances by their legislatures for such purposes, it is yet continued by others, and Virginia, Tennessee, and other states, are now prosecuting expensive works, considered essential to their prosperity, by means of advances from their respective treasuries.

In the year 1850 Congress passed an act, after a very protracted discussion, granting to the State of Illinois about 2,700,000 acres of public lands to aid in the construction of the Central railroad, to which allusion has been before made. This magnificent donation is reckoned by the company to which Illinois has confided the building of the road, to be worth $18,000,000. This was the first instance in which the aid of the national government had been extended to a railroad project.

But since the above grant, innumerable applications have been made from all the new states for cessions of land for railroad purposes. Whether such further aid shall be extended is now a much agitated question in American politics. Bills are pending in Congress proposing to cede for these purposes about 30,000,000 of acres.

The following table presents, in a convenient form some of the principal facts connected with railroads in the U. States on the 1st Jan., 1852:—

States with railroads in operation or in process of construction.	Miles of railroad completed and in operation.	Miles of railroad in course of construction.	Area of the States in square miles.	Pop. in 1850.	No. of inhabitants to the square mile.
Maine.....	315	127	30,000	583,188	19,44
N. Hamp....	489	47	9,280	317,964	34,26
Vermont....	380	59	10,212	314,120	30,76
Mass	1,089	67	7,800	994,499	127,49
R. Island....	50	32	1,306	147,544	112,97
Connecticut..	547	261	4,664	370 791	79,33
New York...	1,726	745	46,000	3,097;394	67,33
New Jersey..	226	111	8,330	489,555	58,84
Pennsylvania	1,146	774	46,900	2,311,787	50,25
Delaware....	16	11	2,120	91,535	43,18
Maryland...	376	125	9,356	583,035	62,31
Virginia....	478	818	61,352	1,421,661	23,17
N. Carolina.	219	385	45,000	868,903	19,30
S. Carolina.	340	298	24,500	668,507	27,28
Georgia.....	804	229	58,000	905,999	15,62
Alabama....	121	190	50,722	771,671	15,21
Mississippi..	93	273	47,156	606,555	12,85
Louisiana...	63	...	47,156	606,555	12,86
Texas.....	..	32	237,331	212,592	89
Tennessee...	112	748	45,600	1,002,625	21,93
Kentucky...	93	414	37,680	982,405	26,07
Ohio.....	828	1,892	39,964	1,988,408	49,55
Michigan...	427	...	56,243	397,551	7,07
Indiana.....	600	915	33,809	986,416	29,23
Illinois.....	176	1,409	55,405	851,470	15,36
Missouri....	...	515	67,380	682,043	10,12
Wisconsin..	20	421	53,924	305,191	5,65
	10,814	10,898			

Nearly parallel to the Atlantic coast of the United States, from Maine to Alabama, runs the range of mountains known as the Allegheny chain. The eastern bases of these mountains are not distant from the seaboard more than a hundred miles, and they form a very formidable obstacle to the construction of railroads between the great eastern cities and the interior. In nearly all the great enterprises which have been undertaken with the view to affect such connection, great additional expense has been incurred to overcome or to penetrate this mountain barrier. In the plan first adopted for the general system of State improvements in Pennsylvania it was proposed to effect the crossing of the Alleghenies by means of inclined planes, with powerful stationary engines at the summits. These planes were built and have been used for several years, until experience proved that their operation was too slow and too expensive to maintain a successful competition with other methods of conveyance, and other improvements have since been finished designed to supersede them. The railroad from Baltimore to the Ohio river is carried over a passage in these mountains where the elevation is upwards of three thousand feet, and a part of that height is overcome by tunnels, varying in length from one-sixteenth to four-fifths of a mile. The road from New York to Albany, along the banks of the Hudson, has three tunnels. The greatest work of this kind yet proposed in the United States is the tunnel through the Hoosack mountain, which, if executed, will be four miles in length, and fifteen hundred feet below the summit of the ascent. The cost is estimated at $2,000,000. On the road from New York to Lake Erie tunnels have been avoided by very expensive works, which overcome ascents of 1,400 feet.

No authentic statement has ever been given of the capital invested in the railroads of the United States, but we have the means of forming an estimate upon which much reliance may be placed.—The railroads in operation at the beginning of the present year may be assumed to have cost $348,-000,000. The amount invested in the lines under construction, it is impossible to estimate with even an approximation to correctness. Their cost when completed will be considerably less than that of an equal length of road now in operation, for the reason that the greater number of new or unfinished lines are in the West and South, where, as has been shown, the cost of construction is far below what it is in the Northern and Eastern States.

The management of the American railroads is entirely distinct from the administration of government. Their concerns are managed by corporations, which consist of a president, secretary and directors. Each of the directors must own a certain amount of stock. They are chosen by the body of stockholders, who have votes in proportion to the number of shares they hold. The directors choose one of their body president, and appoint the secretary. The president and secretary have generally liberal salaries, but the services of the directors are gratuitous.

The rate of speed on our railroads is not so great as on those of England. The ordinary velocity of a passenger train is twenty miles an hour, but on some routes it is as high as twenty-eight and thirty miles. Express trains, on such occasions as the conveyance of the President's message, frequently maintain for long distances as high a speed as forty-five miles an hour. And one road—that between New York and Albany—forty-five miles per hour is the regular rate for all passenger trains.

The fares or rates of passage are not uniform.—In New England, the average price per mile for the conveyance of passengers is under two cents; from New York to Boston it is two and four tenths; from New York to Philadelphia, three and four-tenths; from Philadelphia to Baltimore, three and one-tenth. From New York to Cincinnati, the distance is 857 miles by the northern route, of which 143 miles are travelled by steamboat. The price of passage for the whole distance is $16 50, being slightly under two cents per mile. The lines between Baltimore and Cincinnati, soon to be opened will, be 650 miles in length, and the fare will be $13; that is, two cents per mile.

Believing that the history of the origin, condition, and extent of the railroads in the United States forms one of the most important subjects of statistical investigation, and one not generally understood, I have devoted a portion of my time to the preparation of a complete history and detailed statement respecting each of the railroads in the United States, to accompany the other statistics to be embraced within the seventh census; but, as Congress may exercise their right of abridging the work on this and other subjects, it is impossible, in advance, to say what the census, when published, will contain. I enclose to you herewith a copy of the census of Maryland prepared in advance, for reasons which will appear in its preface.

I have the honor to be, sir, with great respect, your most obedient servant,

JNO. C. G. KENNEDY.

Jules Coutin, Minister Public Works, Paris.

Debts of the States.

The public debt of the United States and of the several States, which we give below, is taken from the returns of 1850:

United States	$64,228,238
Maine	979,000
Massachusetts	6,091,047
New York	23,937,249
New Jersey	62,596
Pennsylvania	40,424,737
Maryland	15,900,000
Virginia	14,400,507
North Carolina	977,000
South Carolina	3,622,039
Georgia	1,903,472
Alabama	10,385,938
Mississippi	7,271,107
Louisiana	16,238,131
Texas	11,050,201
Arkansas	3,862,172
Tennessee	3,337,856
Kentucky	4,531,913
Ohio	19,173,223
Michigan	2,849,939
Indiana	6,556,437
Illinois	16,612,795
Missouri	956,261
Iowa	55,000
Total, 1850	$275,480,676
Total, 1843	198,818,736
Increase in seven years	$76,661,940

This shows an increase of about 30 per cent in seven years, and returns for 1851 will show an addition to the public indebtedness of 1850 of more than forty millions of dollars.

Miami and Erie Canal--Reduction of Tolls.

The Board of Public Works have fixed the following rates of toll, to be charged on the Miami and Erie canal, commencing April 1st, 1852, which we compare with the rates charged last year, in order to show the extent of the reduction. The tolls are on each 1000 lbs. and in the same proportion for a greater or less weight.

Articles.	1852. Each mile. mills.	1852. Whole distance. cents.	1851. Each mile. mills.	1851. Whole dista'ce. cents.
Bacon	4	40	7	50
Barley	4	40	6	50
Buckwheat	4	40	7	50
Blooms	4	40	5	50
Cotton [raw, in bales]	4	40	6	50
Corn	4	40	5	50
Coffee	5	70	8	90
Domestic spirits	5	80	7	100
Flour	4	40	6	50
Grindstones	4	40	6	50
Gypsum	4	40	5	50
Hemp	4	40	6	50
Iron [pig and scrap]	4	40	5	50
Lard	4	40	6	50
Malt	4	40	5	50
Meal	4	40	5	50
Marble [unwrought]	4	40	5	50
Molasses	4	40	7	50
Nails	4	50	6	90
Oats	4	30	5	50
Oils, of all kinds	4	50	6	60
Pork	4	40	6	50
Paper	4	40	6	60
Rye	4	40	5	50
Salt	4	40	6	50
Seed domestic [except Clover	4	40	6	50
Sugar	4	40	7	60
Spikes	4	50	6	60
Tobacco [leaf	4	40	6	60
Wheat	4	50	6	60
Wool	4	70	6	80

Between Cincinnati and Dayton special rates are

charged, being two mills per 1000 pounds per mile, on all articles from Cincinnati to Dayton, and half a mill per 1000 pounds per mile, from Dayton to Cincinnati.

Ohio.

Cleveland, Columbus and Cincinnati Railroad.—The annual report of this company, made on the 14th of January, has been published. From it we learn that the entire cost of the road, its appurtenances and equipments, as represented by capital stock, funded and unfunded debts, up to the 30th November last, is $3,025,888 27. Of this sum, $114,165 56 were borrowed from the earnings of the road, and is, therefore, a debt owing to the company.

The gross sum includes the cost of surveys, right of way and land damages, cost of work and materials, machinery, depot grounds and buildings, interest on money paid in on stock, interest on bonds and all other debts of the company, disconnt and commissions on sale of bonds, salaries, and all incidental expenses.

The road was opened regularly for business on the 1st of April, 1851, and its gross earnings from that time to Nov. 30th, amounted to...$466,317 29
Deduct running expenses..... 167,342 28

Net earnings..... 298,975 01

A dividend of 8 per cent. has been declared, and a fund of $72,611 27 reserved for contingencies, and to insure regular dividends. Few roads have been more prosperous than this.

Ohio.

Cleveland and Columbus Railroad.—We gather the following items in reference to the above company from the superintendent's report:—

Characteristics of Road.

Length of straight line in main track	124 86-100	Miles.	
Length of curved line in main track	10 41	"	"
Total length of main track	135 27	"	"
Length of side "	8 50	"	"
" " Delaware curve	5 52	"	"
Total length of track	149 29	"	"
" " level grades	17 85	"	"
From level to 10 feet per mile	46 79	"	"
" 10 " 15 "	56 66	"	"
" 15 " 20 "	5 32	"	"
" 20 " 30 "	1 50	"	"
" 30 " 40 "	6 75	"	"
" 40 " 50 " in City of Cleveland	5 40	"	"
Total degrees of curvature	643.		
All grades exceeding 20 feet per mile, and 377½ degrees of curvature, are within 4½ miles of Cleveland and two miles of Columbus.			
Total rise going south	816 38	"	Feet.
" " north	654 58	"	"
Total rise and fall	1470 96	"	"
Length of wood bridges	200	"	"
Length of iron bridges built and in process of construction	615		"
Length of stone viaducts	600		"
Number of stone culverts less than 20 feet span	215		

Receipts.

The receipts of the road for six months ending Nov. 30th, 1851 have been as follows:—

For passengers	$216,907 81
For freight	108,355 99
Mail and express	16,417 16
Total	$341,680 96

Passengers Transported.

Local	56,201
Through	46,165
Total	102,366

Schedule of Freight Transported.

Miles run by passenger and freight trains	143,242
Gravel and other trains, estimated	14,000
Total miles run	157,242

Cost of Operating Road.

Repairs of track	$31,692 54
" " locomotives	13,751 93
" " cars	5,481 83
Transportation expenses	18 961 48
Station expenses	13,323 34
General expenses	5,021 92
Gratuities for stock killed	1,554 97
Oil and waste	5,449 09
Fuel	14,437 19
Damages to Merchandise	1,037 39
Total	$110,711 68
To this should be added for deterioration of superstructure, cars, engines, etc.	$16,000 00
Total expense chargeable to 6 months' business	126,711 68

which is about 37 per cent of the gross income.

Financial Statement of the Co.

Construction, including all expenditures to date	$2,718,471 89	
Cars and engines	289,544 59	
		$3,008,016 48

ASSETS.

Cleveland and Cincinnati Telegraph company stock	$3,000 00	
Real estate	9,217 73	
Advances for building car shop	3,700 00	
Bills receivable	1,955 15	17,871 79
		$3,025,888 27
Stock issued	$1,302,812 09	
Contributions for preliminary surveys	1,462 59	
Mortgage bonds	900,000 00	
Other convertible b'nds	484,200 00	
Other bonds not convertable	103,200 00	
Bills payable and other liabilities	120,048 03	
Borrowed from earnings	114,165 56	
		$3,025,888 27
Gross earnings to June 1, 1851	$124,636 33	
Running expenses to June 1, 1851	56,630 60	
		$68,005 73
Gross earnings from June 1st to date	$341,680 96	
Running expenses	110,711 68	
		$230,969 28
		$298,975 01
Amount carried to credit interest account to June 1st	$68,005 73	
Amount carried to credit interest account to Dec. 1st	54,500 00	
First dividend of 4 per cent	51,006 49	
Special interest of 4 per cent	51,006 59	
Balance to surplus and contingent account	74,456 30	
		$298,975 01

Albany and Susquehanna Railroad.

A meeting of the Common Council of Albany was held on the 26th inst., on the subject of the bill now before the Senate, authorising the city to subscribe five hundred thousand dollars to the stock of the Albany and Susquehanna railroad. Resolutions were adopted adverse to such subscriptions, as adverse to the uniform policy of the city, and a draft of a bill as a substitute for the one now before the Senate was agreed to. This substitute provides for the issue, with the consent of a majority of the tax payers, of one million dollars in city six per cent. bonds, to be applied to the construction of the road, and to be secured by a mortgage upon the entire property of the company. Said bonds not to be issued until the company have raised and expended upon the construction of the road an amount equal to ten thousand dollars per mile on its entire length, or $1,400,000—in compliance with the provisions of the General railroad Act of 1850.

Western Routes of Transportation.

We copy the following from the Cincinnati Price Current, in reference to Western routes, and cost of transportation.

The opening of the Miami and Erie canal to Toledo, must be delayed until the 20th of April, to afford time for the completion of repairs near the junction. There may be a good excuse for this delay, but it is to be regretted that it should have occurred, and we think it is quite probable there has been somewhere a lack of energy, for the time set for the completion of all work on the line was the 20th of March. Fortunately however, freights by railroads are low, and goods may be delivered from this city at any of the lake ports on the opening of the latter nearly as low as if forwarded by canal.

Very soon the several channels of communication between the east and west will be open and in full operation, and now the agents of the different routes, are soliciting and contracting for freights, and from the fact that there are four different routes to the East, three of which terminate at New York city, freights will very soon be down to the lowest living point. We have in the first place the Little Miami and Xenia and Columbus, and Columbus and Cleveland railroad to Cleveland, and Erie railroad from Dunkirk to New York the connection being made by Lake between Cleveland and Dunkirk. By this route heavy freights are now taken from Cincinnati to New York at 75c. per 100 lbs; Tallow and Grain 72½c; Cotton and Whiskey 70c; Beef and Pork $2 05 per barrel; Flour $1 25 per barrel; and unmanufactured Tobacco 75c per 100 lb. net. We have railway via Dayton to Sandusky, and thence goods are taken to Buffalo by Lake, and from Buffalo to New York by canal.

We are not reliably informed as to the rates of freights charged by this route, but we understand that agents have been offering to take Pork through at $1 75 per barrel. Next are the canals and lakes via Toledo and Buffalo. The rates by this conveyance will as usual be high on the opening of navigation, but as soon as the press of business is over it is expected that Pork will be taken through from Cincinnati to New York at $1 25 per barrel; and it is quite probable it may be shipped, before the close of the season at $1 00 per barrel. The freight on other articles will be in proportion. Next is the river to Pittsburg, and canal and railroad thence to Philadelphia. Goods destined for New York or Boston, will not we suppose be forwarded by this route.

What effect these shipping facilities will have upon the Southern shipping trade may readily be seen. There will no longer be any necessity for hurrying goods forward to the eastern seaboard via New Orleans during the winter months, and a large quantity of southern products will be retained for shipment during the Summer over these inland routes. The business of this city must consequently be greatly increased, as it is the terminus or centre of all important routes east and north. Already a great increase isobservable in the provision trade, the receipts this season being larger than ever before, in proportion to the number of hogs packed in the West. As soon as our railroad connections are completed with Indiana and Kentucky the receipts of hogs from these States will be greatly increased.

In connection with the above, we give the following from the Chicago Democrat, in reference to the cost of reaching the West by the St. Lawrence route.

We learn that the G. Western Canada railroad company has lately contracted in England, through Messrs. Buchanan, Harris & Co., of Liverpool, for 25,000 tons of railroad iron, of what is called the "Continuous Rail," the best description in use.—The company have contracted to have it brought from Wales to Quebec for $3 00 per ton. From Quebec it can be brought to Chicago for $4 00 per ton, making the cost of freight from Wales to Chicago, via the St. Lawrence, but $7 per ton.

That the cost of freight from Quebec to this city will not be greater than $4, can be proved from the fact that Messrs. H. Jones & Co., of Montreal, have contracted with the Michigan Central railroad to bring their iron from Quebec to Detroit for $3,-50, which would not be more, (if as much) than $4 to Chicago. On the other hand, the Michigan Southern railroad is now arranging to get their iron by New York, at a cost of not less than $12* per ton—say $3 to New York, and $9 to Chicago. The difference in cost in favor of the St. Lawrence would thus be $5 per ton, or $100 on 20 tons, an immense saving.

By the opening of the St. Lawrence, Chicago will become a seaport, as it were, being at the head of navigation, and mercantile houses will be established, as Messrs. Buchanan, Harris & Co's., which would purchase the produce of the country, exchanging direct with the merchant and farmer, who are, under the present arrangement, compelled to pay commissions to importers, to forwarders to warehousemen, etc.

The iron purchased by Messrs. B. H. & Co. for the Great Western [Canada] railroad, will be delivered at various points along the line of road this spring and summer, viz:—at Chatham and Windsor in the Western District; Port Stanley in the London District; and Hamilton in the Gore District.

In connection with the opening of the St. Lawrence, we learn that the Canadian Government has advertised for proposals for carrying the mails between Liverpool and Quebec by propellers or steamers. It is likely that Messrs. Cunard & Co., now running lines of steamers between New York and Boston and Liverpool, will take this contract. They have already four iron propellers, of large size, built on the Clyde, in Scotland, which would be very suitable for this trade. By these and by sailing vessels, emigrants and merchandize could be transported to Quebec, and from thence by propellers to this city, at a much less cost than via New York, and the St. Lawrence will be open to the competition of all nations, and the heavy tolls of the eastern canals will be entirely avoided.

Capt. Ericsson's Air Engine.

It is pretty well known that Capt. Ericsson, of this city, has for some years past, been experimenting upon the use of heated air as a motive power. He claims now to have perfected his discovery, and is about to put it into practice on a large scale. The details of it have not yet been made public. Below we give the latest notice of the discovery or invention, copied from the Journal of Commerce:—

Capt. Ericsson has invented an engine, of which two large working models are now in operation, that differ in many important respects from anything else in use; and is destined on the score of economy, safety, simplicity and convenience to supersede steam—provided that when applied to practical purposes, it shall be found to work as well as the inventor anticipates.

His reputation for skill and judgment, and his long experience in such matters, is a guarantee against any utopian scheme, at variance with the established principles of physics or chemistry; and the method adopted to bring the invention before the puble, is unexceptionable.

In connection with two other gentlemen, whose names are known in Wall street, he is making preparations for the first public experiment, on an unusually large scale. A vessel which cannot be called either a ship or steamer, is being constructed at the yards of Messrs. Perine, Patterson & Stack, something over two thousand tons burden, and expected to be ready for launching in August; while the whole force of the establishment of Messrs. Hogg & Delamater, is at work upon the machinery. That portion of the work already in progress, embraces some of the largest castings, of their kind, that have been made in this country.—The whole affair, from the kelson to the paddle wheels, teems with novelties. Captain Ericsson has been privately at work upon the invention for several years, and now considers it as brought nearly or quite to perfection; so that he can start it on its trial trip to Liverpool, with nearly as much confidence as a new steamship made after one of the approved models.

Should the parties interested complete the vessel, as they have commenced it on their sole responsibility, they will have the profit and honor if it succeeds, and if it fails, the satisfaction of having deceived nobody but themselves. It is due to them to state that they have avoided publicity, and consented with reluctance to any mention of it on the part of the press. It is impossible, however, to keep such a thing private, and it has for some time past been known to the commercial circles.

* This must be a mistake. Iron can be forwarded from New York to Chicago for $5 per ton.

New York.

Buffalo and State Line Railroad.—The earnings of the road for thirty days in the last month were twenty thousand dollars. For a new road we call this an excellent business. Those who know nothing of what is being done on this road, will be somewhat surprised to learn that this morning six passenger coaches, loaded full, went out; while yesterday five were sent up with eight hundred and forty-three passengers; the receipts for which alone were about $1150.

Cape Vincent Railroad.—Yesterday, March 31, a trip was made over that portion of the Watertown and Rome railroad not before used, between Chaumont and Cape Vincent, on the St. Lawrence river. Several officers and directors of the railroad company, and friends of the road, left the depot in this village a few minutes past nine o'clock, in a passenger car, drawn by the locomotive "Pierrepont," in charge of the engineer in chief, J. L. Grant, Esq. With brief delay at the Brownville and Limerick stations, the train arrived at Chaumont at 9·48—42 minutes from the time of leaving the Watertown depot.

Leaving Chaumont at 10·35, the train crossed the fine bridge over Chaumont bay, and proceeded cautiously over the before mentioned track, and finally, after some detention by snow banks in three or four places, arrived safely at Cape Vincent—the terminus of the Watertown and Rome railroad, the American side of the St. Lawrence river.—*Watertown Jeffersonian.*

Ohio Railroads.

Ohio and Pennsylvania Railroad.—The western division of this road, which was opened for business on the 11th, but which may really be considered to have been in operation since the 15th of the present month, has been doing an excellent business thus far, and we think bids fair to more than realise the expectations of its friends.

This division, as at present worked, extends from Alliance to Massillon.

The whole number of passengers carried up to the evening of the 23d, on this line, has been 1,-410. The highest number in one day has been 222. The passenger receipts at the Massillon station during the same time, have been $611 53. The freight business is opening finely, and we presume that in this item our eastern friends will be much disappointed, as it will exceed their largest expectations.—*Massillon News.*

The Akron Branch Railroad, continues its operations to Cuyahoga Falls, with a steadily increasing business, and improving prospects. All are pleased with the manner in which the road is constructed and its admirable equipment. The conductor, Mr. E. W. More, and the engineer, G. W. Rice, receive the highest praise for their efficiency and urbanity, in the performance of their duty.

The work between this point and the Falls is pushed forward with an untiring energy, creditable to all concerned. To form some idea of the obstacles to be overcome in securing to Akron the benefits of railroad communication, it is only necessary to look at the earth and rock excavation going on east of the town. Yet the embankment to be made at Old Forge is still more formidable.—*Akron Beacon.*

Immense Travel.—To show the great amount of travel that is daily passing over the Cleveland and Wellsville railroad, it is only necessary to state that Messrs. Cleland and Curtis, conductors, have reported during the past two weeks, *over three thousand passengers.* The amount of way and through freight, is almost incalculable.—*Wellsville Patriot.*

Origin and History of the Potomac Company.

A CHAPTER IN THE EARLY LIFE OF WASHINGTON.

We give below an extract from a work recently published in Baltimore, with the above title.—Everything connected with the early projects of connecting the western, with the Atlantic waters, possesses a great historical interest, which is much increased from the fact, that the father of the first idea of an eastern outlet from the Mississippi Valley, was the *Father* of his country. It was one of the most cherished ideas of his life. The work has been achieved, but by a far different route, from the one first proposed. The particular route had nothing to do with the merit of the general plan.—Whether the project of a canal between the Ohio and tide waters of Virginia, can ever be realized, remains yet a problem, though nearly one hundred years have elapsed since it was first entertained.—Subjoined is the extract alluded to.

In the latter part of the year 1753 Major Washington, then only 21 years of age, was delegated by the Governor and Council of Virginia on an important mission across the Alleghanies. Having been actively engaged during the greater part of the three years immediately preceding his appointment—in surveying the wild lands of western Virginia, and in the mountainous district at the headwaters of the Potomac river, and already possessing a deservedly high character for energy, firmness and decision—with a thorough knowledge of the peculiar feelings and prejudices of the Indians; a practical acquaintance with the mode of living and travelling in a wilderness country, and withal accustomed to the privations, hardships and exposure of a camp life, the attention of Governor Dinwiddie was readily attracted to him as the individual who combined in the greatest degree the qualifications suited to the discharge of the delicate and responsible duties of the mission. He was accordingly selected. His commission, the letter of instructions and passport were prepared with much care, and formally presented to him by the Governor at the seat of Government on the 30th day of October, 1753.

Immediately after the presentation of these papers he took his departure from Williamsburg, accompanied by the congratulations and good wishes of the Colonial government, and of numerous friends who had called upon him on the occasion. He left for Alexandria, where he remained several days, engaged in making the necessary arrangements for the journey, and then proceeded on his mission by the way of Will's Creek to the Valley of the Ohio. After a tedious and laborious journey of nearly three weeks he reached his destination; and in pursuance to the letter of his instructions continued there no longer than was absolutely necessary to the faithful discharge of the important duties which devolved upon him under the authority of his special commission. On his return he directed his course more to the south and entered the Valley of the Potomac, not far north of the sources of the Shenandoah river.

Notwithstanding the inclement season of the year when the journey was performed, he took daily notes of the incidents as he proceeded; and sketched with remarkable precision and graphic power the features and topography of the country through which he travelled. On his arrival at Williamsburg, the seat of the Colonial Government, he made a verbal report of the result of the mission to the Governor and Council, and presented to them the manuscript journal of his travels across the mountains.

From the imperfect record that is left of his personal interview on this occasion with Governor Dinwiddie, it is fair to infer that he suggested the importance of opening a communication by means of a public road or highway between the settlements east and west of the mountains. The suggestion, however, does not appear to owe its origin so much to the consideration of facilitating trade and social intercourse between these two parts of

the country, as to the idea of affording protection to the remote settlements and as a defence against the aggressions of the French and their Indian allies upon the territory claimed by the British crown.

Previous to the mission of Major Washington, the West was known only as a dense and extensive wilderness; traversed by water-courses and rivers, broken by lofty mountains and deep valleys, and inhabited by wandering and warlike tribes of Indians. Few of the prominent citizens of the Atlantic Colonies, at that early period had an adequate idea of the character of the mountainous belt of country which intervened between the westernmost settlements of the eastern declivity of the Alleghany range, and the western waters; and with few exceptions no disposition was manifested to explore it. Huntsmen, trappers and Indian traders were occasionally seen wending their way through its dark valleys and over its rough and rocky acclivities. But these laborious and perilous journeys were not undertaken to acquire a personal knowledge of the country, with a view to its occupation or improvement. The exclusive object was gain, by the successful prosecution of the particular pursuit in which these hardy and fearless adventurers were engaged; and they were rather more disposed to magnify the difficulties they encountered in traversing the country in quest of hunting and trading grounds than to give a candid statement, which they feared might invite settlers and jeopardize their lucrative and wandering occupations.

Consumption of Oil on Railroads.

Perhaps the following table, compiled from the "Annual Reports of the Railroad Corporations," showing the amount paid for oil by the different railroad companies in Massachusetts, in 1851, may be interesting to some of our readers. There are several railroads in the state not named in the list as they have included the cost of waste and other materials used for cleaning cars and engines with that of oil. The total length of the roads enumerated is 1012 miles, and the total cost of oil used by them in 1851, $77,293 80. The number of miles of railroad in operation in the United States is 10,814. Reckoning the cost of oil on all the roads in the same ratio as that paid by Massachusetts railroads, we have the snug little sum of $825,913 82, as the amount paid by all the railroads in the United States for oil in 1851.

Boston and Lowell	$2,641 41
Boston and Maine	7,787 83
Boston and Providence	2,832 41
Boston and Worcester	9,725 88
Cape Cod branch	923 99
Cheshire	2,223 12
Connecticut River	2,101 09
Eastern	4,367 61
Fall River	2,839 14
Fitchburg	5,702 53
Fitchburg and Worcester	311 55
Lowell and Lawrence	299 92
Nashua and Lowell	699 75
Newburyport	422 00
Norfolk County	915 54
Norwich and Worcester	4,888 34
Old Colony	4,167 13
Pittsfield and North Adams	650 00
Providence and Worcester	1,580 00
South Reading branch	958 72
Vermont and Massachusetts	2,823 89
Western	16,336 87
Worcester and Nashua	1,795 07
Total	$77,293 80

Tennessee.

Business of the Nashville and Chattanooga Railroad.—We understand from good authority that there is sufficient business already doing on the 74 miles of the road completed, to pay 6 per cent per annum upon the cost of construction of the entire line from this city to Chattanooga. The business on the road has accumulated so rapidly that the directors have not yet been able to get a sufficient number of cars and engines upon it to carry off the freight as fast as it is offered. The entire distance from Nashville to Chattanooga is 153 miles.—*Nashville Whig.*

Kentucky.

Below we give a portion of the circular of Mr. Greer, the agent of this company, who is now in this city, for the purpose of negotiating its securities. We regard the project as one of the best in the country. The statement, that the road will connect the central portions of Kentucky, with Cincinnati, the great city, and the appropriate market for a large portion of the western country, will give the best idea of the value and importance of the above road. It must always constitute the outlet for a very large portion of the business of that State. From Lexington *south*, a road is in progress to Nashville, Tennessee, from which it will be carried in three distinct branches, to Savannah and Charleston on the Atlantic, and to Mobile and New Orleans on the Gulf. The Covington and Lexington road must always form a portion of an important link in one of the great through routes, extending from one extreme of the Union to the other.—If with all these advantages the above road will not pay, we know of no one in the United States that will.

The affairs of the company we have good reason to believe, are managed in a very able and satisfactory manner. The work of construction has been pushed forward with energy and economy.—The iron has already been purchased by a direct exchange of the company's bonds. The means of the company are now adequate to the completion of the road, which will be effected with all possible dispatch. We believe that we can with safety commend both the stock and securities of the company to the attention of capitalists as one of the best investments for capital now offering.

Covington and Lexington Railroad.—The city of Covington is one of the most thriving and promising of any in the West, is separated from Cincinnati by the Ohio river, but connected by numerous steam ferry boats of the first class, as is the city of Brooklyn, with that of New York, making it as it were, but one city. Its location is exceedingly favorable, being at the junction of the Licking river, with the Ohio; and its contiguity with the cities of Cincinnati and Newport, gives it many advantages. Its very rapid growth in the last few years is without parallel, as the following statistical report (copied from the latest certified reports of the city clerk in my possession,) will show:

In 1815—Value of real estate in that city was		$1,065,245
	Population	3 567
	Revenue	5,500
1846—Value of real estate		1,420,962
	Population	4,030
	Revenue	6,042
1849—Value of real estate		2,759,837
	Population	7,014
	Revenue	17,685
1850—Value of real estate		4,408,918
	Population	9,010
	Revenue	$34,000

The entire debt of the city prior to the issuing of the Three Hundred Thousand Dollars, was only Twenty-five Thousand Dollars, borrowed in 1830 for a period of thirty years, which falls due in 1860. The interest has always been promptly paid when due. The real estate owned by the city is worth $80,000. The above $300,000 of bonds were given to the Covington and Lexington railroad company, in payment of subscription to their capital stock by said city. The city holding stock therefor, to secure the faithful payment of principal and interest of these bonds. The city irrevocably pledges the revenue of the city, the stock for which these bonds were given, together with its dividends, and all the real estate belonging to the city. Although the foregoing shows an uncommonly rapid improvement, yet, with the completion of the Covington and Lexington railroad, we consider its improvements as but commenced. This road will run through the counties of Kenton, Pendleton, Harrison, Bourbon and Fayette to the city of Lexington [distance ninety-six miles.] These five counties through which this road runs, show an assessed value of taxable property amounting to $43,880,114 00. The entire work is under contract, and a considerable portion ready for the rail, and is progressing so rapidly, that I feel authorized to state, that forty miles will be completed within the present year, and the remainder during the ensuing year. The road is to be of the very best class—over one-half of which no grades will exceed twenty-one feet to the mile, and the maximum grade will not exceed thirty feet to the mile, and no curves short enough to impede the most rapid progress of cars. The radius of curvature on the curved parts of the line exceeds, for the most part, 1900 feet,

Estimated cost of grading, masonry, wood superstructure of bridges, cross ties, ballasting and laying of track	$1,179,446
Estimated cost of iron chairs and spikes	47,168
" " Right of way	20,000
" " Depot grounds	53,000
" " Engineering and contingent expenses	100,000
	$1,399,614
Stock subscribed by individuals	$730,000
Cincinnati bonds—Loan	100,000
Covington subscription	300,000
Fayette co. do.	200,000
Bourbon co. do.	100,000
	$1,430,000

The iron has been purchased for the entire road with the mortgage bonds of the company at par value—one-half payable in ten years, bearing an interest of seven per cent, and the other half payable in fifteen years, bearing an interest of six per cent. The entire mortgage debt is only $500,000. One important feature of the charter is, that the company is at liberty to declare any amount of dividend that the road may earn; and while the roads leading from Cincinnati on the Ohio side of the river have great competition in the various roads now completed and under construction, this road will be without a rival, as it is located in the valley of the Licking river—the only practicable route from Cincinnati to Lexington.

It is needless to enlarge upon the resources and trade of this road, as it runs from the Queen City of the West, Cincinnati, through the richest and most fertile portions of Kentucky to Lexington. It is a mere link in the great chain of railroads that are being constructed with such rapidity in the south, and which, at no distant day, will give a direct railroad connection with Charleston, Savannah, Alabama and New Orleans.

Very respectfully,
A. L. Greer,
Agent Cov. and Lex. R.R. Co.

Illinois Central Railroad.

The official diagram of the route of the Central railroad has been deposited by the proper authorities, with the register of the Land Office at this place.

The road enters this land district on the middle of Section 36, Town 31, Range 1, east of 3d P. M.; crosses the Illinois river at La Salle, about the center of northwest quarters of Section 23. Town 34, Range 1, thence twelve miles directly north to Sec. 28, Town 36, Range 1;—on which section it is supposed will be the junction of the Aurora Extension road;—thence on a straight line, touching the southwest point of Knox's Grove, and crossing the Inlet on sec. 22 Town 20, Range 10, about half way between Binghamton and Shellburn, about twenty-five miles, to the southwest corner of Sec. 9, Town 21, Range 9; thence two miles, to Dixon, where it crosses Rock river on the Island, at the lower edge of the town. From thence to Freeport, leaving Buffalo Grove about three miles on the west; thence on a northwesterly course to within a mile of the Wisconsin line, Sec. 13, Town 29, Range 4, and then runs by a devious course to a point at which it strikes Fevre river about one mile and a half northwest of Scale's Mound; it then runs down that river, crossing it thirteen times to a point two miles below Galena. From there it follows the Mississippi to the State line opposite.

Michigan Southern Railroad.

Joseph H. Moore, Esq., the new Superintendent of our railroad, appointed in place of E. P. Williams, has entered on the discharge of his duties.—He was formerly Superintendent of the Old Colony railroad in Massachusetts. and is said to be a capital business man and eminently fitted for his present position.

The track between Adrian and Toledo is to be relaid with heavy T rail as soon as it can arrive from Europe. Benjamin Folsom of Adrian has the contract for laying it—a guaranty that it will be done. When completed, the running time between the two points will be but one hour, instead of two and a half hours as now.

As soon as iron can be shipped from Dunkirk, the completion of the last link of the railroad from La Porte to the Junction at Bayleytown will progress. It will be finished, it is supposed, within six weeks from this time. The Express train is then to run through from Monroe to Chicago in eight hours, averaging over 30 miles an hour, including stoppages—being faster running than is attained on the Erie railroad.—*South Bend Reg.*

Virginia.

Richmond, Fredericksburg and Potomac Railroad.—The following well-deserved compliment to a faithful public servant—if we may so speak of a corporation—says the Richmond Whig, we take from the columns of our cotemporary, the Dispatch. The Richmond, Fredericksburg and Potomac railroad, is, in some respects, a remarkable line of travel. Under excellent management, it justly enjoys the confidence of the public as one of the safest roads in the world. When have we had to record any serious accident upon it? Such are of daily occurrence upon lines north and south of us, which form portions of the same great chain of communication, between the extremities of the country. But upon this road, over which the bulk of the northern and southern travel is daily conveyed at the greatest desirable speed, casualties traceable to the carelessness of agents are extremely rare. We mention this as a creditable and noteworthy fact in introducing the remarks of the Dispatch:—

The continued prosperity of this road is exhibited in its semi-annual dividend of *three and a half* per cent just declared by the company, while at the same time they have added a surplus of more than $30,000 to the contingent fund from the business of the year, ending on the 30th September last. We refer to these facts with pleasure. The railroad is part of the great line of northern and southern inland communication—was the earliest enterprise of our citizens in railroads—the State has a large interest in it—and its success is not only beneficial to our citizens and the State in a pecuniary way, but is calculated to increase public confidence in our other railroad enterprises. For many years it has, with unfaltering regularity, made the annual dividend of 7 per cent to its stockholders, and its contingent fund so largely added to the past year, will soon be sufficient to relay the track with a heavy rail in a manner putting the road in a favorable comparison with the most enterprising works of our northern neighbors.

The Richmond, Fredericksburg and Potomac railroad is admirably managed, and is without a superior in the regularity of its movements. As a part of the chain of inland railroad through the Atlantic States, it has given public satisfaction, and we are the more pleased at its prosperous condition and anticipated improvement, now that the competition for the travel is greatly to be increased. We trust that the whole line through Virginia, from Weldon to the Potomac, will continue to be conducted upon a scale of energy and regularity ensuring a profitable participation in the immense business of transportation of travellers, which is so great and annually increasing.

The stockholders of the Richmond, Fredericksburg and Potomac railroad have in prospect important additions to their travel from new sources. The completion of the Danville railroad, and the completion of the Southside and Lynchburg and Tennessee railroads will add to their business a vast amount of travel. The stock of the road is now paying more than the legal interest upon money. When the acquisitions from these new sources are realized, the dividends must be increased, and its prosperity will be such as its most sanguine friends cannot now over estimate.

Ohio.

Toledo, Norwark & Cleveland Railroad.—An exhibit of this company published early in January last, shows that this road when completed, will form the last link in the great chain of railroads now constructing along the south shore of the lakes, connecting the cities on the Atlantic with the Mississippi river. Ample local subscriptions had thus been secured to prepare the superstructure, and contracts had been made with reliable parties, who were vigorously pushing forward the work, for the entire construction of the road. A series of the mortgage bonds of the company were issued at that time, the interest upon two hundred thousand dollars of which was guaranteed by the Cleveland, Columbus and Cincinnati railroad company.—Those bonds were issued for the purchase of the iron and equipment of the road. Mr. Boalt, the energetic president of the company, sailed for England last month to negotiate these bonds for the iron.

A letter received from him by the last steamer, says, he had just closed a contract for four thousand tons of rails (enough for half of the road) on very satisfactory terms. Sixteen hundred tons of these were on the dock, and would be shipped immediately. He had no doubt he would be able to close contracts for the balance in a few days.

Too much praise cannot be awarded to Mr. Boalt for the energy and perseverance with which he has labored for the interests of the company since its organization two years ago, and the success he has met with is the legitimate reward of his efforts.

The knowledge of his success in procuring the iron, affords much gratification to all the friends of this enterprize; and is satisfactory evidence to the most doubting, that the road will be successfully completed.

The past winter has been a very unfavorable one for work; but the enterprising contractors, Baxter, Brown & Co., have not been idle, and more than half the grading on the whole road is now completed. The necessary locomotives and cars for construction are all contracted for, and will be ready for delivery in May. The first of the iron will arrive by that time, and we may safely count upon the road being in successful operation by another winter.—*Cleveland Herald.*

Petersboro' and Shirley Railroad.

We learn from a reliable source that the Petersboro' and Shirley railroad company, voted, at a meeting recently held, to assess upon the old Petersboro' Spofford Gap subscription.

If such is the fact, it will lead to litigation and destroy all hope of a further extension of the road. The company once passed a resolution to the effect that this stock should not be called for until the road was put under contract to Petersboro', or thro' Spofford's Gap, or to some place equivalent thereto.—*Contocook Transcript.*

Steubenville and Indiana Railroad.

We have the pleasure of meeting, at the Central hotel, on Friday evening of last week, Mr. J. G Morris, Esq., secretary of the Steubenville and Indiana railroad company. He was on his return from Newark and Licking county, with bonds, etc., amounting to about $250,000. While Mr. Morris was with us, bonds to the amount of $100,000 were signed by the trustees of Jefferson township, in accordance with the recent vote of our citizens. We learn from him that arrangements for cashing the bonds of this and some of the other counties, have already been made in New York. The bonds of Jefferson township were disposed of at ninety cents upon the dollar, falling due in 1862, and paying semi annually, until that period an interest of seven per cent. The company, however, have guaranteed to meet four-seventeenths of this interest, so that the township will be required to pay an interest of only three per cent. Mr. Morris assures us that it is the expectation of the board to have the road completed as far as Urichsville, in April, 1853, and that the whole route will be finished in a year from next fall.—*Dresdon Herald.*

Georgia Railroads.

A meeting of the superintendents of all the railroads, intersected in their connection with the Western and Atlantic railroad, was held in this city on yesterday; and we learn important regulations have been agreed upon, for the purpose of producing greater uniformity in the transhipment, freight, etc., of goods, from Chattanooga and other points, to Savannah and Charleston. Particulars will be given hereafter.

This move is but another evidence that the various enterprising railroad companies connected with the State road will not hereafter be perplexed, bothered, and provoked with the irregularities, detentions of cars and freight, which have so long distinguished the management of our great State road.

Mr. Wadley goes ahead, and demonstrates daily that a State work can and will pay its way and make money for the State.—*Atlanta Republican.*

New York.

Rutland and Washington Railroad.—The company held a meeting at Poultney, on the 16th inst., and elected the following directors:

Merritt Clark, Poultney, Vt.
Jno. Bradley, Burlington, Vt.
Jas. Baldwin, Boston.
D. S. Miller, New York.
J. P. Eastman, Cambridge, Mass.
Geo. W. Strong, Rutland, Vt.
Isaac W. Bishop, Granville, N. Y.

At a subsequent meeting of the directors, the following officers were elected:—

M. Clark, President.
John Bradley, Vice President.
James W. Baldwin, Treasurer.
E. L. Sunderlin, Clerk.

Railroads and Steamboats.

The Cincinnati Commercial says:—"It was thought, when the railroad was opened from this point to Pittsburg that the steamboat packet lines would be seriously affected; but the result has proved otherwise. It would seem that the increase of facilities has increased the travel and shipments, as both the railroads and the steamboats are driving a thriving business—the latter turning up a better account this than on any previous season."

New-York.

The Fredonia Advertiser announces a new project for a railroad between Hornellsville and the State-line at Ripley. It takes the route surveyed by the New York and Erie railroad company, while the line west of Hornellsville was undetermined. That survey led out of the southern tier of counties, to which the New York and Erie company was confined by its charter. The route, it is said, will save about twenty-five miles, making the whole distance from Hornellsville to the State-line about 125 miles.

Business at Dunkirk.

In every department of business there are more than usual indications of approaching activity. It is with extreme difficulty that the present population and business of our village is accommodated with comfortable quarters. The idea of renting a store or dwelling, is utterly out of the question, until they can be erected. There is not a room, or building, of any description whatever, that is not either occupied or engaged. This is the state of things after the erection during the past twelve months, of over *two hundred dwellings and places of business.*

So pressing is the present demand for dwellings and places of business, that we have no doubt *two hundred* could be profitably rented during the present month and yet the addition will be very small. Mechanics, material and labor are scarce in comparison to the demand.

The lake business for the season will be unusually large. Nearly a year's experience of business

by the west and southwest, with the New York and Erie railroad, has proved very satisfactory, and will induce the shipment of large quantities of produce direct to Dunkirk.—*Dunkirk Journal, 2d.*

American Railroad Journal.

Saturday, April 10, 1852.

Gauge of Railroad from Buffalo to Cleveland.

From Cleveland, Ohio, to Erie, Pennsylvania, the Ohio gauge of four feet ten inches is used. Upon the Erie and Northeast railroad, extending from Erie to the New York State-line, a distance of some 18 miles, the wide, or six feet gauge has been adopted. From the State line to Buffalo, the four foot ten inch gauge prevails.

To whom this arrangement is owing we are not informed, but the genius of all evil himself could not have framed a more inconvenient, or one better adapted to obstruct business and travel. With the exception of the Buffalo and State-line road, the only gauges known in this State are the 4 feet 8½ inches, and the 6 feet. Common sense would seem to dictate that one of these should have been taken by the Lake Shore road. As it is, there must now be transhipments at Buffalo, Dunkirk, the Pennsylvania State-line, and at Erie; making *four* where there should have been but two at most. Either the wide or the narrow gauge should have been carried to Erie. That would have been a convenient place of transhipment, and would probably have been selected as such, had there been no break of gauge even there. There must be a limit to the distance to be run by freight and passenger cars. It is found to be more economical and convenient to tranship freight from one train to another, than to run the train over a given distance, on account of the difficulty of preserving order in the arrangement and distribution of the cars. We presume that under no circumstances whatever, would cars loaded at Cleveland be run through to this city. A break of gauge at some point upon the line between the above cities is not objectionable, provided it occurs at the most convenient point. But where there are three or four interruptions to the transit of merchandise and travel, within short distances, and at the most inconvenient places, they will be found to work a serious injury to traffic of all kinds. We predict that evil will in a short time become unbearable, as to work out its own cure. What the Erie people were about, when an arrangement was completed, that completely prevented them from moving in any direction, is more than we can opine. At the lake their road comes to a dead halt, and all thro' business has to be tumbled out of their own cars upon those of other companies. All these blunders must be remedied, and the sooner the better.

Maine.

Bangor and Oldtown Railroad.—We learn that efforts are making, which will probably be successful, to put the above road under contract. No project in the Eastern States promises better results. It would accommodate a vast manufacturing interest which of itself would afford a very profitable business. It will form a part of the European and North American railroad, which is certain to be built, and which would give the former a very large *through* business. A road will be constructed up the Penobscot river at no very distant period, for which the Bangor and Oldtown road when built, must constitute the trunk line to Bangor.—All these interests combined cannot fail to secure the construction of the above road, nor to make it a very profitable work when constructed.

Buffalo and New York City Railroad.

This company have purchased the railroad track from Attica to within four miles of Buffalo. They pay £14,000 per mile. The Attica and Buffalo road is to build a new line, from Batavia to Buffalo, which will save several miles in distance.

Business of New Roads.

The receipts of the new roads recently opened in the Western States, exceed the most sanguine expectations, and promise a lucrative business, tho' the connections which they are to make are only partially formed. Of these roads, we may name the Ohio and Pennsylvania, Ohio Central, Terre Haute and Indianapolis, Michigan Southern, Galena and Chicago, and others. The result is to create an active demand for the securities of new works, which the respective companies were forced to sell at a large discount, so long as the success of their roads was a problem to be solved. The success of western roads already opened will effect a great good, in demonstrating the fact that any road in that section of the country economically built, and well managed, with a good route, is sure to pay. There are no better investments than good western railroads, and the public are fast becoming convinced of this fact.

Stock and Money Market.

Money continues in the same abundance as noted in our last, and all kinds of stocks and securities are well sustained. The speculative feeling in the fancies is very strong, and has carried them to a high figure. The demand for sound securities is steadily increasing. The fact that a vast number of our roads have been making loans for a long term of years, at 8 and 9 per cent, has attracted attention to their securities, and the inquiry has tended to convince capitalits of the entire safety of the securities bearing these high rates of interest. The result is, that large amounts of capital is being drawn from better known but less productive securities, and competition for such of the new class, as meet the demand, has caused a marked advance in them. Notwithstanding the great am't offering, the demand for the securities most in request, those of roads which have just been completed, or are about going into operation, is greater than the supply. This will compel lenders to turn their attention to projects less advanced, but which promise equally favorable results. A numerous class of investors have manifested an unwillingness to invest in securities, the soundness of which has not received the sanction of the public sentiment. They have preferred to pay a pretty large premium in the shape of an advance to the first purchaser, and to hold the security till it acquired a known character. Persons buying for investment are now showing more disposition to buy of the companies direct, and in this manner to save the advance which they have been accustomed to pay. It is scarcely three years since the Ohio road bonds were looked upon with distrust. They are now the favorite securities in the market. At that time, a capitalist would not look at an Indiana security, and would have felt himself trifled with, by having it offered to him. To show the rapid change that has taken place in reference to these, we would state that the bonds of the Terre Haute and Indianapolis railroad, which were sold by the company at 90, are in active demand at a considerable advance upon that price. Large contracts for the sale of the Indiana Central bonds, a road in progress, have been made at 90. Securities of other roads in that State stand well in the market, and in view of their rapid advance, capitalists are beginning to look into Illinois, to see if they cannot buy at a lower figure, securities equally good with those of the more Eastern States, and which will soon command as high a price. But a few years since the success of all western roads was a problem. This is no longer the case. Experience has shown that they must become more profitable than those of any other portion of the country; that Illinois, Indiana, Kentucky and Tennessee, and portions of other Western States, are just as legitimate fields for railroad enterprizes, as is Ohio, and there is no more reason why a capitalist should hesitate to invest in the best securities of the former States, as in those of the latter. There is no difference in intrinsic merit, but simply in the am't of information that exists in relation to them.

It will be seen by the annexed statement that the gold bullion deposited at the United States Mint in Philadelphia, for the three months ending March, 1851, was $10,956,908; while the amount deposited for the three months ending March, 1852, was $11,061,902. The total coinage for March of the present year, was $3,943,137.

COINAGE FOR MARCH 1852—GOLD.

	No. of pieces.	Value.
Double Eagles	162,951	$3,259,020 00
Eagles	14,040	140,400 00
Half Eagles	31,257	156,285 00
Quarter Eagles	91,520	228,800 00
Dollars	102,127	102,127 00
Total in gold	401,895	$3,886,632 00
SILVER.		
Quarter Dollars	46,400	$11,600 00
Dimes	115,000	11,500 00
Three cent pieces	1,000,200	30,006 00
Total in silver	1,563,495	$3,939,738 00
COPPER.		
Cents	239,975	$2,399 75
Pieces	1,803,470	$3,942,137 75

Gold bullion deposited for coinage from 1st to 31st March, 1852, inclusive:

From California	$3,760,000 00
From other sources	130,000 00
Total	$3,890,000 00
Silver bullion deposited in same time	$19,550 00

GOLD BULLION DEPOSITED.

	1851.	1852.
January	$5,071,667	$4,161,680
February	3,004,970	3,010 222
March	2,880,271	3,890,000
Total, 3 months	$10,956,908	$11,061,902

We have received the following statement of the business of the Pennsylvania railroad company for March.

Receipts for passengers in the month of March 1852	$128,438 00
Receipts for passengers in March, 1851	50,212 16
Increase	$78,225 84
Receipts for freight in March, 1852	113,941 66
Receipts for freight in March, 1851	19,518 90
Increase	$94,422 76
Total receipts, passengers and freight, in March, 1852	243,379 66
Total receipts, passengers and freight, in March, 1851	69,731 06
Total increase	$173,648 60

The passengers have been run over 40 addition-

al miles of road not used in 1851, and the freight over 20 additional miles not used in 1851.

We annex a statement of the earnings of the Cumberland Valley railroad for the month o' March:

Receipts for the month of March, 1852.	$12,778 48
Receipts for the month of March, 1851.	10,180 31
Increase equal to nearly 26 per ct..	$2,592 17

The receipts of the Erie railroad for the month of March, 1852, were as follows:

From passengers and Mail	$94,420 95
" freight	156,749 66
Total	$251,170 61
Same month 1851	163,400 99
Increase	$87,769 62
Receipts for January	171,441 00
" for February	201,870 00
" for March	251,170 61
Total	$624,481 61

The estimates for the year are $4,610,000, to meet which, will require a monthly receipt of nearly $425,010. The average estimated monthly receipts were, $333,333,37. They have thus far fallen short about $110,000 each month, or $330,000, since January. But it must be remembered that January, February, and March are the three poorest months in the year, and that the western through travel has been doubled over the Pennsylvania road. This opening of the lakes will take it again over the New York lines.

The traffic of the New York and New Haven road for March shows a very fair increase over the same month of last year. The figures are as annexed:—

Passengers	$47,262 29
Freight, estimated	10,000 00
Total	$57,262 29
Paid Harlem road	3,979 69
	$53,282 60
March, 1851	48,511 66
Increase in 1852.	$4,770 94

The amount received at the Sub-Treasury was $130,446; paid, $60,028; balance, $2,979,361.

The following table will show the exports of specie from this port for the week ending April 3d, and for the year thus far:—

Bark St. Joseph, Rio Janeiro, doubloons	$7,000
Brig Marshal Ney, Cuba, doubloons	6,820
Brig Alfred Hammond, Cape de Verds, do	4,100
Steamer Pacific, Liverpool, English coin	2,000
Total March 27 to April 3	$19,920
Previously reported	$7,032,495
Total for 1852	$7,052,415

The following shows the collections at the office of the collector of the Philadelphia and Columbia railroad in Philadelphia, for the month of March, and for the year thus far:—

Amount as per last report	$49,800 68
Amount for the month ending March 31, 1852	55,879 65
Whole amount since Nov. 30, 1851	$105,680 33
Same time last year	102,680 08
Increase.	$3,000 25

Toe Buffalo Commercial has compiled from official sources the annexed table, showing the trade of the United States with Canada during the last two years:—

Exports.	1850.	1851.
Foreign merchandise	$1,937,812	1,626,748
Do. entitled to drawback, inc. above		1,086,130
Total	$1,937,812	2,712,878
Domestic produce	5,756,755	5,495,873
Total exports	$7,694,567	8,208,751
		7,694,567
Increase of exports in 1851		$514,184

Imports.	1850.	1851.	Difference.
Total	$1,513,796	3,259,889	Dec.1,253,907
Add to'l exp'ts.	7,694,567	8,208,751	
Total trade	$12,208,363	11,468,640	Dec..739,723

By the above it appears that our exports of domestic produce and manufactures have fallen off over $250,000, while those of foreign produce and merchandise have increased $775,000. But the most marked falling off is in imports, being no less than $1,253,907.

The earnings of the Georgia Central railroad for the months of December, January and February were as follows:—

	1850.	1851.
December	$83,810 33	$103,230 73
	1851.	1852.
January	$91,611 29	$101,474 95
February	81,794 11	110,946 30
	$257,215 73	$315,651 98
		257,215 73
Gain in three months		$58,436 25

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, APRIL 10, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	106¼
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	118
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	120
Indiana 5's	89½
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	—
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	76½
Illinois 6's—interest	48
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105¼
Massachusetts 5's, 1859	106¼
Maine 6's, 1855	103
Maryland 6's	102¼
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	109
New York 6's, 1864-'65	114
New York 6's, 1 y., 1866	115
New York 5½'s, 1860-'61	105
New York 5½'s, 1865	105½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103½
New York 5's, 1866	104
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	106
Ohio 6's, 1856	106
Ohio 6's, 1860	109
Ohio 6's, 1870	113
Ohio 6's, 1875	115
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	90½
Pennsylvania 6's, 1847-'53	—
Pennsylvania 6's, 1879	105½
Tennessee 5's	86
Tennessee 6's, 1880	103
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	105½
Cincinnati 6's	96
St. Louis	93½
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	96½
New York 7's, 1857	108
New York 5's, 1858-'60	102
New York 5's, 1870-'75	103
New York 5's, 1890	103
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	103
Baltimore 1870-'90	104½
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	96
Erie convertible bonds, 7's, 1871	93½
Hudson River 1st mort., 7's, 1869	106
Hudson River 2d mort., 7's, 1860	96½
New York and New Haven 7's, 1861	103
Reading 6's, 1870	79½
Reading mortgage, 6's, 1860	84½
Michigan Central, convertible, 8's, 1860	103½
Michigan Southern, 7's, 1860	93
Cleveland, Col. and Cin. 7's, 1859	104
Cleveland and Pittsburg 7's, 1860	93
Ohio and Pennsylvania 7's, 1865	97
Ohio Central 7's, 1861	92

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Mar. 31.	April 7.
Albany and Schenectady	100	100
Boston and Maine	104½	104½
Boston and Lowell	109	109
Boston and Worcester	100½	101
Boston and Providence	87	87
Baltimore and Ohio	64½	66½
Baltimore and Susquehanna	32½	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	111	110
Eastern	97	97
Erie	86	88½
Fall River	99	98
Fitchburgh	104½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	71½	73½
" preferred	111	111
Hartford and New Haven	126	123
Housatonic (preferred)	35	35
Hudson River	67½	65
Little Miami	—	—
Long Island	21½	22½
Mad River	—	—
Madison and Indianapolis	93	100
Michigan Central	96	97½
Michigan Southern	113	112
New York and New Haven	111½	112½
New Jersey	129	129
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	56½	58½
Ogdensburgh	25½	24½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	28½
Petersburg	—	—
Richmond and Fredericksburg	—	93
Richmond and Petersburg	—	35
Reading	71½	73½
Rochester and Syracuse	112½	113
Stonington	54	54½
South Carolina	—	—
Syracuse and Utica	125	125½
Taunton Branch	115	115
Utica and Schenectady	127½	130
Vermont Central	20½	20½
Vermont and Massachusetts	20½	20½
Virginia Central	—	40
Western	103	103
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Accidents on Railroads.

We seldom chronicle accidents on railroads. The chief reason is, that the public will be in possession of the account of them through the daily papers, before our Journal will reach them. But "accidents" are becoming so alarmingly frequent, they should receive attention for the purpose of devising some way of preventing them, if for no other.

During the past year, nearly 100 persons have fallen victims to railroad accidents in New York alone, and about one-half of this number seriously injured. The loss of property suffered is also immense. All this would seem to cry for reform, but the evil goes on increasing with fearful ratio, instead of diminishing.

Now these casualties are not necessarily inherent in travelling by railroad. To be sure, in travelling by railroad, we move under conditions that impose a heavy tax upon the strength of material, but this can always be proportioned to the burden to be borne. Great vigilance is constantly required, but not greater than can easily be exercised. In fact, railroad travelling can be made the safest in the world, as is fully demonstrated by the practice on some roads. All that is wanted is, that the care and vigilance required should, in all cases, be equal to their exigencies; and they can always be so, with a proper attention and expense. Railroad companies can easily prevent a greater portion of the accidents that occur, if they will.

An entire immunity from accident cannot be expected. The officers and employees of a road can only be rendered competent for their trust by *expeperience*, which implies a difference of qualification at different periods. It will occasionally happen that incompetent and unfaithful men are unavoidably employed, or that some imperfect material is used. But the *necessary* accidents due to these causes, are but a tithe of those that daily happen from sheer carelessness.

The only way to prevent accidents, is to make it for the interest of railroad companies that they should NOT happen; to make the penalty so great, that freedom from them shall be necessary for economy's sake. All corrective measures, in fact, resolve themselves into this. The Legislature should not only see that a proper penalty is annexed to every accident, but the public should take the matter into their own hands, by giving exemplary damages in all cases that come before a jury.

But something more than this should be done. No material should be used upon railroads, upon which the lives or safety of the travellers may depend, without being subjected to the inspection of some competent person. We adopt this precaution as far as the engines and boilers of a steamboat are concerned; why should we not extend the same to the locomotive, to the running stock, rails, etc., etc.? Why not compel companies to use nothing but the best materials of every kind? There is no hardship in this, as it will prove true economy in the end. We require many of the most important articles of merchandise to be inspected before they can be sold, for the purpose of ascertaining their quality. Why not do the same thing, where the lives of thousands are daily concerned?

The introduction of railroads has been so recent, that legislation has by no means kept pace with their development, nor with the necessity of providing for the public safety. Railroad companies should be made to feel that economy and safety mean the same thing. The quality of everything used upon roads, upon which the safety of the traveller depends, should be subjected to the inspection and approval of some *competent* person. This precaution would prevent a multitude of accidents. We will cite a case in point. A great many of the most terrible accidents upon the Erie road have been occasioned by the use of a rail of poor quality. Those rails should never have been used, and never would have been had they been subjected to the proper tests before using them.—This necessity applies with equal force to the running stock of a road. Will not our legislature take this matter in hand, and apply the remedy within their power, and which could be made effectual to secure almost entire immunity from the dreadful accidents which we almost daily witness.

Bridge Building by the Pneumatic Process.

We learn that the interesting experiment of sinking piers for bridges, upon the pneumatic process, is soon to be tried by the Wilmington and Manchester railroad company, in constructing their bridge over the *Great Pee Dee* river in South Carolina. The Pee Dee is a large and rapid river, and where the road crosses it, runs over a bed of light shifting sand, which is of too great a depth to allow the use of wooden piles. In the new process it is proposed to use cast iron tubes, six feet in diameter, in sections of eight feet. The depth of the river at ordinary low water is 10 or 12 feet. The tubes are so cast as to fit into each other, and of course are to be made entirely air tight. In the commencement of the process two tubes will be used, and additional ones fitted on as fast as it shall become necessary from the sinking of the pile, or shaft. Long wooden guide piles are first to be driven, to keep the iron tubes in an upright position.

Two piers will be constructed in this manner, each consisting of a group of four distinct tubes, or piles. They will be driven through the sand, into some material that shall afford a good foundation. The water and sand will then be pumped out, and the tubes filled with concrete. They will be carried up to the bed of the bridge, and will constitute the entire piers. The tubes constituting each pier, will be thoroughly braced together, for mutual support.

This method of sinking the piers for the above bridge has been recommended by Mr. Fleming, the intelligent and efficient engineer of the company, under whose direction the experiment is to be tried. The castings, steam engine, air pump, etc., are to be furnished by Mr. Parrott, of the West Point foundry. All the most difficult parts of the machinery to be used, are to be most thoroughly tested by the builder before taking them upon the ground. Every precaution is to be taken to ensure success, but as the experiment is the first ever made in this country, it would not be at all strange, if complete success should require a series of experimental tests.

The above mode of sinking tubes is, in its principles, one of the most simple and beautiful processes imaginable. The power used is the pressure of the superincumbent air, a vacuum being created in the tube. The extent of this pressure, the cross section of the tube being given, can be determined to an ounce. The pressure upon the top of the tube being uniform, it has a tendency to keep it in an upright or vertical position. Should it meet an obstacle, the water and sand can be pumped out, so as to allow the workmen to descend to remove it. In all stages of the process, the tube serves the use of a coffer dam, and becomes an abutment, or pier, when sunk to its proper depth.

We are glad to learn that active operations are to be immediately commenced upon the above work, for the purpose of carrying it as far along as possible, before the commencement of the sickly season, We hope soon to be able to communicate to our readers, from time to time, the result.

Indiana.

Indiana Central Railway.—We learn from a recent report of the President, that the grubbing, grading, bridging and culverting on 63 miles of this road are under contract and progressing rapidly. The remaining 9 miles will be put under contract very shortly, and the whole work will be pressed forward with energy to a final completion. The company expect to have 10 miles of the road, from the state line to Centreville, the county seat of Wayne county, completed, and ready for the iron by the 1st of July next. They also expect to have 20 additional miles of track ready for the iron rails by the 1st of October next; 33 additional miles ready for the rails by November next; and the whole road completed during the spring following.

The cost of grubbing, grading and bridging the entire line is estimated at $292,724 90. The superstructure will cost $494,000, and the ballasting, $50,169, making the total cost of the road, without motive power and cars, $836,893 90. Add to this the sum of $166,000 for equipment and incidental expenses, and the total cost of the road, when ready for business, will be $1,002,893 90. The average cost per mile for construction alone will be $11,677 04; for construction and equipment, $13,993 22.

The amount of stock subscribed in the road is over $450,000: of which $150,000 have been paid in. It is believed that by July next the amount subscribed will be nearly $700,000. Great confidence is placed by the public in the stock of this road, and there is no doubt but that the requisite quantity will be taken.

With regard to the alignment of the road, there is no curve having a radius of less than 1·547 feet. The total amount of curvature is 3·84 miles nearly, and the amount of straight line 67·84 miles, the total length of the road being 71·67 miles. The grades are less favorable; the amount of level surface being only 18·45 miles, while 32·40 miles are composed of grades over 30 feet to the mile. The highest limit is 58 feet. Were it not for the consideration that the road is nearly an air line, these grades might be considered objectionable; but wherever a high rate of speed is desirable, as it is on the Indiana Central railway, it will be found to be much easier attained on a straight road, with no grades exceeding 60 ft., than on a curved level line.

In its business prospects this road is scarcely excelled by any other in the United States. It was originally, as most are aware, a part of the Terre Haute and Richmond railroad, which for greater convenience of construction was divided into two lines at Indianapolis. The nominal length of the road is 72 miles; from Indianapolis to the State line between Ohio and Indiana; but in reality it is part of an immense chain, extending from the Ohio opposite Wheeling, to St. Louis on the Mississippi. This chain connects at Wheeling with the Baltimore and Ohio railroad, leading to Baltimore, Washington, and the southern Atlantic cities; also, by means of the Hempfield road, with the Pennsylvania Central railroad, Philadelphia, New York and Boston. At Columbus, the capital of Ohio, a connection is made with the Cleveland and Co-

lumbus railroad, leading to Lake Erie; and at Xenia with the Mad River railroad, also running to Lake Erie. By means of these roads, a connection is effected for the Indiana Central railway, with the Lake Shore roads, the New York and Erie, the Central New York, and Boston and Western railroads. The Indiana Central road is also connected by two railroads with Cincinnati: the Cincinnati, Hamilton and Dayton at Hamilton, and the Hamilton and Eaton railroad at Richmond. By means of these two roads a desirable route will be offered from Cincinnati to St. Louis.

There is in process of construction at the latter city a railroad west to the Pacific. When that road is completed, there will be a great chain extending from one side of the continent to the other, of which the Indiana Central railroad will form a part.

With such connections, together with the fact of its being in the line of western emigration, the Indiana Central railway will have a most important through traffic.

When we consider the rich agricultural region through which it runs, the rapidly increasing population of that portion of Indiana, and the consequent increase of taxable property, we conclude that the local business of the Central road will be no less favorable. According to the late census returns, the valuation of the real and personal estate in fourteen counties, through which this line runs, amounts to the sum of $61,945,891. If we add to this amount the returns for only three counties in Ohio, for the connecting link in the chain, the Dayton and Western railroad, amounting to $22,293,072, we shall have an aggregate sum of $84,238,963, tributary to the Indiana Central railway.

The line west of Indianapolis is also very productive, and abounds in inexhaustible beds of bituminous coal, of the very best quality, which must add largely to the general transportation.

According to the lowest estimates made, the net profits of the road will be $150,000 per annum, or 15 per cent on its cost. In all probability they will greatly exceed that amount.

Cleveland and Wheeling Railroad.

The efficient and able president of the Cleveland and Wellsville railroad passed through this city a few days since, on his way to Baltimore, for the purpose of calling the attention of the authorities of that city to the subject of the proposed extension of the Cleveland and Wellsville road to Wheeling, a distance of 38 miles. We learn from Mr. Prentiss that there are no engineering difficulties in the way to hinder the completion of the Wheeling extension by the first of January next, the day proposed for opening the Baltimore and Ohio railroad. All that is wanting is *money*. The route is a remarkably direct and easy one. The rails can be purchased on good terms of the Brady's Bend company, and the whole road can as well be put in running order in nine months, as in as many years.

Mr. Prentiss goes to Baltimore to secure "material aid" from that city, which has vastly greater interests at stake in the early completion of the above road than those living immediately upon its line. During the present year the Baltimore and Ohio railroad will, at an immense cost, reach Wheeling. But here that road will practically *stop*, at least for two, if not three years, unless the extension to Wellsville shall be completed. This would at once connect the former with the railroad system of Ohio, and with Cleveland, the first lake city of that State. It is our firm belief, that the city of Baltimore, and the Baltimore and Ohio railroad, can better afford to construct the link referred to, and present it to the Wheeling company, than to be without a railroad connection in the west for two years to come. Should this connection be completed within the present year, the Baltimore and Ohio railroad will open with all the eclat and prestige attached to a *through* route. It will secure all the real and theoretical advantages due to this fact, the latter a matter by no means to be despised. On the other hand, should the Baltimore route stop at Wheeling, travel and business would take the New York and Philadelphia routes, from which it would be very difficult to recall it. It is due to the city of Baltimore, and to the Baltimore and Ohio railroad, that a matter of such vital importance should not be allowed to linger for the want of the small pittance now wanted to make up the required sum. The Baltimore and Ohio railroad is already suffering severely from the rival routes named, from the fact that the former have much less extent of unfinished line than the latter. By the first of January next, with proper exertion, the Baltimore can be on as good a footing as the New York, and much better than the Pennsylvania route.

An additional reason why Baltimore should take up the Wheeling extension of the Cleveland road, is the fact, that the stock of the latter will command very nearly par. We believe it will command a premium within a year from this time.—Our Baltimore friends, therefore, can secure not only all the advantages we have enumerated, by taking up the above project, but can do a very good thing for themselves, by subscribing to its stock by way of investment.

Alleghany Valley Railroad.

We learn that vigorous steps are to be immediately taken to commence this work, which we regard as one of the most important projected roads in the country. It will constitute the great avenue through which the city of Pittsburgh will communicate with New York and New England. It is a work necessary to the maintenance of the important position now held by that city. For New York and the Eastern States, it opens a direct route to the head of navigation on the Ohio, without going through Philadelphia, a matter of no small moment, when we consider that that city may again repeat the precedent of refusing to forward over the Central road, merchandize purchased elsewhere. It is highly important that New York should be able to reach the Ohio river, by a convenient and commodious route, without suffering from the exactions of her rival. The Albany and Susquehanna road will, in connection with the Allegheny Valley road, open a very direct route from Boston and other eastern cities to the highest points of western navigable waters. There can be no doubt that the Genesee Valley road will reach the Erie road at Olean long before the Allegheny road can be completed, so that a short and direct route will be opened between Pittsburg and Lake Ontario. The last named road will traverse one of the most productive iron and coal regions in the world, and will supply western New York and the lakes with these important articles.

The value of the Allegheny Valley road to this city will be fully appreciated here, and it will be likely to receive substantial aid, so soon as it shall be in a position to demand it. Our people will eagerly embrace a project that promises to give us a *free* access to the west. It would undoubtedly secure to us a very large trade from Pittsburg, which is now almost entirely monopolized by Philadelphia. We have good reason to suppose that the companies constructing roads west of Pittsburg, are well disposed toward New York, which has furnished the means for their works. Pittsburg cannot fail to be very largely benefited by having access at all times to the New York market, as this will secure to her much better treatment from the Philadelphia interest. In every point of view, the Allegheny road is a most important work, and we hope to see it pushed forward with all the despatch that the magnitude of the results involved in it demands.

Duryee, Forsyth & Co.'s Weigh Lock and Railroad Scales.

We invite attention to the following testimonials in reference to the scales manufactured by the above firm:—

Western Division Erie Canal Enlargement,
October 11, 1850.

Messrs. Duryee, Forsyth & Co.:

Gentlemen:—The Rochester weigh lock scale, constructed by you and under your special supervision, having now been in operation since the 29th July last past, sufficient time has elapsed to afford me the expression of my entire confidence in their practical utility and perfection of operations. They have been carefully submitted to the most severe and scrutinizing tests, and in each repeated instance have proved themselves more than equal to the highest expectations of the canal officers to whose charge they have been committed. In regard to workmanship and superior finish, no structure of the kind upon our canals bears suitable comparison, while the plan and principle adopted, and the great weight of metal employed in their construction, establishes the conclusion of their great superiority over all other scales of their class I have yet seen. They are indeed, in my opinion, without a parallel.

Very respectfully, yours, etc.
JACOB HINDS, Canal Commissioner.

Freight Office Auburn and Roch. R.R. Co.,
Rochester, January 26, 1849.

Messrs. Duryee, Forsyth & Co.:

Gents.—Having the charge of the freight depot of the Auburn and Rochester railroad in this city, in which you placed one of your railroad track scales, weighing twenty-three tons, and two of your depot scales, weighing six tons each, about one year since, I have seen them tested in various ways at different times and take pleasure in stating that I have always found them correct. The scales have been in constant use since they were put in, and thus far have given entire satisfaction to all parties concerned. I most cheerfully recommend your scales for all similar purposes, believing as I do that they cannot be excelled.

I am, respectfully, yours, etc.,
GEO. B. REDFIELD, Freight Agent.

Liability of Railroad Companies.

A man by the name of Patrick Cass recently recovered a verdict of $100 and costs against the New York and New Haven railroad company, being the value of a trunk and contents placed in possession of the baggage-keeper, in June last, but not delivered. The ticket, a check received for it, had been lost, and the agent refused to deliver it when it was demanded, and it was subsequently lost. The Court held that in common law the railroad company is liable for the loss of baggage entrusted to their care, and the giving a check to a passenger, designating the number of the baggage, was intended to furnish the passenger with additional security, and the loss of the check does not relieve the company from liability, unless some other person presents the check, and in good faith and without notice the baggage is delivered to the party so offering the check. Nothing of the kind was shown here, and judgment was entered for the plaintiff.

Isthmus of Tehuantepec.

We have received a copy of the recent report of the survey of the Isthmus of Tehuantepec, made by the Tehuantepec railroad company, under the general superintendence of Major J. G. Barnard of the United States Engineers. The report was prepared by J. J. Williams, Esq., first assistant engineer, owing to the illness of Major Barnard, and to his prolonged stay upon the Isthmus. The report is accompanied by a volume of maps and profiles of the route, which are executed in a style of great elegance, and upon which the topography of the Isthmus is most carefully delineated. The report makes a volume of 300 pages, and contains numerous sketches, illustrative of the character of the country and its inhabitants. It is divided into two parts, the first of which comprises the engineering and hydrographic reports, an account of the Pacific ports, and closing with a general summary, showing the practicability and cost of construction of the road, the adaptedness of the route to the wants of commerce, its probable revenue, etc., etc. The second part treats of the geology, climate, productions; the inhabitants, their productive industry, etc., etc. The whole of it bears the marks of the most thorough and careful research and investigation, and carries internal evidence of its entire reliability. Every point of interest or inquiry touching that portion of the Isthmus is met, and thoroughly explained and elucidated. It conveys to the reader as vivid an idea as it is possible to have without actual observation, of the physical characteristics of the Isthmus of Tehuantepec, its capacity to become the great route of commerce between the two oceans, its productions, the character of its inhabitants, etc. The literary merit of the work is far above the ordinary style of engineering reports in this country. It is clear and lucid, exactly adapted to give a distinct idea of whatever is treated upon. On the whole, we can say that the volume before us reflects the highest credit upon Major Barnard and his staff, and the preparation of it for publication, upon Mr. Williams, the first assistant, upon whom, in consequence of the poor health of Major Barnard, the preparation of the report, and many of the more important duties of the survey, devolved.

As every thing connected with the proposed route across the Isthmus possesses a general public interest, which is daily increasing, from the rapidly growing importance of our Pacific possessions, we propose from time to time to place before the public the more material portions of the report.—We commence with the following extracts, giving a general *topographical* view of the Tehuantepec route.

The Isthmus of Tehuantepec is that portion of the Mexican territory which lies between the Gulf of Mexico and the Pacific Ocean, where the two seas approach the nearest to each other; and comprises the eastern portions of the states of Vera Cruz and Oaxaca.

From the mouth of the Coatzacoalcos, which discharges itself into the Gulf in 18° 8′ 20″ north latitude, and 94° 32′ 50″ longitude west (from Greenwich), to the harbor of Ventosa on the Pacific, situated in 16° 11′ 45″ north latitude and 95° 15′ 40″ west longitude, the distance in a direct line is 143¼ miles. The coast-lines on either side have a general direction nearly east and west.

In considering the Isthmus with reference to its general topographical features, it may properly be said to comprise three main divisions, more or less distinct in their general characteristics; the first, embracing that portion extending from the Gulf to the base of the Cordillera, and which may be called the *Atlantic plains;* the second, comprising the more elevated or *mountainous districts* in the central parts, and the third, including the level country bordering the ocean on the south, and known as the *Pacific plains.*

The first division comprises a belt of country of some forty or fifty miles in breadth, lying contiguous to the Gulf coast, and made up of extensive alluvial basins of exceeding richness and fertility, through which the drainage of the northern slope of the Cordillera discharges itself into the Gulf.

The principal of these hydrographic basins is that of the Coatzacoalcos, which occupies the central portion of this division, and has a general direction of N.N.E. by S.S.W. It is separated from the basin of the Tonala and Tancochapa rivers on the east, and the San Juan on the west, by a moderately elevated plateau or table land, furrowed by numerous small streams, and generally covered with dense forests. These table lands, with few exceptions, are not elevated more than two or three hundred feet above the sea level.

Conspicuous to the west of the Coatzacoalcos are the peaks of San Martin and Pelon, mountains of considerable magnitude, and constituting the most striking topographical features of this division of the Isthmus. They occupy an angle in the coast, which at the Barrilla turns to the north, making nearly a right angle with the coast line to the east, and gradually curving to the west for a distance of 20 or 30 miles, when it again assumes an east and west direction. The mountains referred to terminate a long range of hills extending to the west, and gradually decreasing in height till they subside to the level of the plain country bordering the San Juan river on the east: the whole being known as the Tuxtla range. With few exceptions, the entire country embraced in the northern division (as seen from the highlands immediately south of the Jaltepec river) presents the appearance of a broad plain, entirely covered with dense forests.

The second or middle division may be said to extend from the Jaltepec river on the north to within 20 or 25 miles of the Pacific coast, comprising a strip of country through the central portions of the Isthmus, of some 40 miles in breadth on the west, and gradually widening out towards the east to 60 or 70 miles. This division presents a great diversity of feature. The immense chain of the Cordillera, which, under different denominations, extends almost without interruption, the entire length of the two Americas, traverses the country from east to west; but instead of those lofty volcanic peaks, which constitute so striking a feature of extensive portions of this gigantic chain of mountains, there is a sudden depression of the range in its passage across this Isthmus, the continuity of the chain being nearly broken at a point directly in the line of shortest communication between the two oceans. The Cordillera here approaches very near the Pacific coast, and its southern slope terminating suddenly, extends in nearly a right line for a considerable distance in an east and west direction. But on the north side, the base of the mountain range, commencing at the point of greatest depression, forms an extended curve to the northeast on one side, and to the northwest on the other, having the concave side turned towards the north. The section of country lying to the south of the Jaltepec and Chalchijapa rivers, and circumscribed on the east, south and west by the above mountain range, is made up of elevated table lands, more or less broken and divided by low irregular spurs from the main Cordillera. To the east and west we find a confused mass of mountains, which, though attaining to but a moderate elevation, cover a large extent of country, particularly on the east, where they fill nearly one-half the breadth of the Isthmus. The table lands above mentioned comprise an area of about 1400 square miles, and are watered by the Jumuapa, Sarabia, Malatengo, Almoloya and Chichihua rivers, all tributaries to the Coatzacoalcos, and streams of small importance, by reason both of their limited length and the comparatively small volume of their waters. The first four take their rise in the mountains to the west, and the last drains a portion of the mountainous districts to the east. These streams present through nearly half their length the character of mere torrents, and their currents are generally rapid throughout their entire course. In their passage through the table lands, they are generally bordered by a greater or lesser breadth of rich alluvial bottoms.

The elevated spurs and ridges referred to, and which traverse the country generally in an east and west direction, offer the principal obstacles to the construction of a railroad across this portion of the Isthmus. The Jaltepec and Jumuapa rivers are separated by a chain of highland, constituting a spur from the Cordillera on the west, and extending easterly to the Coatzacoalcos; branching from this main ridge, are numerous lateral spurs, which decreasing in width and height, gradually subside to the level of the river bottoms. We also find the country bordering the Sarabia river considerably elevated and broken, from its confluence with the Coatzacoalcos to a point about two miles westward of Boca del Monte; and three miles southwest of this latter place is a high range of hills, known as the mountain of Sarabia.

Further to the south are the hills of Xochiapa, which originally seem to have formed a connected chain, joining the mountain range to the east and west, but have been cut through or divided by the Malatengo, Almoloya and Chichihua rivers; thus opening *natural* passages through a range of hills, which otherwise would seem to have offered an almost insuperable obstacle to the construction of a railroad. Between this range and the Summit Pass, the country is made up of elevated rolling plains, which are divided by low ranges of hills into three divisions, known respectively as the plains of Xochiapa, Chivela and Tarifa, which generally present a very smooth surface, but more or less undulating, and nearly destitute of heavy timber, except on the margins of the principal streams. They gradually become more elevated as we approach the Summit Pass, and also present a more uniform level surface. They are bounded on the south by the cerros Prieto, Masahuita and Espinosa, all of which terminate in rugged limestone peaks, at an elevation of from 1500 to 2000 feet above the Pacific; and form the only connecting links between the high mountain chain extending westwardly through the state of Oaxaca, and the Cordillera of Guatimala on the east.

By a narrow opening or gap in these mountains, we descend suddenly from the elevated table lands to the Pacific plains, which form the third or southern division. These plains average about twenty miles in breadth, from the base of the mountains to the Pacific coast, and descend on the meridians to the lagoons, at an inclination varying from ten to fifteen feet in the mile; thus forming, as it were, an immense inclined plane, with its side next the mountains, about two hundred and fifty feet above the Pacific. Under these circumstances they present a remarkably smooth, even surface, with an uniform, gentle slope towards the sea. In some instances there are occasional isolated hills, which rising abruptly, form a prominent feature in the topography of this part of the country. The plains are traversed by eight rivers, which discharge the drainage of the southern slope into the sea. Seven of these rivers empty into the lagoons, which are connected with the sea by a narrow outlet, called the Boca Barra; the eighth, or Tehuantepec river, comes from a northwesterly direction, and passing through the city of the same name, discharges itself directly into the sea at the Bay of Ventosa.

All of these streams, as they issue from the mountains, are remarkably pure and limpid, even in times of flood, thereby indicating the rocky nature of the districts which they drain. In their descent towards the plains they offer almost unlimited sources of water-power, which at many points may be made available for sawing lumber or for other purposes.

The lagoons, which receive most of the drainage of the southern slope, extend a distance of nearly forty miles along the cost, and comprise an area of more than 200 square miles; they are divided by a narrow peninsula of land into two principal divisions, known as the upper and lower lagoons.—Though of considerable extent, they are generally shallow, and no doubt annually becoming more so from the sediment brought down by the numerous rivers which discharge into them.

The bay of Ventosa is formed by an indentation in the coast, and the projection of the Cerro Moro on the west. The Tehuantepec river discharges itself near this point. The bay is partially sheltered from the north winds by low ranges of hills from three to four miles distant. A short distance to the

westward are two similar indentations of the coast, known respectively as Salina Cruz and Salina del Marques.

Of the streams watering the northern slope of the Isthmus, the most important by far is the Coatzacoalcos, by reason both of the comparatively large extent of country, for the drainage of which it is the outlet, and also as furnishing the natural channel through which the projected communication between the two oceans may, in part, be effected. The river takes its rise in the unexplored part of the Sierra to the east of Santa Maria Chimalapa. About thirteen miles above this village, the Chimalapilla falls into the Coatzacoalcos on its right bank. This was the highest point explored by the commission; but the Indians ascend it on rafts thirty or forty miles further beyond.

From Chimalapilla, the Coatzacoalcos receives a large number of tributaries, among the most important of which are the Coachapa and Aspinapa, on the east, and the Jaltepec and Tierra Nueva on the west. The Aspinapa is a large and important river, and is navigable for some distance for large ships.

From the mouth of the Jaltepec to the mouth of the Coatzacoalcos, the latter has a gentle and pretty uninterrupted current. For a very considerable distance it is navigable for large vessels. We copy the following account of the river, from Mina-titlan to its mouth, a distance of about 20 miles.

The banks of the river below Mina-titlan are very low and frequently flooded. The mouth of the Coatzacoalcos, the geographical position of which has been given, is 115 miles west from the river Grijalva or Tobasco, and 110 miles from Vera Cruz. Its width is about 1500 feet, and its depth varies in different places. A transversal section of the river, over the bar, shows it to be slightly swelled in the middle and hollowed out towards the two banks of the river; the hollow on the right forming the eastern, and the other the western pass. The greatest depth of the latter is close to the bank on which the fort is built. This pass is a straight channel, of easy entrance, and always the same, by reason of the nature of the material composing the bar. It has a width of 350 feet and a depth of 13 feet, which, however, is diminished to 12½ in the month of May. The tides are not strong on the Mexican coast; but in case of heavy northerly winds, the waters of the river are backed up, giving a sensible increase of depth on the bar. The eastern channel is about 100 feet in width, and its depth varies from 11 to 12 feet.

As soon as the bar is crossed, and the ascent of the river commences, it widens and deepens, and at 7 miles from the Gulf the lead shows a depth of 40 feet, which is preserved for some distance. The least depth in the channel below Mina-titlan is 12 feet, and this may be carried nearly to the island of Tacamichapa. The superior advantages offered by this stream as a safe and convenient harbor for ships, early attracted the attention of the Spanish conquerors. Cortes, in his official dispatches to the Emperor Charles V., speaks of the importance of this river, as furnishing the best harbor to be found on the Gulf coast of Mexico. In giving the results of a survey of the river, made by his order, he says: "They found two fathoms and a half of water at its entrance, in the shallowest part, and ascending twelve leagues, the least they found was five or six fathoms."

These soundings were made in the year 1520, and give about the same depth over the bar at the month of the river which we now find. This is an important fact, as proving that the material of which the bar is formed does not change its position, and giving promise that any work for deepening the channel at this point will afford permanent results.

Massachusetts.

Amherst Railroad.—The Amherst Express states that the railroad from that place to Palmer is progressing rapidly. There are now over two hundred laborers employed upon it. The directors held a meeting at Palmer on Monday, at which it was decided to make the second assessment of $5, payable on the 10th of April, and the third, of $10 per share, on the 10th of May next.

Bridging the St. Lawrence.

We understand that an application is to be made to the Canadian Parliament by the Montreal and New York railroad company for leave to build a bridge across the river St. Lawrence, connecting the north with the south shore, above the Lachine Rapids, and below the village of Lachine, and Caughnawaga, with power to acquire the lands necessary to connect the bridge with the Montreal and New York railroad.

Tennessee.

Nashville and Chattanooga Railroad.—The Chattanooga Advertiser learns from Mr. Grant, Chief Engineer on the Nashville and Chattanooga railroad, that the track laying is proceeding at the rate of a mile and a half per week on the western division. He is confident in the opinion that the road will be open for through travel by November next—connection being made at the river by steam boat.

Virginia and Tennessee Railroad.

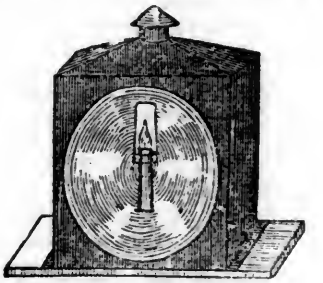
The railroad from Lynchburg to Liberty, a distance of 25 miles, was formally opened Tuesday last. We have no space to speak of the event, further than to say, that it was an occasion of much rejoicing with the citizens of both places. Several hundred persons, among whom were some (not all) of the loveliest ladies of our town, accompanied the cars on their first trip through.—*Virginian.*

Baltimore and Ohio Railroad.

The Baltimore City Council have passed a resolution authorizing a sale of a portion of the dividend stock of the Baltimore and Ohio railroad owned by the city. This resolution provides that three thousand and forty-eight shares shall be sold at a rate not less than $70 per share; the fund arising therefrom to be applied to the payment of the interest on the internal improvement debt of the city.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.



Olcott & Brother,

INVENTORS and Manufacturers of the celebrated Locomotive Lamps, to whom was awarded the FIRST premiums by the American Institute, and also at the State Fair held at Rochester, N.Y., in 1851. These Lamps are in general use throughout the United States. We are now prepared to furnish Lamps of every description used on Railroads, and a better article than any other establishment in the United States.

A. R. GILLMORE, Agent,
35 Canal st., New York.
OLCOTT & BROTHER, Rochester, N. Y.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852, 1m

Notice to Contractors.

HEMPFIELD RAILROAD.

PROPOSALS will be received from the 19th to the 26th of April, at the office of the Engineers, in Wheeling, for the grading of twelve or more sections of the Hempfield Railroad, including a tunnel 1500 feet in length, through Brady's Hill, east of Washington, and other heavy work between Wheeling and Washington.

Profiles and specifications, with approximate estimates of quantities, will be supplied at the office.

T. M. T. McKENNAN, President.
CHARLES, ELLET, Jr., Engineer.
Washington, Penn., March 23, 1852.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch. WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian	53 "
Sixth	"	"	Bloomington to the Illinois River	60 "
Eighth	"	"	from Freeport to Dubuque	67 "
Ninth	"	"	Chicago to Kankakee river	55 "
Tenth	"	"	Kankakee river to Urbana	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required. R. B. MASON,
Engineer in Chief Illinois Central R. R.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

—

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer.

Engineer's Office, Pittsburgh,
March 22, 1852,

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan. 22, 1852.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.

THOS. H. CALLAWAY, Prest.

Railroad Office, Athens, Tenn.,
1st March, 1852.

To Telegraph Companies.

TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers.

JEE, CARMER & CO.,
75 Broad st., New York.

6m*14

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

—

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

—

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

Railroad Iron.

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports o the United States.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

To MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction.

F. C. ARMS,
General Superintendent.

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is direc'ed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Lithographic Printing,
169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction - India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agen

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,
Of elegant designs and colors.
GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR
Of every description and quality.
New York, 1850. 1y16

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 16] SATURDAY, APRIL 17, 1852. [WHOLE No. 835, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Tehuantepec Railroad....241
Pacific Railroad....242
Railroad Accidents....243
Cincinnati and Dayton Railroad....244
New Orleans and Jackson Railroad....244
Statistics of New York Canals....245
Delaware and Hudson Canal....246
Madison and Indianapolis Railroad....246
Ohio and Pennsylvania Railroad....246
Ohio and Mississippi Railroad....247
Rock Island and Chicago Railroad....247
Public Works of Pennsylvania....247
Cleveland and Wheeling Railroad....247
Alton and Sangamon Railroad....247
Western Vermont Railroad....248
First American Locomotive....248
Stock and Money Market....249
Potsdam and Watertown Railroad....250
Nashville and Henderson Railroad....250
Lawrenceburg and Upper Mississippi Road...250
Buffalo and State Line Railroad....250
Toledo, Norwalk and Cleveland Railroad....251
Peoria and Oquawka Railroad....252

American Railroad Journal.

Saturday, April 17, 1852.

Tehuantepec Railroad.

We continue in our present number a notice of the report upon the Tehuantepec railroad.

The route surveyed for this road may be divided into three portions. The first extends from Mina-titlan to the Jaltepec river, and is 62¼ miles in length. The second, from the Jaltepec to the base of the mountains on the Pacific plains, reaches 68¾ miles. The third, from the base of the mountains to the Bay of La Ventosa, is 35 miles long; the total length of line being 166 miles. The air-line between Mina-titlan and Ventosa is 130 miles.

The character of the route is as follows:—Leaving Mina-titlan, it bears off in a southwesterly direction, passing from one to two miles to the left of the towns of Jaltipan, Tesistepec and the Hacienda of Almagro, until it reaches the Encantada mountain. Then curving eastwardly it passes about three-quarters of a mile west of that mountain, and entering a dense forest, continues on the same character of profile until it reaches the Jaltepec river. The country between Mina-titlan and the Jaltepec is favorable for the construction of a road; the soil being composed mostly of sand, gravel, and clay, materials easy to be removed, and the streams encountered requiring not more than fifty feet of water-way. The grades will also be light, and the alignment generally good.

After leaving the Jaltepec, the line advances in a southerly direction until it reaches the summit which divides the waters of the Jaltepec and Jnmuapa. To ascend this summit a grade of 60 feet to the mile will be necessary. The descent on the opposite side is made by a grade of 25 feet, until the line reaches the level of the river bottoms. Thence to the hills of Xochiapa, the ground is comparatively level.

On arriving at these hills, an ascent is made along the banks of the river Malatengo by a grade of 60 feet per mile, untill the plains of Xochiapa are reached. Thence another ascent of 60 feet to the mile is required to attain the summit of Nisi Conejo.

From the summit of Nisi Conejo, the line continues in a southeasterly direction, descending on a grade of 60 feet, to the level of the plains of Chivela; thence it continues its course to the Hacienda of that name, at the entrance of Chivela pass.

The entrance from these plains to the pass of Masahua is three miles distant, from a point 2,000 feet north of the Hacienda. From this point the line ascends, on a general direction a little east of south, nearly one mile and three-quarters to the summit, which is 125 feet above the plains of Chivela, and 843 feet above the Pacific Ocean. Here it is proposed to make a thorough cut of about 2,500 feet, with an average depth of 40 feet, the grade line at the deepest point being 63 feet below the surface. This would reduce the summit at grade to only 60 feet above the plains of Chivela, and 793 feet above the Pacific. The material in this cut being composed mostly of slate rock can easily be removed.

Descending from the summit on a 60 feet grade, the line continues in a southerly direction till it reaches Danta Pass, where the valley opens between two high mountains; the one on the right being called "*Masahuita,*" and that on the left, "*Cerro de Espinosa.*"

From the summit to Masahuita, several sharp spurs of the main range are encountered, which will require four or five short tunnels, having an aggregate length of near half a mile, to be rendered passable. These tunnels will not be of very difficult construction; and it is the opinion of the engineers that they may be altogether avoided by throwing the line further to the east.

Just before reaching Cerro Mashuita, a deep ravine is encountered, running parallel with the northern base of the mountain. The fill here for 700 feet will average about 80 feet in depth. This cannot be avoided in running through Danta Pass, but may be entirely obviated by running the line back of the mountain, and coming into the valley of "Torrente de Masahua" by the "Arroyo de Molino."

From this fill the line sweeps around the end of "Masahuita" on a radius of 1,000 feet; thence taking a westerly course along the southern slope of the mountain to the "Arroyo de Molino," which it crosses on a fill of 65 feet; thence on to the southern slope of "Cerro Barnard" to "Arroyo de Juan," crossing on an elevation of 55 feet; thence continuing along the southern base of Cerro Prieto, it reaches the Camino Real, descending thro' Chivela Pass, where the line crosses to the opposite bank of "Torrente de Mashua," and continues in the vicinity of this stream till it reaches a point opposite the extreme end of the bare hills called Cerro de la Martar, and, after crossing what is now called Rio Verde, it passes by the Rancho de la Martar, over the plains to San Geronimo, Comitancillo, Tehuantepec, and, lastly, to the Bay of Ventosa.

This line passes west of the Coatzoalcos, and through the pass of Masahua. There is another route proposed running east of the same river, via the Almaloya and the pass of Chivela, but it is considered somewhat doubtful whether it is any better than the one already described. We copy the following short paragraph from the report of Mr. J. C. Avery, in reference to the eastern route:—

"With regard to the practicability of constructing a railroad on the east side of the Coatzacoalcos, I may here state, that the road can be located from Paso Nuevo to a point on the Uspanapa, near the confluence of the Arroyo de Mexcalapa, over very favorable ground as regards both alignment and grades; thence to the mouth of the Malatengo river, the route laid down on the map would encounter no highlands of sufficient elevation to offer any serious obstacle to the construction of the road. The distance would, however, be greater than by

the line to the west of the Coatzacoalcos; and the comparatively large amount of drainage necessarily passing the line of road, requiring expensive constructions with the risk of damage from the effects of floods, would seem to be conclusive in favor of the western route, notwithstanding the superior advantages offered at Paso Nuovo for a harbor, and as a terminus for the road."

The principal bridging difficulties on the route are encountered at the Tehuantepec river; indeed there seems to be but two favorable localities for railroad crossings—one at the city of Tehuantepec itself, and the other just below Huilotepec, the former being by far the best.

If the line should be located by way of Tehuantepec, it ought to pass between Cerro de San Diego, and the ridge of Cerro Xunirahui. In this case it would necessarily cross the San Jone.

If the line be constructed from the mouth of the Pass of Chivela, by the most direct route to Ventosa, instead of by the towns of San Geronimo, Comitancillo and Tehuantepec, it would go to Huilotepec, and then either cross the river to the lower base of San Diego, and so sweep round under the Cerro Morro; or without crossing the river, keep to its left bank to the sea. It is considered better, however, to cross the Tehuantepec, and run down near the base of Cerro Morro, close to the site of the proposed break-water, for by extending the break-water from the end of Cerro Morro, 1500 or 2000 feet, it would afford ample protection to the wharves at the terminus of the road.

The material on the Pacific plains is sand, gravel, red and yellow clay. The embankments over this portion of the route will not average more than two or three feet in height, and may be thrown up directly from the sides.

With regard to the grades on the route there are none of any importance, except on the middle division between the Atlantic and Pacific plains.—The total ascent on that portion of the line, approaching the Pacific, is 1346 feet, the descent is 1221 feet. The elevation of summit to be overcome above the Pacific plains is 593 feet. The maximum grade encountered is 60 feet per mile, which may be considered very favorable as compared with those on the Baltimore and Ohio railroad, and many other roads in the United States. It is confidently believed that a speed of 20 miles per hour can be attained on the most difficult portions of the route, and that the whole distance from one ocean to the other can be accomplished in the short space of *six* hours.

The estimated cost of constructing the road is as follows:—

Clearing, grubbing, earth work, masonry and bridging of the first division, from Mina-titlan to the Jaltepec, 62 miles, at the rate of $19,043 per mile	$1,180,666 00
Clearing, grubbing, etc., of the second division, from the Jaltepec river to the Pacific plains, 63¼ miles	3,766,838 39
Clearing, grubbing, bridging, etc., of the third division, from the Pacific plains to the Bay of Ventosa, 35 miles, at $9,880 56 per mile	345,819 60
Total	$5,293,323 99

The total cost of the road from Jaltepec river to Ventosa, including the equipment and engineering expenses, together with six miles for stations and side track, will be $5,954,165 78. The total cost of the road from Mina titlan to Ventosa will be $7,847,896 17.

In estimating the cost of the road, the calculations were made for a single track of 6 feet gauge, with the requisite side tracks and turnouts, and on a road bed of 22 feet wide in excavation, and 16 feet in embankment, with slopes for cuttings of 1½ to 1 in earth, and ¼ to 1 in rock; and for filling 1½ to 1 in earth, and 1 to 1 in rock. The materials for construction can be easily obtained along the line of the road.

It is expected that a great amount of the excavations, embankments, etc., can be accomplished by native labor. The present total want of employment, the anxiety to obtain it, and the scarcity of money on the Isthmus, combine in placing labor at a low rate easily attainable by the company. The natives could certainly, it is stated, do the grubbing and clearing much cheaper than foreign laborers—as the handling of the *machete* is their principal *forte*.

The price of daily labor in the United States is nearly three times the price of native labor on the Isthmus. Allowing that a foreign laborer will accomplish twice as much as a native, there will be a saving of one-third in expense, by employing the latter.

We will conclude by copying an extract from a letter of J. C. Trautwine, Esq., on the subject of the employment of native labor.

Our usual payment to common native laborers on the canal between Carthagena and Magdalena river, in the Republic of New Grenada, was three *reals* per working day—and to native superintendents of gangs, four *reals* per working day; this was considered good wages.

They received indifferently the real of their country, and the ten-cent piece of the United States, both having the same current value in New Grenada. From these sums they provided their own subsistence, the cost of which varied from half a real to a real per day, provisions being abundant.

They lived *chiefly* on plantains, yams, rice, cassava bread, and the jerked beef of their country; but to these they added corn, beans, dried fish, fruit, etc., when procurable.

Where any large body of workmen was collected for some time, a small native village generally grew up at a few weeks' notice. In these many of the workmen lodged and purchased their supplies. Generally they breakfasted and dined in gangs, on the work; some of the wives acting as commissaries and cooks. The cooking was performed on the line of the work, and the men ate in the open air. In some few instances we built huts for them where circumstances rendered it necessary to do so.

They were tasked every week, and generally averaged from three to six cubic yards per day (per man) removed, depending on the character of the soil, their own degree of training, etc. I am not sufficiently acquainted with the peculiarities of your work to advance any opinion respecting the advisability of employing foreign workmen, but from the experience I have had I should never think of relying upon any but the natives for forming the *great mass* of laborers. We found a system of light premiums, to those gangs who did more than their tasks, was productive of a very good result. It created a rivalry among the several parties as to who were the best workmen, and the lazy ones of each gang were kept moving by the others in order to secure the premiums.

We removed much of the earth in carts, drawn by either horses or mules. We also used the small donkeys or "*burros*" of the country, for carrying earth out of the cuttings, in boxes holding about a cubic foot each; one being slung on each side. The bottoms of the boxes were hinged for letting the earth drop out.

This method answered very well, but the carts were better, generally speaking.

In shallow cuts we also used wheelbarrows to advantage. With proper training the natives worked very well. I am confident they did more work than whites could have done in the same climate, and more cheaply,

I hope your route is not in the vicinity of the present route of travel; for although the natives when left to themselves, and treated with a proper degree of kindness and firmness, are tractable and willing to work; yet when brought into contact with a stream of travel, such as that which now flows to and from California, they become altogether depraved, as I fully experienced on the Isthmus of Panama.

Missouri.

Pacific Railroad.—Below we give the late annual report of the directors of this company submitted at a meeting of the stockholders held in St. Louis March 29, 1852.

In obedience to the fifteenth section of the original act of incorporation, the directors of the Pacific railroad present to the stockholders an exhibit of the condition and affairs of the company, for the year ending the last Monday of March, instant.

1. The amount of capital stock subscribed, to this date, is $1,560,400. Of this amount, however, only about $1,300,400 is immediately available for assessment, and $50,200 is the estimated amount of contractor's stock. The loan of two millions of State bonds is derived, according to law, by virtue of the above amount of subscription, which we shall receive as fast as the capital stock is collected and expended.

2. Twenty-five per cent. has been called in, of which the amount paid up, exclusive of the ten per cent. reserved from the contractor's estimates, is $300,670, including one hundred and seventy-nine shares paid in full, leaving unpaid of the calls on the available subscriptions, $25,880. The amount unpaid of the whole capital subscribed, including contractors' stock, is $1,259,780.

3. The total amount expended to the 10th of March, for engineering, including preliminary surveys of whole line, land damages, fencing, real estate, graduation and masonry, and contingent expenses, is $252,074 14.

4. The indebtedness of the company, for which their notes are outstanding, amounts to $30,880 34, which has been wholly incurred in the purchase of real estate, and the settlement of land damages.—The liabilities of the company further extend to the expenses to be incurred under contracts made, covering the cost of the entire division in construction.

5. The objects and business contemplated seemed to require convenient and more expensive arrangements at the St. Louis terminus than upon any other part of the road. Owing to this circumstance, and the high price of land in and near the city, the cost of the first division was estimated at a higher rate than any other of equal length. By the revised estimate of the Engineer upon the final location of the division the cost was put down at $1,095,000. This was upon the supposition that the division was forty miles in length. But by an increased cost of some $30,000, the length has been reduced to thirty-seven miles, and the grades also improved. This sum is also somewhat increased in the item of land and damages, which have cost us much more than was anticipated, though the proceeds of the sales of surplus lands, will considerably reduce the final cost. The estimated amount required to complete the division, including the running stock stationary machinery and buildings is near $900,000.

6. The first division, extending from Fourteenth street in the city of St. Louis, to Franklin county line, 37 miles, was located by resolution of the board, June 18, 1851, but the work of graduation was not fairly commenced until the 2d of August. Some sickness among the laborers intervened during the months of August and September, which slightly retarded the progress of the work. Several of the original contractors failed also to perform their contracts, and the work undertaken by them had to be re-let. The inclement weather of the past winter was not favorable for the rapid prosecution of the work. All the sections are now in progress, and the graduation of several of them is nearly completed. The number of hands constantly employed during the past season has been from 800 to 1,000, and as an increase is necessary to complete the work within the contract time, orders have accordingly been given to call in additional forces.—The contractors on the first eight sections, extending about eight miles from the city, are required to

complete their work by the 1st to 15th of July.—The contractors on the remaining sections are required to finish by the 1st of September.

A contract was closed last fall with the Ebbervale company, of London, to furnish us 4.400 tons of rails of the T pattern, weighing about sixty pounds to the yard, at thirty-two dollars per ton delivered in New Orleans, duty to be paid in St. Louis by the company. The first fourth of the rails to be delivered before the 1st of May; the second before the 1st of July; and the remainder before the 1st of September. The arrival of the first shipment is daily expected.

Three locomotives, one of eighteen, one of twenty, and one of twenty four tons, are in process of construction; two at Patterson, New Jersey, and one at Taunton, Massachusetts. The first of these is expected to arrive here in June. Contracts for ties, cars, machinery, etc., as well as for the construction of the machine shop and engine houses, have also been made, and every step has been taken, that seemed necessary or practicable, to complete the first division within the present calender year.

Looking to the further extension of the road, a contract has been made for five additional locomotives to be constructed in this city within the next two years.

The actual amount of receipts and expenditures [apportioned] to the 10th inst., as appears from the books of the Treasurer and Secretary, is as follows:

Debit or receipts.

On subscription to stocks.....	$300,670
From State of Missouri.....	100,000
Bills payable [for land and damages]..	30,880 34
	$431,550 34

Credit or disbursements.

Office expenses and contingencies....	$8,306 53
Preliminary surveys.....	20,116 70
Location do.....	7,443 10
Interest and exchange account.....	189 30
Discount on bonds [sold].....	950 00
Land and damages.....	111,651 07
Superintending construction.....	12,796 15
Fencing account.....	4,007 77
Graduation ".....	71,690 21
Masonry and bridges.....	28,853 21
Superstructure.....	477 10
Machine shop and engine houses.....	80 00
Balance in hands of Treasurer.....	164,989 20
	$431,550 34

In the item land and damages, on the credit side are included the amounts of bills payable embraced in the amount of indebtedness above mentioned.

The balance in the hands of the Treasurer consists entirely of State bonds of the city of St. Louis, and of the county of St. Louis.

We received the first $50.000 in State bonds on the 20th of January last. We are entitled, at present, to $150,000 more of State bonds than we have received; but we can only receive them as fast as the proceeds of the sales of the previous issues are expended on the work. The $100,000 received, have been sold nearly all above par. The company will have to make provision for the payment of the interest on all State bonds sold by them, payable in New York, on the first of July, and first of January, in each year.

More than half of the receipts from subscriptions to the stock, consists of city and county bonds, received at par. Until recently we had not been able to turn these securities into cash as expeditiously as we could have desired; but while we have made no sacrifices, the lapse of time has given us better opportunity to make them known, and a very happy consequence is, that these bonds are now coming into fair request. The Pacific railroad State bonds are now held at above par, and there is good reason to anticipate their advance to a rank fully equal to the securities of any of our sister States of the west or south. Not only is the faith of the State pledged for the redemption of these bonds—the faith of a great and wealthy State, comparatively free of debt—but the railroad company endorses them, and the railroad itself is mortgaged as further security. These bonds are, therefore, to be regarded in reality as safe, sound and desirable as any State six per cents in the United States. Nor do we know any sufficient reason why the six per cent bonds of the city and county of St. Louis, at the present rates of interest, should not be fully as valuable as the bonds of our most favored cities. We are prohibited by law from selling the city bonds at less than 95 cents, a limitation which we trust will ultimately prove beneficial to the city credit. A proposition is now pending to take all our securities upon terms which we hope will be satisfactory. We do not, therefore, apprehend difficulty in disposing of these bonds, of all kinds, as their proceeds are needed.

The city of St. Louis is the only stockholder to whom we are allowing interest upon payments made on subscription to stock. The city subscribed on condition of such allowance being made payable in stock, and we receive her bonds at par, and allow interest accordingly.

The item of land and damages makes too large a figure to be passed over without further explanation. Circumstances seemed inevitably to precipitate the location of our line of road a little in advance of the dictates of wise policy. The right of way should have been first more thoroughly secured. As a natural consequence, we have encountered many vexatious and exorbitant claims for damages.

Our road-bed is laid out generally one hundred feet wide, and occupies in this division 474 acres. Every acre was private property.

The cases which have arisen for settlement number 123, many of which have required examinations and adjustment of title, and about 150 deeds. Of these cases ninety-five are absolutely settled and disposed of, twenty are supposed to be settled as to terms, and eight are unsettled, most of them waiting the action of the Circuit Court. For modes of settlement we have resorted to Commissioners appointed by the Circuit Judge, to referees chosen by the parties, and to negotiation. We have generally found that negotiation is the most economical for the company, and most satisfactory in its results to all concerned.

In settling several claims we have deemed it best to purchase more land than we required for the road-bed. We have, in this way, acquired over twenty acres of valuable land near the city. We have also acquired about twenty-four acres for depots and other buildings. The actual and estimated cost of these lands and land damages is about $140,000. This cost has been incurred in the following districts:—

Within the first four miles.....	$119,000
Within the next nine miles.....	16,500
Within the next five miles.....	2,500
Within the remaining nineteen miles....	1,700

While we have come in contact with a few unworthy spirits, yet it is due to a respectable number of landowners to say, that they have met us in a proper tone of enlightened liberality.

It seems here a proper place to observe that, in its effects upon the price of lands adjacent to the line, the railroad is accomplishing quite as much as was ever predicted or promised. The value has been at least trebled. Lands which recently were held at $1 50, are now held at $10—those which were held at $30, have been sold at $100—those which were but lately bought for $300, have been sold for $1,000. There can hardly be a doubt that the enhanced value of lands through the district of country in which our road is laid, already considerably exceeds the estimated cost of the work as far as located. Another perceptible effect is a renewed spirit of industry and enterprise, and the development of new resources. In the interior, it has attracted new settlers, and occasioned the entry of large quantities of public land. Our fellow-citizens seem to be quite conscious of the superior advantages of railroad power, and manifest, as well at the north of the Missouri, as in the southwest and west, an anxious desire to avail themselves of it. With a view to the further extension of our line, some further surveys will probably be found expedient during the current year. This will be rendered the more important in case of the grant of lands, and the right of way, which we are laboring by every practicable means to obtain in a liberal form from the present Congress. Seeing, however, a disposition manifested to attach conditions calculated very much to impair the value of the grant, the board thought proper to inform the representatives from this State, that it would be inexpedient for the company to accept a grant of which the sales were limited to actual settlers in limited quantities, and by which the State was to become an overpowering stockholder at a double valuation, and the general government to have free use forever of the road. The board believing that the lands would be too dearly purchased at such a price, have expressed a preference for the right of pre-emption to a limited quantity of acres, to be selected by the company. We are encouraged to hope, however, that a more liberal bill will yet obtain the assent of the House of Representatives, as it has already of the Senate.

With this grant secured, we apprehend no difficulty in pushing on the work rapidly to the western line of the State. Without it, we do not doubt the work will steadily progress.

In any event, looking at the numerous projects of railroads, north and south, and east of us, calculated, as it were, to change the current of the Mississippi, we feel assured that we shall never regret our efforts, however laborious, to hold St. Louis to her true destiny, as the Central City of the Mississippi Valley.

Submitted in behalf of the board.

THOS. ALLEN, President.

Railroad Accidents.

Ogdensburg Railroad.—The Ogdensburg Republican, in an article upon railroad accidents, gives the following reasons for the entire immunity from accidents on that road. It says:

The Ogdensburgh road has been in operation since September, 1850. Its trains have been run constantly, in all weather. Not a passenger has been killed, or injured.

Why is the Ogdensburgh railroad exempt from the casualties almost daily occurring on other roads? Simply because, in all its structures and furnishing, it is built and equipped on the best plans, and has the best regulations devised by experience, rigidly enforced.

The road has been in operation nearly two years. Not a bridge, culvert, or any other structure, has failed. Not a "stone has rolled down a slope," or an embankment given way, carrying death and destruction before it; and not a single collision of trains has "happened." Its trains have kept their fixed times, with wonderful precision.

These successful results have cost much money, and much labor and care of managing officers.

The public acknowledge these facts, but even those most interested do not calculate the ultimate worth of good construction and good management, of a railroad.

Stockholders, desirous of speedy dividends, complain of too much expenditure; and customers condemn the rules adopted, solely for their own safety and benefit.

The end will show, and it is now showing, that SAFETY is the best policy, for all parties.

Our road is destined to be a great thoroughfare for passengers, as well as for freights. It is highly desirable that its character for capacity, for correct regulations, and for safety should be maintained.—All stockholders should feel this necessity. With its present efficient and able officers, and agents, there can be no doubt of continued successful operation.

We are informed, that the best conductors and enginemen, from other States, are soliciting employment on this road, at less compensation than they could command elsewhere, for the only reason that "the Ogdensburgh is a *safe* road."

Let any person become acquainted with the conductors and enginemen of our passengers trains, and he will be pleased to find them active, intelligent men, of sound experience, as well as hired agents of a corporation.

Let him mount one of the first class engines, [by permission of the Superintendent, conditioned that he shall not talk to the engineer whilst the train is in motion.] and he will see a code of rules posted on the engine, a time table to which the engineer casts his eye every few minutes, a watchful care of the powerful machine, and a strict look out to the track and fixtures—evincing skill and experience, which he does not dream of, when safely riding in the comfortable car.

Let him meet the same engineman, when off duty, and he would be equally pleased, to recognize a clever gentleman,—perhaps, a man of real substance, who, from mere love of mechanism and old habits of industry, turns servant of the corporation; puts on his fear-nought coat and drives his engine, at all hours, and in all weather; keeps his machine, with all the storm, smoke, dirt, and rust, as clean and bright, as a New York dandy would his buggy, and makes it as much his pet, as the greatest jockey does his best race-horse.

This sort of men, these regulations, and a certain *esprit du corps*, always attainable under one competent, vigilant head, give capacity, dispatch, and safety to the Ogdensburgh railroad.

What is done in one case, may be done in others. This road now carries large tonnage, and a fair number of passengers. With its present furniture and machinery, it could transport double its tonnage, and ten-fold the number of passengers, with the same dispatch and safety.

Other roads can do the same thing, with proper regard to construction, to rolling machinery, to regulations, and chiefly with vigilant supervision, enforcing strict performance of the rules and regulations.

Ohio.

Cincinnati and Dayton Railroad.—The following article in reference to the above road we copy from the Cincinnati Times.

As much is now being said and done, to concentrate the various railroads pointing towards our city, from the west, north, and east, on the short line to Dayton in the Deer-creek Valley as a common track for their general interests, terminating near Broadway and Canal, you will please allow me to direct the attention of our readers to the subject, as one more seriously affecting the prosperity and health of Cincinnati, than any other measure seldom or ever considered by our city, and in so doing, a brief reference to the reasons making it essential for such an arrangement, is all that is necessary, to make it apparent to those who have at heart those interests, and to induce a prompt and hearty co operation with those efforts, which must result more profitable and certain than any other similar investment in our State.

It is well known the Deer-creek Valley affords the only central termination near the heart of our city, and cheaper, more commodious, accessible and convenient depot grounds, as well as a great saving of distance to various radiating points, over any other route now, or which can be established.

The various Indiana railroads, centering at or near Hamilton, can save 3 miles; the railroads terminating at Dayton 7½ miles; Little Miami railroad 12 miles from Xenia, by the way of Waynesville, Lebanon, and Sharon; and the Zanesville, Chillicothe and Hillsboro' railroads, each a material distance, by terminating upon the short line railroad to Dayton, at and south of Sharon, on a double track, with both the Ohio and Indiana gauge. Economy of time and distance not only require such an arrangement, but the great saving to each company in being semi-annually assessed in proportion to their business, their portion of the cost only in maintaining the road and paying the interest on the bonds, and a semi-annual dividend of 5 per cent. to the stockholders, also should induce it. A road constructed as is contemplated by Mr. Gest's survey for said company, fenced in, passing either over or under every cross road, to secure safety and speed, having no long bridges to impede its progress, terminating at a central point in the city, accessible at high speed, would of itself, at a very low charge, afford a large profit to be deducted from the general expenses of the road, leaving in all probability not over 1 per cent., on an average, to each company, to pay on the whole cost for 12 miles, for the use of a road affording every facility to be enjoyed as though each company maintained a separate road.

The various railroad companies will not only profit by such an arrangement, but materially promote the health, business and value of business property of the city.

At present the inconvenient location of depots and waste of time in getting out of the city, with the cost, prevents thousands of our citizens from residing in or visiting the country. Some expeditious and cheap method must be adopted for the benefit of the masses, who will enjoy more of the country if the short line road is built with a view of accommodating so important an interest almost totally neglected. With the advantages the Deercreek valley affords, and the manner proposed to construct the short line road, its omnibus trains could place its passengers 20 miles off at a trifling charge by the time the present roads could now get out of the city.

The business of our city is not only incommoded by the want of a central common depot, but is severely taxed with double drayage.

It is not only desirable that our business men should feel a permanency in their location, but those owning business property east of the head of Vine street, to the river, could well afford to build the road to Dayton, to secure for all coming time, in the neighborhood of the Court House, the principal railroad business of the west, tending to permanently locate our principal commercial business, where it now is, which otherwise must move westward.

Much of the success of our railroads terminating here depends on their ability to compete with those roads passing by, and near us; hence, necessity, not only of economy in construction, distance and time, but also in transhipment, which can only be done at a common depot for roads from various points.

No where in our country, is there another railroad terminating at a point so desirable to other companies to unite upon, as a common trunk, affording such mutual advantages, and reliable profitable investment in perpetuity to the stockholder, beyond a possibility of the stock selling under par.

It is to be hoped, those interested will promptly co-operate with the directors, in accomplishing so desirable an object, and though temporary sacrifices may now be made by some railroads, in making such an arrangement, it must result for their good in the future. CINCINNATI.

New Orleans and Jackson Railroad.

The New Orleans Commercial Bulletin contains the following synopsis of the charter of the above road, which is the engrossing topic with the people of New Orleans.

Section first provides, that the corporation shall be called the *New Orleans, Jackson, and Great Northern Railroad Company*, and fixes its domicil in New Orleans. Section second states, that said corporation is established for the purpose of constructing a railroad "from New Orleans to Jackson, in the State of Mississippi; thence northward, through the State of Mississippi, towards the point that shall be deemed most favorable for continuing the communication to Nashville, in the State of Tennessee." Section three fixes the capital stock at $3,000,000, divided into 120,000 shares of $25 each. Five per cent. is to be paid on each share at the time of subscribing. Subsequent payments are to be made in such sums, and at such times, as the board of directors shall fix, *provided* that not more than ten per cent. can be called for at one time, nor more than three such calls made within one year, sixty days' notice of which must be given in *two* newspapers published in this city. Section four permits the corporation to go into operation as soon as $400,000 shall have been subscribed. Section five provides, that the business of the corporation shall be conducted at its domicil in New Orleans, by a board of eighteen directors, who shall be stockholders, six of whom shall be taken from stockholders residing in Mississippi; seven members to constitute a quorum; the directors to elect one of their number President, on whom legal service or citation against the company may be made, and the company agree to be bound by such service or process. Section six prescribes that the first board of directors shall be chosen as soon as the lists of subscriptions are closed in this State; first board to consist of twelve members from the Louisiana stockholders, who are to organise and elect their President; as soon as subscription lists in Mississippi are closed, a special election is to be held for six Mississippi directors; notices for election are to be published fifteen days in advance in two New Orleans newspapers; the first board of directors to remain in office until the first Monday in May, 1853; thereafter elections are to be annual, but failure to elect shall not dissolve the corporation, the board in office continuing to exercise its functions until a new board can be elected.

Section seven appoints the following commissioners to receive subscription to the stock of said corporation: Messrs. James Robb, L. Matthews, W. H. Garland, Peter Conrey, Jr., J. P. Benjamin, H. C. Cammack, George Clark, Isaac T. Preston, J. P. Harrison, W. S. Campbell, Glendy Burke, R. W. Montgomery, H. S. Buckner, A. D. Kelly, and E. W. Moise. Said commissioners to have power to appoint agents in other places than New Orleans to receive subscriptions; lists of subscriptions to be closed on 15th April, 1852; if subscriptions do not reach the amount of $400,000, to be closed as soon as said amount shall be subscribed; immediately after election of first board of directors, subscription lists are to be opened for four months in Louisiana and Mississippi; board to appoint agents to receive subscriptions; if amount subscribed shall exceed capital required, a meeting of stockholders and subscribers shall be held to determine whether the capital shall be increased to the whole amount of subscription, and if the capital be not so increased, then the number of shares shall be reduced by deductions from the largest subscriptions; election for six Mississippi directors to be then held. Section eight designates the mode in which delinquent stockholders are to be treated. Section nine provides that all meetings held for the purpose of increasing or diminishing the capital stock of the company, such meetings shall be composed of persons holding in their own right, or as agents for others, three-fourths of the stock; at all other meetings a majority of the stock to be represented; if such be not the case the meeting to stand adjourned for one week, when the vote of the majority of the stock represented shall bind the company. Section ten provides that any vacancy in the board, during the year, may be filled by the directors. Section eleven empowers the President and directors to do everything necessary for the construction, repair and maintenance of the road; to determine its line and location; to make all necessary contracts, and to purchase all machines, vehicles, teams and equipments, required therefor. Section twelve prescribes that the company shall not borrow money to an amount exceeding $50,000, unless authorised by a two-thirds vote of the stock represented at a regularly called meeting; but the directors may contract for iron, equipments, etc., and mortgage the property of the company, if deemed necessary, to secure payment therefor.

Section seventeen provides that any subscriber who may be taxed by law or ordinance for the payment of subscriptions to the company, shall have the right of reducing the number of his shares, by an amount equal to that of the taxes imposed; this right to be exercised within thirty days from the date of the law or ordinance referred to. Section eighteen accepts the act of the legislature of the State of Mississippi granting the right of way through that State, and constitutes it a part of the charter. Section nineteen gives the board power to make all arrangements they may deem proper for the connection of the aforesaid road with any branch road or roads, calculated to increase the business of said road.

In view of the importance of the above work to the city of New Orleans, the Bulletin urges upon its citizens the immediate subscription of the amount necessary to secure the charter. It says it is to be fervently hoped that more than twice the amount of subscriptions required by law will be secured.—It will argue ill for the liberality and enterprise of our citizens if such be not the case. Declining commerce calls aloud for liberality; depreciated and depreciating real estate demands liberality; every interest of the city, mercantile, mechanical, and industrial, unite in one mighty appeal for liberality,—and if it be not extended to this great work of internal improvement—so full of promise to New Orleans in every essential particular—what has been often said may well be repeated, that a city which is so illiberal, stingy and parsimonious, deserves that all her competitors should vanquish her in the contest for the palm of commercial greatness and mercantile superiority. That they will

do so, if this enterprise is permitted to languish and wither, there can be no earthly doubt.

Virginia Finances.

The Committee of Finance of the Virginia Legislature have recently submitted a report relative to the revenues, liabilities, expenses, etc., of that commonwealth, from which we copy the following—

Statement of the Public Debt of Virginia.

1852.

January 1, bonds registered in the office of the Auditor of public accounts	$793,146 17
Bonds registered in the Second Auditor's office	12,639,411 64
Bonds funded since January 1st, 1852	879,617 00
Total funded debt on 20th March, 1852	14,312,174 81
Amount of valid subscriptions to companies organized before the 30th September, 1851	3,337,928 25
Amount of valid subscriptions to companies organized since the 30th, September, 1851	264'720 00
Funded debt and valid subscriptions	17,914,823 06
Amount of subscriptions authorized to companies not yet organized	732,560 00
Amount of bonds guaranteed by State as surety for corporations and joint stock companies	3,901,374 00
Total	$22,548,757 06

The committee go on to say—

Duty to the General Assembly and to the public, no less than considerations of public policy, have controlled the action of the committee in presenting this expose of the true state of the debt and liability of the commonwealth; but it is not insisted that a necessity rests on the General Assembly, at its present session, to organize a sinking fund for the extinguishment of the whole sum of twenty-two million five hundred and forty-eight thousand seven hundred and fifty-seven dollars. It conceded that the amount of the guaranteed bonds may be properly omitted at present, as the obligation to pay by the State, does not attach until default made by the co-obligors. This deduction would reduce the sum to eighteen million six hundred and forty-seven thousand three hundred and eighty-two dollars and six cents, as the true amount on which to estimate a sinking fund.

The Northwestern Route.

We take the following from the St. Louis Intelligencer:

Corn Going East.—The Michigan and Illinois canal will open in a few days, and we learn from a very reliable source that a large amount of corn has been bought on the upper portion of the Illinois river, and is now being placed in canal boats ready for shipment to Chicago, and from thence to the eastern markets. It is said that very little corn above Beardstown will come in this direction the present season, unless prices improve materially. It is computed that there are now 150,000 bushels at Peoria, about the same amount at Pekin, and from 12 to 15,000 at Wesley city, all destined to pass to the north, and through the Illinois canal.—Quite a number of canal boats are filling up all along the river with the produce of the country, but the first through will carry a much larger proportion of corn than any other article of grain. We understand that as high as twenty cents per bushel has been advanced by Chicago merchants at Pekin and Peoria, and for at least one-half the grain now in store at those points they hold the warehouse receipts, consequently the entire control, and not a bushel of which will reach St. Louis, unless the market here shall offer better inducement than Chicago or Buffalo, or will net more than to send it directly through to the seaboard. The last quotations for prime yellow and white at Chicago were 33 to 35 cents, about the same as in our own market; but to bring the article here—the difference in the rates of transportation, etc., making it necessary—there must be a clear margin of from 5 to 8 cents per bushel, otherwise it will go north.

We make this statement not from a belief that corn will be scarce or very high in price the present season, but more to show the influences at work to cut off the supplies and curtail the trade.

We know that corn is shipped every year from the Illinois river to Chicago, in greater or less quantities, but we doubt very much if means have ever been taken to secure for Chicago, and other points on the Lakes, so large a share of the business as they will enjoy the present season.

New York Canals.

We extract from the report of the Auditor of the Canal Department the following interesting statistics:—

The total tonnage of all the property on the canals, ascending and descending, its value, and the amount of tolls collected for the fifteen years preceding, is as follows, viz:

Year.	Tons.	Value.	Tolls.
1836	1,310,807	$67,634,343	$1,614 312
1837	1,171,296	55,809,288	1,292 623
1838	1,333,011	65,746,559	1,590,911
1839	1,435,713	73,399,764	1,646,382
1840	1,416,046	66,303,892	1,775,747
1841	1,521,661	92,202,929	2,034,882
1842	1,236,931	60,016 608	1,749.196
1843	1,513,439	76,276,909	2,081,590
1844	1,816,586	99,921,152	2,146,374
1845	1,985,011	100,553,245	2,646,181
1846	2,268,662	115,612,109	2,756,106
1847	2,869,810	151,563,428	3,635 381
1848	2,796,230	140,086,157	3,252,212
1849	2 894,732	144,732,285	3,268,226
1850	3,076,617	156,397,929	3,273,899
1851	3,582,733	159,981,891	3,329,727

The total tons coming to tide waer from Erie and Champlain canals, for each of the last 17 years, and the aggregate value thereof in market, were as follows, viz:

Year.	Tons.	Value.
1834	553,596	$13,405,022
1835	753,191	20,525,446
1836	696,347	26,932,470
1837	611,781	21,822,354
1838	640,481	23,038,510
1839	602,128	20,163,199
1840	669,012	23,213 573
1841	774,334	27,225,322
1842	666,626	22,751,013
1843	836,861	28,453,408
1844	1,019,094	34,183,167
1845	1,204,943	45,452,321
1846	1,362,319	51,105,256
1847	2,744,283	73,092,414
1848	1,447,905	50,883,907
1849	1,579,946	52,375.521
1850	2,033,863	55,474,637
1851	1,977,151	53,927,508

The whole quantity of Wheat and Flour which came to the Hudson river from 1834 to 1851, inclusive, with the aggregate market value of the same, and the amount of tolls received on all the Wheat and Flour transported on the canals in each year, from 1847 to 1851, inclusive, is as follows:

Year.	Tons.	Value.	Tolls.
1834	130,452	$5,719,795	not ascertain'd.
1835	128,552	7,395,939	do.
1836	124,982	9,796,540	do.
1837	116,491	9,640,156	$301,739
1838	133,080	9,883,568	308,161
1839	124,683	7,217,841	404,525
1840	244,862	10,362,862	700,071
1841	201,360	10,165,355	621,046
1842	198,231	9,284,778	606,727
1843	248,780	10,283,454	731,816
1844	277,865	11,211,677	816,711
1845	320,463	15,962,950	851.533
1846	419,366	18,836,412	1.099,325
1847	551,205	35,890,928	1,460,424
1848	431,641	21,148,421	1,126,133
1849	434,447	19,308,595	1,128,064
1850	461,781	20,218,188	1,114,519
1851	457,624	16,487,652	867,881

A reduction in the rates of tolls was made on Flour and Wheat, commencing on the opening of navigation in 1851, equal to 25 per cent.

The tons of Wheat and Flour shipped at Buffalo and Oswego, from the year 1835 to 1851, and at Black Rock, from 1839 to 1851, inclusive, and the total tons of Wheat and Flour which arrived at the Hudson river, were as follows, viz:

Year.	Buffalo. Tons.	Black Rock Tons.	Oswego. Tons.	Total.	Tons at tide-water.
1835	15,935	.....	14,888	30,823	128,552
1836	24,154	.....	13.591	37.745	124,298
1837	27,206	.....	7 429	34,635	116,491
1838	57,977	.....	10,018	67,987	133,080
1839	60,082	7,697	15,108	82 887	124 683
1840	95,573	12,825	15,075	123,473	244.862
1841	106,271	24,843	16,677	147,791	201,360
1842	107.522	13,035	14.338	134,895	198,231
1843	146,126	12,882	25.858	184,866	248,780
1844	145.510	15,669	42.293	203.472	277.863
1845	118,614	17,066	44,560	180.240	320.463
1846	217,860	16.564	63,905	328,329	419,366
1847	380,053	18,489	87.329	485,871	551.205
1848	253.325	19,376	90.411	363,112	431,641
1849	229.983	22.926	119.201	371,380	434.444
1850	205,457	24.256	133.473	363,186	461,781
1851	229,526	25.457	146,204	401,187	457,624

The total number of boats, as ascertained by count in 1844-'47-'48, and in 1852, by estimate with their tonnage capacity, and the tonnage delivered at tide-water from the Erie canal, is as follows:

Year.	Number.	Tonnage capacity.	Tons fm. Erie canal deliv'd at tide-water.	Lockages at Alexander's lock.
1844	2,126	117 153	799.816	28,219
1847	3 991	266,260	1 431,252	43.957
1851	4,047	283,293	1,508,677	40,396

It is seen that the total number of boats and their aggregate tonnage capacity, the tons delivered at tide-water, and the lockages at Alexander's lock, are about the same in 1847 as in 1851. In 1847, a portion of the locks between Albany and Syracuse were single, now they are all double.

New Railroad Project.

A survey for a branch railroad from the Rutland and Washington railroad at Middle Granville to this place and the lake, has just been finished by George T. Clark, Engineer of the above road.—The line of survey, we understand, on leaving the Rutland and Washington road, crosses the Granville stream, a little north of the church, in Middle Granville, and runs along south of the travelled road, crossing it near the Baptist Church in West Granville, then entering Granville river valley, it follows to this village, crossing the track of the Saratoga and Washington railroad, it runs parallel to it to the lake. But we believe Mr. Clark is not confident that the line as surveyed through our village is the best way of reaching the lake, and in the event of the road being built recommends a further survey. The average grade of the road is 20 feet per mile, and its alignment will be equal to the average of New England roads—no curve of less radius than 2,000 feet being required. Its length as surveyed is 12¼ miles to Canal street in this village—13¾ to the lake. Mr. Clark has not completed the estimate of its cost, but confidently asserts it will not exceed $20,000 per mile.—*Whitehall Chronicle.*

Travel Between New York and Albany.

An interesting trial is to be made during the present season of navigation, to test the question of the comparative superiority of the Hudson river, and the railroads, as the routes of travel between this city and Albany. Both the Harlem and Hudson River roads are well equipped and in good condition, and the river boats have been put into the best trim, so that both parties are well prepared for the contest.

The public will watch the result with great interest. If railroads shall be able to successfully compete with the Hudson river for passenger traffic, we may consider the question as decided as far as our internal routes of travel are concerned.

Financial Condition of the Delaware and Hudson Canal Co.

Statement made by N. Seymour to the Commissioners of the Legislature, 2d July, 1851:

DEBTOR.

Stock, 72,000 shares $100, issued prior to 1845	$1,922,000
Stock in 1845, to stockholders, at 75c..	1,922,000
Stock in 1848, to stockholders, at 75c..	1,922,000
Stock in 1850, at auction	234,000
Part of $1,500,000, authorised in December, 1850, sold at a premium of $151,144 10, divided in 1850 as part earnings of the co	1,200,000
Total	$7,200,000

CREDITOR.

Canal, 25 miles in Pennsylvania	$1,526,281 27	
" 85 " New York	3,871,620 27	
Total		5,397,901 54
Railroad and appurtenances		744,415 30
Real estate, 4,199 127-190 acres land in Pike, Wayne, and Luzerne counties	$57,008 32	
Do. in State of N. York	177,908 37	
		234,916 69
Canal equipment, boats, tugs, etc		445,913 69
Coal on hand, coal breakers, coal yard fixtures and ledger balances.		376,852 57
March 1, 1851		$7,200,000 00

	1845.	1847.	1849.
Tons of coal mined	276,000	404,000	451,612
Cost of mining	59·22	69·26	61·25
Railroad trans. and repairs, 16 miles	39·22	48·00	47·92
	98·44	1,17·26	1,69·17
Freight to Rondout	92·80	93·16	97·92
Canal repairs and superintendence	28·36	24·30	19·77
Labor at Rondout	9·51	9·24	11·20
Rents, salaries, etc., in N. Y.	9·06	5·75	3·69
Total cost of coal at Rondout	2,38·17	2,49·71	2,41·75
Profit from coal	309.318	562.865	677,487
Tolls on merchandise	25,881	38,971	34,817
Interest	22,985	32,809	
Interest, profits on barges and real estate			131,132
	$358,184	631,645	843.476
Per cent on capital	13	20	16¼

	1850.	1851.
Tons of coal mined	432,339	472,692
Cost of mining	63·25	59·24
Railroad transportation and repairs, 16 miles.	60·55	60·81
	1 23·80	1,20·05
Freight to Rondout	1,05·88	95·41
Canal repairs and superintendence	31·45	27·23
Labor at Rondout	9·85	8·30
Rents, Salaries, etc., in New York	5·80	5·32
Expenses of coal yard, taxes, interest, etc		21·62
Total cost of road at Rondout	2,76·73	2,78·03
Profit from coal	380,519	244,647
Tolls on merchandise	36,671	41,759
Tolls on Pennsylvania company's coal	58,326	116,683
Interest, profit on barges and real estate	126,985	56,192
Profit on stock sold	151,144	
	$756,645	459,281
Per cent on capital	12	6¼

Capital stock in 1845, $2,747,500; 1846, $2,913,800; 1847, $3,173,000; 1849, $5,060,000; 1850, $6,305,000; and 1851, $7,200,000.

Indiana.

Madison and Indianapolis Railroad.—The late annual report of this company presents a very favorable account of its finances, under the able management of John Brough. The receipts of the past year have been as follows:

Amount received for transportation of freights, passengers, mails and express		$354,636 63
For cars built and transportation for other roads		27,770 51
Insurance on Sugar creek bridge		3,000 00
Balance from 1850	$5,315 66	
Less notes of branch roads unpaid, and error in ac'nt.	5,155 00	$660 66
Total		$386,067 80
Expenses of managing and running road, including rent to State, and interest on bonds		$185,080 60
Nett earnings		$200,987 20
Dividend of July, 1851	$77,260 28	
" of Jan'y 1852	81,250 00	158,510 28
Surplus		$42,476 92

This surplus has been charged with the following extraordinary expenditures:

Deferred tax account	$23,736 02	
New depot buildings	3,790 29	
Double track	6,608 34	
New shop at Madison	1,247 00	
Re-building bridges	5,400 00	$40,781 65
Balance to credit		$1,695 27

The cost of repairs of cars and machinery on the road, was less during the last than the preceding year.

The increase of revenue and business over the year 1850, excluding, in both cases, transportation and labor performed for other roads, affords the most gratifying evidence of prosperity. The comparison is as follows:

Transportation receipts of 1851	$354,636 63
" " of 1850	272,308 84
Increase, 30 per cent	$82,327 79
The expenditures of 1851 are	185,080 60
" of 1850 were	149,793 93
Increase	$35,286 67

The expenditures of this year include about $6,000 interest on bonds. In addition to this, the transportation of iron and timber for 30 miles relaid with heavy rail, on the main line and of 4½ miles of double track, and the use of engines and cars in the prosecution of the work, has all been charged to current expenses. Making due allowance for these, the expenditures show but a small increase.

The passenger transportation of the two years compares as follows:

1851, No. of pass.	75,392	Revenue	$109,589 66
1850, No. of pass.	64,986	Revenue	87,465 90
Increase	10,406		$22,123 76

There has been built and put upon the road during the year, 60 box freight cars, 40 platform and hog cars, 1 baggage car, 2 express cars, 2 first class passenger cars, 4 hand cars, and 8 gravel and ditching cars. The motive power has been kept in good condition, and is now ample for even the heavy traffic of the road. The rolling stock is also in good order. We are yet crowded for freight and passenger cars.

That portion of the track between Edinburgh and Indianapolis, that was in use last year under the flat bar, has been relaid with heavy rail, which completes the entire road with that material. The track has been maintained in excellent order, and is now in good condition, with the exception of a portion built by the State, which will require considerable repairs during the present year.

Since the annual meeting of the board of directors, the Legislature of Indiana has passed a bill to provide for the sale of the contingent interest of the State in this road, to the company. The payments divided into four equal annual payments, becoming due on each first of January, 1854 to 1857. The board of directors, at a special meeting on the 4th instant, accepted the provisions of the act, and thus consummated the contract.

A large amount of work has been done during the year and many necessary buildings have been added, and the side tracks have been materially improved. The annexed table shows the great increase in the traffic of the board since 1846, in some of the leading articles:

	1846.	1851.
Merchandise, per 100 lbs	4,654,924	7,040,782
Barrels bour	35,272	93,463
Lard and pork, bbl	4,456	11,990
Wheat, bush	101,104	537,975
Corn, bush	90,993	519,978
Oats, bush	4,430	21,301
Lumber, feet	1,008,700	2,8-0,000
Staves	300,000	345,000
Hoop poles	170,000	365,000
Bacon in bulk, lb	10,760	1,334,151
Hogs, live and dead	53,232	94,982
Molasses, bbl	660	4,347
Oil, bbl	309	1,840
Salt, bbl	7,433	18,026
Coal, bush	3,411	48,971
Lime, bbl	60	11,365
And passengers	22,586	75,432

Ohio and Pennsylvania Railroad.

We have been furnished, by the obliging officers of the Ohio and Pensylvania railroad, says the Pittsburg Gazette, with the following exhibit of its business for the first quarter of the year 1852, to wit:—

Passengers carried in Jan	10,298	
" " Feb	9,521	
" " March	15,060	
Passengers carried in three months	34,879	
Receipts in January—Passengers	$9,999 58	
Receipts in January—Freight	2,058 88	
Total receipts in January	$12,058 46	$12,058 46
Receipts in Februry—Passengers	$8,379 95	
Receipts in February—Freight	2.657 06	
Total receipts in February	$11,037 01	11,037 01
Receipts in March—Passengers	$13,070 08	
Receipts in March—Freight	3,571 20	
Total receipts in March	$16,641 28	16,641 28
Total receipts in three months (not including mail service)		$39,736 75
Total number of passengers carried since the first opening of the road		91,085
Total receipts		$72,979 87

This statement shows a very gratifying increase of receipts for the month of March, and we confidently anticipate a still greater proportionate increase in future. The line being in an unfinished state, the weather very bad, and there being a deficiency of machinery to do the freighting business, all have operated against the business of the road. We may now look for pleasant weather shortly, and several new locomotives are on the way, and will arrive in a day or two. Thus two difficulties will be removed. The finishing of the road is a

work of more time. If the means are provided soon, the work will be completed to Crestline this year. Without additional means it cannot be.—The President and directors are doing all men can do, to push on the work, and we have strong condence that they will succeed.

Whenever the work is finished to Mansfield, we shall have a complete through line of railroad from Pittsburg to Chicago. The through business this will throw upon the road will be immense, and the receipts of the company will advance in a like gratifying proportion.

The work will be opened to Wooster about the first of July. This will add greatly to the business of the road, as every mile added increases the business over the whole line.

Ohio and Mississippi Railroad.

We copy the following from the Advocate, (Salem, Ill.) of April 1st:

"*Railroad Progress.*—Salem, and its vicinity, have been alive the past week with railroad engineers, surveyors, etc., with their respective corps. We have already mentioned the movements of Mr. Galloway and his company on the Chicago branch of the Central road. On Wednesday, three several corps passed through our town, being at work on the Ohio and Mississippi road, and pitched their tents southeast of the town. They are in charge of Wm. Sherwood, Esq., and are engaged in preparing the line for immediate operations. We understand that a body of one thousand men will be at work upon this magnificent road within a month. The enterprising and energetic contractors are determined to push forward their work with the utmost vigor. Already the railroad begins to be a tangible object. A few months will witness the completion of this division. Mr. Sherwood and company are surveying, leveling and staking the line, from hence toward Vincennes."

The work of preparation is not less cheering on the eastern division of the road. Prof. Mitchell, the Chief Engineer, with contractors and several engineers, left to pass along the line to St. Louis—taking the mail boat to Madison, thence by Madison and Indianapolis railway, to Vernon. We understand the road will soon be prepared for location and construction. There are now six parties of engineers in the field, well appointed and equipped. We understand the recent surveys develop a better route than any found before. From the energy displayed by the company and contractors we have assurance of the early completion of the entire road. —*Cincinnati Commercial.*

Progress of the West.

We copy the following from the N. Y. Courier and Enquirer, the Editor of which was stationed as a United States officer at Chicago.

And this West! where is it? What was it a few years since, and what is it destined to become?—The pamphlet now lying before us, containing the reports of the President and Engineer, (John B. Jervis,) of the Chicago and Rock Island railroad, calls to mind very vividly our recollections of the past. Thirty years ago we were a Lieutenant in the Army, stationed at Chicago, which was then a frontier post, two hundred miles in advance of our most western settlement. There were then five sail vessels and one steamer on lakes Erie, St. Clair, Huron and Michigan; and to reach Chicago under the most favorable auspices was a journey of more than a month. Now it is performed with ease, comfort and safety, in 36 hours.

Rock Island, situated in the Mississippi river, was then, even in its relations with Chicago, the far west—being a garrison belonging to the valley of the Mississippi, and approached from the south in summer; while our post of Chicago belonged to the east, and was approached and supplied by way of the lakes during the summer. It became necessary in the winter of 1822 to apprise the command at St. Anthony's Falls, that the Sioux Indians were about surprising them, and had entered into a league with the Winnebagoes for that purpose.

And we had the pleasure of being the first white man in all that region, who was known to have crossed from Chicago to the Mississippi in the winter season. We walked the distance between Chicago and Rock Island in ten days through deep snow and over bleak prairies, with the thermometer below zero, through a tribe of hostile Indians (the Winnebagoes), whom we avoided by avoiding the comforts of the woods and keeping the prairies.

We, however, accomplished our purpose, and were none the worse for our exposure; but little did we dream at that time, that in the brief space of thirty years, all that region would be densely populated—boast of its millions of inhabitants west and south of Chicago, and we be called on to invite attention to the construction of an iron way, destined to connect that distant spot with this city, by means of which the intervening distance could be travelled in 42 hours. The man who at that period would have ventured the prediction that the combined science, enterprise and wealth of the world, could ever have produced such a result, would have been pronounced a fit tenant for a mad-house. And yet, after a lapse of only thirty years, this apparent impossibility has been achieved.

Pennsylvania State Works.

Profits of Main Line, from the Report of Canal Commissioners for 1851, exclusive of Columbia railroad:

RECEIPTS.

From Main Line of canal.....	$375,204	
From Portage railroad.....	249,088	
		624,292

EXPENDITURES.

For maintenance of Main Line of canal.....	$249,882	
Portage railroad.....	340,705	
		590,587
Leaving to pay outstanding debts and interest on State loans.....		$33,705

Columbia Railroad.—The following table shows the collections at this office:

Amount as per last report.....	$49,800 68
Month ending 31st March, 1852.....	55,879 65
Whole amount since Nov. 30, 1851...	105 680 33
Same time last year.....	102,680 08
Increase.....	$3,000 25

Cleveland and Wheeling Railroad Extension.

We are much pleased to find the committees appointed to obtain subscription for this most important work to this city, are efficiently entering upon their work. They have appointed a committee, Messrs. D. Baldwin, Geo. A. Benedict, D. Stedman, M. C. Younglove, and J. Gill, to assess the amount necessary to be subscribed, $100,000, among our citizens.

We think the views of the respected chairman of the general committee, Wm. A. Otis, Esq., as expressed to the committee, worthy of the consideration of every citizen.

He said Cleveland had now arrived at a position where it became her to be on the look out and turn the great avenues of trade and travel towards us.—That Boston was doing this all over the country—that this connection with Wheeling was now emphatically the work which called us to its accomplishment, and though he had no real estate, as we understood him, here except his house and lot, he was willing to do his part in said subscription, let it be $500 or $10,000. He added that we were now much better able to make subscriptions than when we were first called upon to subscribe for railroads, because our property had been very much increasd in value, and we had, many of us, the stock we had taken which we could now sell at or about par; and that the city could, at any time, he understood, be relieved and receive full pay for her bonds of $200 000 to the Columbus road.

Now, when such a man, who is so connected with our public improvements and so well acquainted with our interest, is willing at his age to labor on committees and subscribe liberally, we hope all will emulate his example, and that the amount required will be subscribed promptly.

As Wheeling, Baltimore, and the Cleveland and Pittsburgh railroad company are now interested, a comparatively insignificant amount will now secure the road. Indeed we learn that if we subscribe $100,000 promptly at Cleveland, that the road will be completed this year. This will place us in connection with the Baltimore and Ohio railroad as soon as it shall be completed.

We are all apt to feel, that we had rather hold our dishes and catch the gravy than to be at the expense of furnishing and paying for it—that we had rather have the benefit of the rise of our property by railroads without subscribing, than to exert ourselves to raise the means for such roads. But this is a spirit unworthy of us, and we hope and trust it will be discarded by all.—*Cleveland Herald.*

Illinois.

Alton and Sangamon Railroad.—After careful inquiry, we have obtained accurate and reliable information in regard to the prosecution of the work on the railroad from this city to Alton, which must prove exceedingly gratifying, not only to the two towns, and others along the line, but to those engaged in other railroad projects who regard a connection with this road as a very desirable object.

The managers have, for some months past, been energetically engaged in doing the work, and the assertion may be safely hazarded that no similar enterprise in the United States has been more rapidly advanced than this.

The road for a distance of twenty miles from Alton this way is already in operation, and in a few days eight more will be ready for trains. The heaviest work, which is at Coop's creek, twenty-five miles this side of Alton, will be finished this week, and by the first of May trains will run to Macoupin, thirty-five miles. From Hurricane creek, [forty-two miles from here,] the grading is ready for the rail as far as Virden's, a distance of sixteen miles. At the present time fifteen hundred feet of track are being laid daily.

At this point, and for some distance out of the city, a large amount of work has been done. Ties, iron and spikes are arriving by the Springfield and Naples railroad. The switch at the crossing of that road, two miles south of this city, and four hundred feet of track adjoining, are laid.

The bridge over Lick creek is nearly finished, and the grading contiguous is advancing rapidly.

The bridge over Sugar creek will be completed within at least ten days, if the weather should be favorable.

It is estimated that within seven weeks the track will be laid from here to Lick creek.

There are upwards of twelve hundred hands on the line, two hundred and fifty of whom are working in this county.

The whole road will be in operation by the 4th of July next.

In this connection, we regret to be compelled to remark that a large number of subscribers of stock have failed to pay their instalments when called upon by the proper collectors. Nearly all of these delinquent stock subscribers are men of wealth and ready means, and in but few instances can good excuses be given for their omission to come to time. We understand that the directors are determined to forbear no longer, and we know their character well enough to believe that they will carry out anything they may seriously undertake. They deserve all honor for the invaluable services they have rendered our community and the State, and we hope that they will meet with no impediments in consequence of the neglect of others to meet their engagements.—*Springfield Register.*

Pennsylvania.

Central Railroad.—On the 1st inst., another section of this important work was opened to the public, extending a distance of seven miles, from the big viaduct to Johnstown. This is the first section of the Mountain Division, and it avoids incline No. 1, and the Portage Tunnel, which, together, formed the most serious obstruction on the Portage road. There is a deep, thorough cut, through solid rock on this section, extending 110 feet in depth, and there is a beautiful iron bridge, one hundred and thirty feet long and forty-five feet above the water. This additional length of finished road, at a point of so much consequence, is an important advantage gained for the convenience and

interest of the public. The labor of completing our great highway to the west is being pushed forward with commendable vigor and zeal, and it will not be a great while befcre the locomotive will be running continuously over the entire route, from this point to the head of the Ohio river.—*Philadelphia North American.*

American Railroad Journal.

Saturday, April 17, 1858.

Western Vermont Railway.

The managers of this road (Rutland and Bennington) are now running an accommodation freight and passenger train from Rutland to Arlington and back, daily—a distance of forty-two straight and level miles, leaving but twelve miles unopened, to Bennington and the Troy and Boston junction. The average earnings of the partial train now running, exceed $100 per day, in freight. The number of passengers, also, it is stated, equals the average *per diem* of trains on the New England railroads. The influence of the Western Vermont road upon the prosperity of the Rutland and Burlington, the Rutland Whig says, is too obvious to need remark. This road will form, with the important one last named, a great southern line direct, conveying the morning mails and passengers from New York to Burlington and Montreal, the same day, with a degree of economy and safety probably unequalled on any other route of equal length in the Eastern States.

New York and Erie Railroad.

The Dunkirk Journal says that the arrangements of the New York and Erie railroad company for their second track are such that a distance of sixty miles between New York and Dunkirk will be saved. The saving is mostly gained between Lackawaxen and Lanesboro, and Elmira and Oswego. When completed, the second track will be the shortest possible route by which the west can reach New York.

Northern Indiana Railroad.

We learn, says the Chicago Tribune, that that part of the Northern Indiana railroad between Bailytown and La Porte—a distance of twenty miles—is only waiting for the iron, which is at Dunkirk, and will be laid down in a few days after it arrives. This, when finished, will shorten the distance between Toledo and this city about six miles, and avoid a very heavy grade on the line between La Porte and Michigan city.

We understand the Michigan Southern and Northern Indiana roads propose, as soon as the section referred to above is completed, running an express train hence to Monroe, and put passengers through the entire route between this city and Dunkirk in twenty four hours.

Georgia.

Atlanta and LaGrange Railroad.—We learn from the Lagrange Reporter that the superstructure is now ready for the whole route between Newnan and LaGrange. About three fourths of the grading is finished and several heavy sections will be completed in a few weeks. The passenger train now runs to Chandler's, about six miles beyond Newnan, and is expected to reach the twelve miles station by the first of June. The work on the road was impeded considerably by the severe cold of the last winter, but the work will henceforth go on with rapidity until completed. It is supposed that the road will be completed as far as LaGrange by the first of December.

Great Railroad Scheme.

Connection of St. Louis with New Orleans.—The Western Journal and Civilian, published in the city of St. Louis, and devoted principally to the cause of western commerce and internal improvements, contains an ingenious article in favor of a direct railroad communication, between New Orleans and St. Louis, as an extension, in part, of the Southwestern railroad from New Orleans to Jackson, and thence—according to some favorite plans—to Holly Springs, Mississippi. The plan is for Missouri and Arkansas to build a road from St. Louis to Helena, which is not more than forty miles from Holly Springs, and a branch road of that distance would connect with a point on the Mississippi opposite Helena.

The Picayune goes on to say:—

The distance between the two cities might be reduced to 650 or 700 miles, which, reducing the Journal's figures a little, can be made regularly with all ease in less than two days, and connect New Orleans by the shortest route with the valley of the Upper Mississippi river, so often and for such long periods inaccessible to us. Of course no survey has yet been made of the route from Helena north; but the inquiries of several years have led to the opinion, that all the swamps may be entirely avoided, and that a table land of high ground extends all the way to the southern boundary of Missouri, presenting as favorable a line for railroad construction as any in the United States. Considered as a scheme of connection, what is new of this plan is the road through Arkansas, and the contemplated branch to Holly Springs. The southern portions are already projected, and will certainly be completed within a few years. Entering Missouri in the very heart of the mineral region, it meets the local interest which has already projected a railroad to St. Louis.

This is a speculation indeed, but a very interesting one, worthy of being examined with attention. To bring St. Louis at all times within two days of New Orleans, and the Western and Upper Mississippi regions more close to us than they can ever expect to be to any eastern market, is a scheme not to be lightly regarded, or dismissed without a fair and full examination of the merits of the project. We are seeking to go half-way in that direction, and should be anxious to hear arguments and proofs to show that other States will find it to their interest to build a line on the other side of the Mississippi, to open the way for the expanding commerce of that vast region to come down to a point, where by land or by water it must at length reach New Orleans.

These are interesting themes for discussion.

Pennsylvania.

Road from Philadelphia to the Water Gap.—The Pennsylvania Legislature has passed the bill to incorporate the Philadelphia, Easton and Water Gap railroad company. This projected road is to extend from Philadelphia to some point in Northampton county, with a right to extend it into Monroe or Pike counties, and to connect with the Delaware, Schuylkill and Susquehanna railroad, the Delaware and Gobb's Gap railroad, and the New York and Erie railroad, or any other railroad which may be connected with it in Pennsylvania.

A correspondent of the Philadelphia Commercial List proposes the following route for the above road:

The proper point from which to commence the road is undoubtedly Norristown. The Germantown and Norristown railroad company have an exceedingly fine road running into the city. Eighteen miles of the line is thus already in operation From Norristown to the mouth of Saucon Creek is say 37 miles, then to Easton 6 miles, to Belvidera 12 more, and to the Water Gap another 10. Thus a railroad of 55 miles will soon give us a connection through one of the richest parts of Pennsylvania with the New York and Erie railroad, with a shorter distance to Philadelphia from Lake Erie, and much easier grades. Then to this road will be continued from Saucon Creek up the Lehigh to Mauch Chunk a distance of 36 miles, making the whole distance from Philadelphia to Mauch Chunk, 89 miles. Now let any one complete the list of this road in comparison with the Reading road, with the most liberal allowance and then remember that it goes into an inexhaustible coal region where mining is carried on with much greater facility than in the Schuylkill locality, and what a prospect does it not hold out for remuneration to the capitalist? Granted that a road is made from Easton to New York, the distance is 80 miles, from Saucon Creek to Philadelphia 53. The Easton and New York road with heavy grades, this one just the reverse; capable of being made almost with a descending grade the whole distance. Surely this project must arrest the attention of our enterprising citizens, and ere long be carried into effect.

Pennsylvania Railroad—Mountain Section.—On the first of April, about eight miles of the mountain section of the Pennsylvania railroad were opened. This avoids inclined plane No 1, and the tunnel, and about one-fourth of the Portage railroad. On the 1st of July, some twenty miles of staging in Westmoreland county will be avoided.

The First American Locomotive.

The Charleston Mercury says the first locomotive built in this country was constructed for and used on the South Carolina railroad. The Mercury says:—

This engine would be a curiosity if placed alongside of one of Norris's or Baldwins last improvements. It was named the "Best Friend," and was built under the direction of Mr. E. L. Miller, of Walterboro', at the West Point Foundry, of Messrs. Kemble, New York. The engine had no tender, but carried its own wood and water. The wheels were of wood, with spokes like a wagon, and the wheel armed with a wrought iron tire.

The engineer who ran the first locomotive that was used on this or any other road in the United States, was N. K. Darrell, an apprentice brought up in Dotterer's Machine Shop. He is now, and has been for many years past, the well-known and efficient master of the company's workshops in Charleston.

After a few trips, the wooden wheels of the "Best Friend" gave way, and were replaced by cast iron ones, the pattern for which was made, and the wheels cast by another of Dotterer's apprentice boys, J. D. Petsch, then the foreman of that well-known establishment. These, it is believed, were the first cast iron wheels used on railroads in this country.

The "Best Friend" blew up after a brief career, and from its wreck another engine was built by Mr. Petsch, at the company's workshop, of which he was then in charge. It was called the "Phœnix." Previous to this the crank axle had been used; but in the reconstruction of this engine, Mr. Petsch introduced the straight axle with outside connexions, and also wrought iron tires on the cast iron driving wheels, neither of which, it is believed, had before been tried in this country. Mr. Petsch is now the able and efficient Superintendent of the Motive-power and Transportation Department of the South Carolina railroad, in which important position he has rendered valuable service by the many improvements he has embodied in the plan and construction of locomotives, machinery, workshops, etc.

Maine.

Somerset and Kennebec Railroad.—The Somerset and Kennebec railroad company held a meeting at Kendall's Mills, in Fairfield, on the 30th ult., and organized the company under the charter. D. Bronson, Lot M. Morrill, Eben'r Nye, Joseph Eaton, Sam'l P. Shaw, Wm. Connor, Ezra Totman, Abner Coburn, and Edward Wheeler, were chosen directors. The directors had a meeting, and made choice of D. Bronson as President, Sam'l P. Shaw, Treasurer, and Edward Wheeler, Secretary.

Maryland Coal Trade.

The Cumberland Journal says that the Cumberland Coal and Iron company, recently chartered by the Legislature of Maryland, have transacted much preliminary business for the prompt organization of the company; and adds:

They have purchased two large steamers to carry their coal from Alexandria to the New York market, and are assiduously organizing their boat lines. In addition to this they are now making arrangements with the Baltimore and Ohio railroad, for the immediate transportation to market of an amount of coal that will occupy all the cars and motive power that the company can, with justice to others, devote to that employment.

In the meantime, the companies on Jennon's run are engaged in active operations. The Frostburg, Borden and Allegheny companies are mining large quantities of coal, and making preparations for an expansion of their business as the facilities are increased. The Parker Vein Coal company are rapidly completing their connexion with the Mount Savage road, and in a few days will discharge the accumulated wealth now lying at the mouth of their mines through the two great avenues for transportation.

Alabama.

Girard Railroad.—The Columbus Sentinel gives the following synopsis of the second annual report of the directors of the above road.

The cash receipts of the road were, $17,554,95, the expenditures $17,205 97, leaving a balance on hand of $347 95, up to March 1st 1852.

Subscriptions in grading nine miles have been received, since last report, and $178,400; and the total subscriptions in grading 170 miles, and $491,400, at the date of the report. Besides this, the company have received a subscription of $150,000 from the City Council of Columbus, to be applied to the purchase of iron for the road from Girard to Chunnenuggee. In other respects the monetary affairs of the company remain unchanged.

Forty miles of the road are under contract, and the probability is, that this distance will be graded during the present year.

On the first twenty-two miles, more than one hundred hands are employed, which will soon be increased to one hundred and seventy-five; and it is confidently expected that five hundred hands will be engaged on the work next summer.

The negotiation of the city bonds is now pending; and the President has been directed to let out the contracts for wooden superstructures.

Pennsylvania Railroad.

The directors of the Pennsylvania Central road are about to make a 6 per cent. loan for the purpose of completing and equipping that road.

East Tennessee and Virginia Railroad.

The city of Knoxville is about to vote upon the proposition of loaning its credit to the amount of $50,000 to the East Tennessee and Virginia railroad.

Stock and Money Market.

The money market continues without much change from our last. Money is sufficiently abundant for all useful projects. There is at present no difficulty in negotiating good class securities for new works. The tendency of the best bonds is toward a rapid advance, the best class western convertibles having gone nearly up to par. The prospect for the coming season is very encouraging; our roads should make hay while the sun shines.—All that show a good exhibit, can now borrow money in this market, while at the same time, *nothing* can be done in securities that are not well based.

The receipts of the Baltimore and Ohio railroad for the month of March were $150,236 58, of which $119,098.26 were from the Main Stem, and $31,138 32 from the Washington Branch.

The earnings of the Macon and Western road for March were:

Passengers and mail	$7,316 38
Freight	19,186 39
Total	$26,402 77
Corresponding month last year	18,590 06
Increase	7,812 71

The following sums have been paid by Kentucky for the various specific purposes of internal improvement:

Kentucky river navigation	$901,932 70
Green and Barren "	859,126 79
Licking (unfinished) "	372,520 70
Turnpikes	2,694,239 98
Dirt roads	216,497 07
Descending navigation	14,999 14
Railroads	322,677 00
Survey	10,259 84
General expense account	27,556 26
Engineer's secretary	6,215 16
Total	$5,426,022 64

Frankfort and Louisville Railroad.—The receipts of this road for the month of March were as follows:

Freights	$6,682 37
Passengers	8,761 05
Mail	464 29
Total	$15,907 71

The receipts for express packages are not included in the above estimate, which would increase the receipts of the month to upwards of $16,000.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, APRIL 17, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	107¼
U. S. 6's, 1862	113½
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	118½
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	120¼
Indiana 5's	90
Indiana 2½	43
" Canal loan 6's	88
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76½
Illinois 6's—interest	48½
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	100½
Maine 6's, 1855	103
Maryland 6's	105½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110
New York 6's, 1864-'65	115
New York 6's, ½ y., 1866	115
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	106½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	106
Ohio 6's, 1856	106
Ohio 6's, 1860	109
Ohio 6's, 1870	113
Ohio 6's, 1875	115
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	93½
Pennsylvania 6's, 1847,-'53	101¼
Pennsylvania 6's, 1879	105½
Tennessee 5's	86
Tennessee 6's, 1880	104½
Virginia 6's, 1886	109½

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	108
Cincinnati 6's	99
St. Louis	95
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	107
New York 5's, 1858 '60	100½
New York 5's, 1870-'75	103
New York 5's, 1890	103
Fire loan 5's, 1886	101½
Philadelphia 6's, 1870-'90	106
Baltimore 1870-'90	106
Boston 5's	100½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115
Erie 2d mortgage, 7's, 1859	105½
Erie income 7's, 1855	97½
Erie convertible bonds, 7's, 1871	96
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	103
Reading 6's, 1870	79½
Reading mortgage, 6's, 1860	85
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	97½
Cleveland, Col. and Cin. 7's, 1859	105
Cleveland and Pittsburg 7's, 1860	97
Ohio and Pennsylvania 7's, 1865	98½
Ohio Central 7's, 1861	93

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	April 14.	April 7.
Albany and Schenectady	100	100
Boston and Maine	105	104½
Boston and Lowell	109	109
Boston and Worcester	101	101
Boston and Providence	87	87
Baltimore and Ohio	68	66½
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	142½	—
Delaware and Hudson Canal	110½	110
Eastern	97	97
Erie	89	88½
Fall River	98½	98
Fitchburgh	104½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	76½	73½
" preferred	111½	111
Hartford and New Haven	123	123
Housatonic (preferred)	35	35
Hudson River	64	65
Little Miami	—	—
Long Island	22½	22½
Mad River	—	—
Madison and Indianapolis	—	100
Michigan Central	97½	97½
Michigan Southern	113	112
New York and New Haven	111½	112½
New Jersey	132	129
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	59	58½
Ogdensburgh	25½	24½
Pennsylvania	45	—
Philadelphia, Wilm'gton & Balt.	29½	28½
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	74	73½
Rochester and Syracuse	115	113
Stonington	57½	54½
South Carolina	—	—
Syracuse and Utica	124	125½
Taunton Branch	115	115
Utica and Schenectady	130½	130
Vermont Central	20½	20½
Vermont and Massachusetts	20	20½
Virginia Central	40	40
Western	103	103
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

New-York.

Potsdam and Watertown Railroad.—This road is intended to run from Potsdam, a town in the northern part of New York, in a southwesterly direction to Sackett's Harbor, on Lake Ontario, a distance of 86 9-10 miles.

The object of the road is to bring Potsdam into closer connection with the lakes, as well as to open a prosperous business in that portion of the State, which borders upon the proposed line.

Careful surveys have been made of the country between Potsdam and Watertown, and several routes selected as practicable for the construction of a railroad, of which that running through the village of Philadelphia has the preference, on the score of distance and economy. The grades on that route will not exceed 36·96 feet to the mile, and there are no curves having a less radius than 2000 feet, with the exception of one short one of 1500.

The total cost of the road from Potsdam to Watertown is estimated at $1,140,146 00; to Sackett's Harbor, $1,273,243 94, being an average cost of $14,651 per mile.

With regard to the business of the road, there is every reason to believe that it will be profitable.—The country through which it runs is productive, and is settled with an industrious and thriving population. The amount of local freight that will pass over the road the first year is estimated at 90,000 tons. The population of the 1,200 square mls. tributary to the line is 40,000, which will give on the lowest estimate 80 passengers per day over the whole length of the road, or 20 for each trip. The 90,000 tons above mentioned, at $1 40 per ton, would give $126,000. Allowing 80 passengers per day, the number for the whole year would be about 25,000, which at $2 per passenger would be $80,000, making the total receipts for the first year $176,000. The cost of operating the road according to the engineer's estimate will not probably exceed $80,000, which deducted from the above sum will yield $96,000 for net profits the first year, an amount equal to 8 per cent on a capital of $1,200,000.

When the Potsdam and Watertown road is extended to the Ogdensburg railroad, a direct route to Lake Ontario will be offered to the inhabitants of the northern part of New England.

The Portland and Montreal railroad is now rapidly progressing towards completion, and also a road from Rouse's Point to intersect it. There will thus be formed a chain of railroads from Portland, Maine, to the lakes, which, in connection with the proposed Portland and Halifax road, will present the quickest and most direct route to Europe, as well as to these Atlantic cities.

The travel west from Rouse's Point will take the route via Potsdam and Watertown in preference to continuing on to Ogdensburg, on account of the great amount of time that will be saved by such a course.

From the junction of the two roads to Ogdensburg the distance is 28 miles, which will occupy about an hour; thence by steamboat up the St. Lawrence, and to a point on Lake Ontario, opposite Sackett's Harbor, the quickest time is eight hours, which is often increased by reason of fogs and the intricacy of the channel passed through, making the total time 9 hours. From the same point of departure to Sackett's Harbor, over the Potsdam and Watertown railroad, the time is 3 hours, saving *six hours*.

The construction of the Potsdam and Watertown road will also benefit the Rome and Watertown railroad, for the Potsdam freight destined for New York and Albany, which is now transported by the Ogdensburg railroad, to Rouse's Point and thence by canal and boat to the desired terminus will be conveyed to the Erie canal, via Watertown and Rome, as by that route a distance of fifty miles is avoided, and the additional expense saved.

In fine, the Potsdam and Watertown railroad is a project worthy of success, and though not so brilliant in its prospects as many other roads that are in process of construction, still has its merits, which time will not fail to disclose.

Railroad from Evansville to Nashville.

We have frequently spoken of the importance of this connection. Evansville will soon be connected with the railroads of Indiana, and the whole northern States. Nashville, during the present year, will be governed by railroads to Charleston and Savannah. The short link between Nashville and Evansville, will soon only be wanting, to form a circuit which shall embrace the greater part of the settled portion of the Union. For no equal distance in any part of the country can a railroad be built at less cost, and none promises a better return. Will not our Kentucky friends turn their attention to the above road? It can be built within 18 months after the first blow shall be struck. It is a project that can command abundant means abroad, if the people along the line will make the effort required of them. We regret to see a line of so much importance to the whole railroad system in the country, remain so long untouched. Unless its friends move before the Louisville and Nashville railroad shall be completed, they may as well consider their project as abandoned, for after an outlet in another direction shall be opened, capitalists will not assist in building what would be in some respects, a rival line.

Indiana.

Lawrenceburg and Upper Mississippi Railroad.—This road is to extend from Lawrenceburg, a town on the Ohio, 20 miles below Cincinnati, to Indianapolis, a distance of 90¼ miles.

The object in constructing the road is to afford a shorter communication between Indianapolis and Cincinnati than any now existing. The shortest route between these two cities at present is by way of the Cincinnati and Hamilton, the Hamilton, Eaton and Richmond, and the Indiana Central railways, a distance of 140 miles. By means of the proposed route, the distance will be reduced to 110¼ miles.

The importance to Cincinnati of a short railroad connection with Indianapolis will readily be understood, when we consider that the latter city is the diverging point of a number of important railroads, such as the Lafayette and Indianapolis, the Terre Haute and Indianapolis, the Peru and Indianapolis railroads, etc. By the first of these roads Cincinnati becomes connected with the city of Chicago, also with Galena and Rock Island, important points on the Mississippi river. By means of the Indianapolis and Terre Haute railroad, Cincinnati is connected with St. Louis and with central Illinois. The Peru and Indianapolis railroad affords a connection with the Northern part of Indiana, and when extended, as proposed, with southern Michigan.

The total distance from Cincinnati to Chicago is 303 miles, all of which is announced will be graded within the present year, and the iron laid upon 160 miles in the same period. The distance from Chicago to Galena is 180 miles, and the same to Rock Island, making the whole distance between those points and Cincinnati 480 miles, over the Lawrenceburg and Upper Mississippi railroad.

The Terre Haute and Indianapolis railroad is now in complete operation, and active measures are being taken to ensure an early connection by railroad between Terre Haute and St. Louis, with a branch to Alton, and another to Quincy, also, a direct road to Keokuk.

The Lafayette and Indianapolis road will be under travel this year, and the prospects of the western extension of the same road to Burlington, on the Mississippi, are very favorable.

A profitable business is estimated for the Lawrenceburg and Upper Mississippi road, from the known success of the Madison and Indianapolis railroad. In 1850 the number of passengers over that road was 64,986. In 1851 the number was 75,432. Allowing one-half for way passengers, the number travelling to and from Indianapolis and the river is estimated at 37,716. It is well ascertained that the great majority of through passengers pass to and from Cincinnati; so that when a shorter route is constructed from that city to Indianapolis, it is but natural to suppose that the travel will take that route.

The population of the nine counties directly tributary to the road is 143,063; the value of real estate owned is $28,662,255. The number of bushels of wheat raised in 1849, according to the census report, was 765,096; bushels of Indian corn 9,209,828. The wheat crop of 1849 was an almost entire failure; the amount usually produced is at least ten times that of 1849. From this it will readily be seen that the local traffic, as well as the through traffic of the road will be great.

The cost of the road, including the right of way, grading, bridging, superintendence, laying superstructure, etc., has been carefully computed at $998,932,00, being $11,007 per mile. The *total estimated cost* of the road, when thoroughly equipped, and furnished with Depots, Water Stations, Shops, etc., is $1,250,000, making the average cost per mile, $13,174,

The whole line from Indianapolis to Lawrenceburgh is under contract for the preparation of the road bed, and furnishing cross-ties. The construction of the first 17 miles was let in 1849, and is now, together with some portion of the 2nd division, ready for the superstructure. The last 40 miles was let in January last, including the cross-ties and laying of the track, on advantageous terms for cash, stock and bonds, to responsible parties at Indianapolis. These parties are to finish the grade and lay the track to Shelbyville, this fall, and the residue to Indianapolis by the 1st October, 1853.

The amount of work completed in preparing the road-bed is, $119,148; the amount which remains to be done is $209,364. Upon the $119,148 completed, payment has been made to $106,062; the balance is payable in stock or real estate.

The resources of the company are as follows:

Subscriptions payable in cash.....	$216,070
" " in real estate, in Dearborn, Decatur, Ripley, Shelby and Marion counties.....	358,469
Subscriptions in materials, work, etc.....	82,400
City of Lawrenceburgh 6 per cent bonds.	40,000
County of Decatur 6 per cent. bonds.....	100,600
Total.....	$796,939

To procure the rails, chairs and spikes, and ma-

chinery, it is proposed to issue $500,000 of mortgage bonds, *the first and only lien upon the road*, the sales of which will be amply sufficient for the purpose, together with the other means of the company.

The resources of the company will then be as follows:—

Stock subscriptions, as before stated....	$796 939
Bonds to be taken by contractors.....	136,000
Mortgage bonds now offered.....	500,000
	$1.432.939
Cost of road fully equipped.....	1.250,000
Excess	$183,939

These bonds run fifteen years, and are convertible into stock at the pleasure of the holder, within five years from date.

The expenses of construction are thus amply provided for, and in all probability the road will be completed and in running order before the close of the year 1853. Cincinnati will then be brought into closer connection with Indianapolis, and another important line will be added to those already existing and contributing to the wealth and prosperity of Indiana.

Great Through Line Railroad.

It may be interesting to our readers to learn, says the Indiana State Journal, as it is gratifying to us to know, that it is in contemplation to have the entire connected through railroad from Philadelphia to St. Louis, of the same gauge, (being the Pennsylvania and Indiana gauge of four feet eight inches and a half.) Such a line when completed must necessarily become the great interior live stock line of the United States, and in that character alone must do an immense business, besides its other and usual business. The several links of this great chain, are as follows: From Philadelphia to Pittsburg, from Pittsburg to Columbus, Ohio, by Steubenville and Coshocton, from Columbus to Union, by Urbana and Piqua, from Union to Indianapolis by Winchester, Muncie, and Anderson, from Indianapolis to Terre Haute, and from Terre Haute to St. Louis; the entire line from Philadelphia to St. Louis is in rapid progress of completion, except the section across the State of Illinois, west of the Wabash river, and even that we learn will be pushed forward without further delay. It is confidently believed, that all the gaps will be closed in the line between our city and Philadelphia, in the course of the next eighteen months at the furthest, giving us a continuous line of the same gauge, from Philadelphia to Terre Haute, on the Wabash.

Buffalo and State Line Railroad.

This road has been doing a very profitable business since its opening on the first of March last.—The road is 69 miles long and cost about $1,800,-005. The gross earnings for March, were $22,300, or an average of $720 per day; its earnings for the first six days of April, were $7,022 28, being an average of $1,170 per day. During this time the travel for 62 miles west of Erie, has been by stage over a very bad road—navigation not yet being open between Erie and Cleveland. The amount of capital subscribed and paid in, is $800,000, of which $250,000 is owned by the New York and Erie railroad company, and $250,000 by the New York Central roads. At the State line it connects with the Erie and North-east road, and the connection is kept up with Cleveland by the Cleveland, Painesville and Ashtabula road, which will be completed next summer. This road will then be the connecting link of the New York Central line of roads, and the Erie road and the web of roads radiating from Cleveland. During the suspension of navigation on the Lake it must do an immense business.

Hempfield Railroad.

The directors of the Hempfield railroad have advertised the letting of the grading of twelve sections of the Hempfield railroad, between Wheeling and Washington, including a tunnel of 1500 feet in length, east of Washington. The Wheeling Gazette says that of the twelve sections now advertised, two are on the property of Mr. Steenrod, near Wheeling; three at West Alexander; three east of Claysville; two at Potter's Summit; and one near Washington. The tunnel through Brady's Hill east of Washington, is a very heavy job, and if not commenced immediately, would prevent the early completion of the road.

The work to be let includes the heaviest sections between Wheeling and Washington.

The Wheeling Gazette says that the remainder of the work between Washington and the Monongahela, will also be offered for contract, at an early day.

Illinois.

Galena and Chicago Railroad.—The Galena Advertiser announces that a letter has been received in that city from the President of the Galena and Chicago railroad, which states that an offer has been made for $150,000 of the bonds of the Third Division (from Rockford to Freeport) by a party in New York; and an offer has also been made to furnish 3,000 tons of iron on advantageous terms.

We doubt not, says the Chicago Tribune, but that prompt measures will be taken for the early completion of that division of the road. The Central company, it will be seen by their advertisement, are ready to receive proposals for the construction of so much of the Galena branch, as lies between Freeport and Galena. The Galena and Chicago company have agreed to complete their road to Freeport by the time the former shall reach Galena. They will doubtless be abundantly able to comply with their agreement. Such has been the judicious management of this road, and so satisfactory its business thus far, that it is no longer necessary to appeal to the patriotism of capitalists to subscribe to its stock or buy its bonds. We congratulate our citizens upon the flattering prospect of an early completion of their earliest projected and favorite road.

Alleghany Valley Railroad.

We notice, says the Pittsburg Gazette, the appointment of Milnor Roberts, Esq., as Chief Engineer, and Mr. Geo. R. Eichbaum as assistant engineer of this road. The reputation of Mr. Roberts as an engineer is widely and favorably known.—Mr. Eichbaum is a younger man. He has recently served on the Cleveland and Wellsville road in the capacity of principal assistant, in which post he evinced talents of a high order.

We are glad that the directors have ordered a vigorous prosecution of the surveys of the several routes—three below Kittanning and four above—all to be entered upon immediately by three distinct corps of competent engineers. That the gentlemen to whom the work has been entrusted will give us a reliable report we feel perfectly assured, and from our general knowledge of the country, we are equally sanguine that the report will be highly favorable, both as to cheapness of construction, and easy grades and curvatures; and what is even more important, that they will be able to show from undeniable data that the amount of business which the road will be required to do at once will cause it to be a very profitable investment.

Municipal Bonds Issued in the State of Pennsylvania.

In reply to a resolution adopted in the Senate, some time ago, calling upon the Auditor General for a statement of the bonds, script, and other certificates of indebtedness issued by the several counties, incorporated cities, districts, and boroughs of the commonwealth of Pennsylvania, that officer has communicated the following statement showing the amount of bonds, script, and other certificates of indebtedness issued by counties, incorporated cities, districts, and boroughs subject to the State tax imposed by the 42d section of the act of 29th of April, 1844:—

County of Alleghany.....	$1,000,000 00
Chester.....	23,400 00
Philadelphia.....	1,613,067 33
City of Alleghany.....	640,824 41
Erie.....	6,830 58
Lancaster.....	187,780 00
Philadelphia.....	5,467,200 00
District of Northern Liberties.....	295,700 00
Pennsylvania.....	138,000 00
Southwark.....	366,000 00
Borough of Westchester.....	32,700 00
	$9,866,502 32

Georgia.

Lagrange and West Point Railroad.—The Lagrange Reporter contains the following information in reference to the progress of this road:

"From a recent conversation with one of the heaviest contractors and largest stockholders connected with the company, we learn that the superstructure is ready for the whole route between this place and Newnan. About three-fourths of the grading is also finished, and several heavy sections will be completed in a few weeks. The passenger train now runs out to Chandler's about six miles on this side of Newnan, and, by the first of June, it will reach the twelve mile station. The progress of the enterprise was greatly hindered by the severe cold of the late winter, but now that the delightful season of spring has set in, we may hope that the work will go bravely on to consummation. With these prospects, we safely predict its completion between the first of November and the first of December ensuing."

Railroad From Baltimore to Westchester.

We have, says the Bel-Air Gazette, been favored by a friend with an extract of a letter from a gentleman, an engineer on the Westchester and Philadelphia R. R., from which it appears that the officers of that company take a lively interest in the proceedings had in this county in relation to the project of constructing a road from Baltimore to Westchester, Penn. The measure seems to have taken hold of the minds of many influential citizens, and in such hands its plausibility must appear. The committee appointed at Bel-Air have proceeded to Westchester to confer with the company there, agreeably to their instructions.

Ohio.

Toledo, Norwalk and Cleveland Railroad.—Information has been received from Mr. Boalt, President of the above road, who is now in England, that he has purchased 10,000 tons of rail, of which 1,600 tons was on the dock at Portsmouth. It is now expected to have this road run by the first of January, 1853.

Peoria and Oquawka Railroad.

We give below a portion of the recent exhibit of this company, relating to the business prospects of the road:

BUSINESS PROSPECTS OF THE PEORIA AND OQUAWKA RAILROAD.

It has been fully demonstrated by the experience of all the western roads that have been opened, that they are much more productive than those of any other portion of the United States. The reason of this is obvious. They cost much less, while a given area of western territory furnishes a larger amount of business than the same extent in any other portion of the country, from the superior productiveness of the former, and from the fact, that agriculture being the sole pursuit of its inhabitants, all surplus has to be exported, there being no domestic market. Such a market can only be created by a *diversity* of industrial pursuits. All surplus products of the west are therefore thrown upon the routes of transportation, to be sent to distant consumers. There is no domestic demand and exchange, which confine within a narrow circle the consumption of the aggregate products of a community. The same cause that creates such a large export trade from the west, renders an equally extensive import trade necessary. The one must be very nearly the complement of the other. The western farmer, confining himself to the culture of agricultural staples, is compelled to import from abroad all articles of consumption which his farm does not produce. His ability to purchase is measured by his ability to sell. The import and export trade of the west, therefore, are very nearly equivalent to each other; and, together, involve an amount of transportation nearly equal to the entire products of the country.

These general statements, presenting in its true light the *principle* upon which western commerce is based, will probably convey a more correct idea of its extent, than could be done by the most imposing array of statistics. It is believed to be a correct explanation of the cause of the unexpectedly large and lucrative business of western roads, which is fast making their stocks and bonds the favorite securities in the market.

The friends of the Peoria and Oquawka claim that they cannot only show the basis of a most lucrative traffic, from data of an existing business, but that their road most emphatically comes within the general principle already stated. It possesses, in an eminent degree, every element of a large and profitable business.

LOCAL TRAFFIC OF THE ROAD.

The belt of country traversed by the Peoria and Oquawka railroad, is well known to be one of the most fertile, best cultivated and productive portions not only of Illinois, but of the west. Below we give a list of the counties traversed by the road, with the population of each.

Henderson	4,601
Warren	8,232
Fulton	22,276
Peoria	17,552
Knox	13,280
Total	65,941

Showing an average population of 26 to the square mile, which will compare favorably with many of the best parts of Ohio and Indiana.

The statistics of the amount of the products of the State, by counties, are not at hand, but the general census for 1850 furnishes us with the aggregate amount of production of some of the leading articles. The amount of wheat and corn produced in the State in 1849, was 66,613,248 bushels, which to a population of 851,000, averaged over 78 bushels to each inhabitant. When we take into consideration the fact, that the counties named are purely agricultural in their pursuits, while other portions of the State are devoted to mining and commerce, and also the fact, that the production of extensive sections is very small, from the difficulty of sending to a market, it cannot be doubted that the production of the above counties equalled 100 bushels to each person. This would give an aggregate of about 6,600,000 bushels within the territory named. Allowing 20 bushels to each person to be retained at home for domestic consumption, there would be 5,280,000 bushels of the articles of corn and wheat for exportation over the above road. These, at 3 cents per bushel, would alone give a yearly income of $160,000. To this source of revenue must be added all the other productions of the counties, such as wool, beef, pork, oats, etc., etc., which must more than equal that to be derived from the articles of wheat and corn, making an aggregate income of $320,000 from agricultural products. Allowing one-half for working expenses, this sum would leave $160,000 for net income, equal to 14 per cent upon the cost of the road.

This estimate is based upon the present amount of production. There cannot be a doubt that the proposed road would more than double it, from the vastly increased price which it would enable the farmers to realize.

The railroad, as is well known, will traverse the great Illinois *coal field*, to which, at either terminus, an almost inexhaustible market would be opened, not only in the ordinary demand for domestic purposes, but for steamboats navigating the Mississippi and Illinois rivers, and for the vast number of manufacturing establishments, which always spring up where fuel is abundant, but which, in that portion of Illinois must be driven by steam, for the want of suitable water power. The coal upon the line is not only most abundant, but presents large workable seams above the water level. There can be no doubt that the business to be derived from the coal trade alone, would afford a good revenue.

As the country traversed by this road is well filled with an active and industrious population, it is believed that the receipts from local travel will be equal to that of any western railroad of equal length. The following statement shows the passenger receipts of the several western roads for the past year:

	Length.	Passenger receipts.
Madison and Indianapolis	89	$109,589 66
Little Miami	84	224,737 99
*Cleveland and Columbus	135	216,907 81
Columbus and Xenia	54	135,829 27

The total receipts from the above roads for the past year have been as follows:

Madison and Indianapolis	$354,636 63
Little Miami	487,815 59
*Cleveland and Columbus	341,689 96
Columbus and Xenia	211,631 37

The past, was the first year's operation of the two last named roads. Of course their business capacity is only partially developed.

The cost of the roads named have been as follows:

Madison and Indianapolis	.....
Little Miami	$2,409,748 99
Cleveland and Columbus	3,008,016 48
Columbus and Xenia	1,194,073 70
	$6,611,839 17

The cost of the Madison and Indianapolis railroad is not given, as its present cost to the stockholders cannot be well ascertained, owing to the recent purchase of the State's interest. It does not however exceed the average cost of the other roads named. With this exception, the receipts of the above roads, upon a cost of $6,611,839 17, allowing the yearly receipts of the Cleveland and Columbus to be double those of the past six months, are $1,282,827 18, or nearly 20 per cent upon their entire cost. Allowing 33 per cent of the gross earnings to cover expenses, this would leave $855,-218 12 as the net earnings, or 14 per cent upon the cost.

The cost of the Peoria and Oquawka railroad will average much less than the above roads, from the greater facilities for construction. Its income upon its cost, it is believed, must be fully equal.—No one who will examine into its business capacities, can doubt that it will come up to the above standard.

THROUGH TRAFFIC.

The first connection to be accomplished, is with the city of Chicago, which is fast becoming the great *entrepot* of the commerce of the northwestern States. The low rate of transportation between that city and New York, makes the northern or lake route, not only the cheapest, but the route of convenience. The territory west of Chicago bears the same relation to that city, that the western part of the State, does to the city, of New York. A road running westerly from the former, is a *through* route to all the country beyond its *western* terminus.

It is well known that by far the larger part of the population of the flourishing State of Iowa, which is rapidly assuming a leading rank among the western States, is embraced in that portion of the State opposite the western terminus of the above road. The business of this portion of Iowa centres at *Burlington*. The population of the southern part of the State dependent upon the above road for an outlet, amounted to 125,000 inhabitants in 1850; or three-fifths of the entire population of the State. The same territory cannot now contain less than 200,000 people. To this may be added at least 50,000 inhabitants of the State of Missouri, who will use the above road, and an equal number in Illinois not embraced in the counties upon its line, but who must use it as their outlet to a market. As soon therefore as the road can be opened, it will at once be called upon to meet the commercial and travelling wants of at least 300,000 inhabitants.

The great business avenues now used by all these people, for the want of railroads, are the Mississippi and Illinois rivers. The latter has now, through the Illinois canal, a connection with Chicago; and the result of this has been to change the direction of produce of central Illinois, from the southern route by way of New Orleans, to the northern route by way of the lakes. A great drawback to the usefulness of the canal is the fact, that it is closed four months in the year, the most convenient period for forwarding produce to a market. The people living upon the Mississippi are still compelled to use the New Orleans route. The inconvenience arising from this may be well illustrated, by the injury and loss suffered by the pork trade, which is now an important branch of business in Illinois and Iowa. The Mississippi river closes at Burlington about the commencement of the packing season. The packers are therefore compelled to hold their pork till spring, when it is sent to New Orleans. It does not reach that point till the hot season commences, from which as well upon ship board in the Gulf, as at New Orleans, the quality of the pork is often seriously injured. With a railroad from Burlington to Chicago, it would be sent off to the latter city, as fast as slaughtered, to be forwarded to New York, via the canal, as soon as it should open. Pork, by taking this route, would reach its point of destination at less cost for transportation, with an entire saving of the loss from depreciation of quality, now suffered in the transit by way of New Orleans.

What is true of pork is also true of all other articles of merchandise exported from, or imported into, the great northwest. The Mississippi route has been used as a matter of necessity. The northern route will become the favorite outlet of that portion of the country, as soon as connections with it shall be opened. This may be said to be the primary, as it is one of the leading objects in the construction of the Peoria and Oquawka railroad.

From this statement of facts in reference to the *convenient* route, and future direction of western trade the importance of lines of railway leading from the lakes to the Mississippi river, will be readily understood. A vast business has been developed, and is in active movement upon that great water course. Railroads whenever they strike it, will turn this business from its old into new channels. The river collects upon its banks the trade of the whole contiguous country. No railroad lines in the country are more important than those connecting Lake Michigan with the Mississippi, and which are to transfer this trade to the former; and it is believed that no person can maturely consider the subject, without coming to the conclusion, that the Peoria and Oquawka must be one of the most important and profitable of these lines.

The proposed eastern connections of the above road are regarded as very important. Burlington is very nearly on the same line with Lafayette, the most considerable town in north western Indiana, and destined to be a large city. From Lafayette a road will soon be constructed up the valley of the Wabash to Fort Wayne. From that point a line

* For six months,

of railroad is in progress to Pittsburg, the whole forming a very short route between the latter city and Burlington. For the western portion of the Peoria and Oquawka road, the Illinois Central road will furnish an additional outlet to Chicago. It will be seen by reference to a map, that Burlington is very nearly on a line with Pittsburg, Pennsylvania, and with Lafayette, Indiana. These two cities must soon be connected by a railroad, of which the Ohio and Pennsylvania railroad will constitute a conspicuous link. The latter road is being carried to Fort Wayne, by the Ohio and Indiana railroad. From Fort Wayne, following down the valley of the Wabash, a railroad will soon be constructed to Lafayette. From the last named city to Peoria, will then be the only link wanting to a direct and continuous line of railroad from Pittsburg to Burlington, from whence it is proposed to carry it to the Platte river, on the route of the great Pacific railroad. It is believed that the line indicated will prove a part of the shortest and best route for a railroad running from the Atlantic to the Pacific.

Michigan.

New Albany and Salem Railroad.—Mr. Brooks, President of the New Albany and Michigan railroad, returned home from his visit east early this week. We learn that he disposed of all the old bonds (ten per cent.) amounting to $250,000, which will be sufficient to meet the present wants of the road. Of this sum, $50,000 was applied to the payment of 2,000 tons of iron, now at New Orleans, and which will be sufficient to lay the track to Bloomington.

Mr. Brooks did not attempt to negotiate any portion of the new loan by the directors, the demand for American railroad securities by parties in England being so great as to warrant the belief that the loan can be secured on more favorable terms a short time hence than at present.

The cars will, on the first of next month, run to Pless's, within about a mile of White river. The regular passenger train will leave here, as usual, in the morning, and return in the evening; but an "accommodation train," for freight and passengers, will leave Pless's for New Albany also in the morning. It is designed that passengers leaving here in the morning train shall be able to reach Bloomington the same day. Mr. Orchard will have a coach in readiness for passengers on the arrival of the cars each day.

We cannot but congratulate our readers and all having business intercourse with New Albany, on the rapid advancement of this work, and the high position it holds among similar works in the West. Too much credit cannot be bestowed on Mr. Brooks, the directory, and indeed all the officers connected with the road, for the rapid advancement it has made and the satisfactory manner in which its business is carried on.—*New Albany Ledger.*

Vermont

Suits Against the Vermont Central Railroad.—At the recent session of the County Court in Washington county, were tried nine actions against the Vermont Central railroad for damages in overflowing lands, running over cattle, etc., in all of which, except one, there were recoveries against the company. The court remained in session three weeks, but did not try more than half the cases set down for trial.

N. W. Lincoln has commenced a suit for slander against James Moore, late superintendent of the Vermont Central railroad, demanding $10,000 damages.—*Brattleboro' Eagle.*

Canada.

Toronto and Guelph Railroad.—The meeting of the stockholders to elect a board of direction took place on the 30th ult., at Toronto, when the following gentlemen were elected, viz:—Messrs. Dr. Herrick, J. H. Cameron, J. Hutchinson, L. Moffatt, W. Gooderham, Dr. Gwynne, S. Thompson, F. Widder, Mr. E. F. Whittemore, J. M. Strachan, Sheriff Grange, G. Duggan, Jr., and W. P. Howland. The rate payers of Chinguacousy, by a majority of 94, have determined to take stock in the road.

New York.

Buffalo and New York City Railroad.—This road is now opened to Portageville, on the Genesee river, and will by midsummer, probably, be opened to Buffalo. The bridge over the Genesee is a stupendous work, the flooring of it being 234 feet above the bed of the river. We hope to be able soon to present a minute account of this great work to our readers.

To Contractors.

SEALED Proposals for the grading and masonry of two divisions of the line of the *Hartford, Providence and Fishkill Railroad*—one extending from Providence to Willimantic, the other from Bristol to the Naugatuck Valley—will be received at the Company's Office, Hartford, up to the 29th inst.

Plans, profiles and specifications will be ready for examination on and after the 22d inst., at the same place, and information regarding the route may be obtained at the Company's office in Providence, Willimantic and Bristol, as well as at the Engineer's office in Hartford.

The directors will require security for the faithful execution of the work, which is to be divided into sections of convenient length.

The Directors also reserve the right to reject such proposals as they may consider unsatisfactory.

SAMUEL ASHBURNER, Chief Engineer.
Hartford, April 5th, 1852.

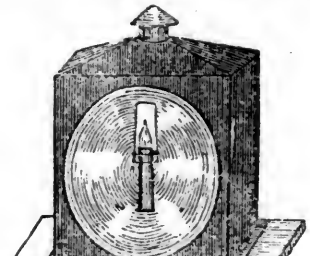
To Contractors.

SEALED Proposals will be received by the undersigned at his Office in Lambertville, until the 22d day of April inst., for the Grading and Masonry of twelve miles of the Belvidere Delaware Railroad. The work will be ready for inspection, profiles and specifications will be shown, and blanks furnished, on and after the 19th inst.

ASHBEL WELCH,
Engineer B. D. R. R.
Lambertville, N. J., April 7th, 1852.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.



Olcott & Brother,

INVENTORS and Manufacturers of the celebrated Locomotive Lamps, to whom was awarded the FIRST premiums by the American Institute, and also at the State Fair held at Rochester, N.Y., in 1851. These Lamps are in general use throughout the United States. We are now prepared to furnish Lamps of every description used on Railroads, and a better article than any other establishment in the United States. A. R. GILLMORE, Agent,
35 Canal st., New York.
OLCOTT & BROTHER, Rochester, N. Y.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.
January 31, 1852. 1m

Notice to Contractors.

HEMPFIELD RAILROAD.

PROPOSALS will be received from the 19th to the 26th of April, at the office of the Engineers, in Wheeling, for the grading of twelve or more sections of the Hempfield Railroad, including a tunnel 1500 feet in length, through Brady's Hill, east of Washington, and other heavy work between Wheeling and Washington.

Profiles and specifications, with approximate estimates of quantities, will be supplied at the office.

T. M. T. McKENNAN, President.
CHARLES, ELLET, Jr., Engineer.
Washington, Penn., March 23, 1852.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch. WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River.....	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian...	53 "
Sixth	"	"	Bloomington to the Illinois River....	60 "
Eighth	"	"	from Freeport to Dubuque.....	67 "
Ninth	"	"	Chicago to Kankakee river.....	55 "
Tenth	"	"	Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required. R. B. MASON,
Engineer in Chief Illinois Central R. R.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested. to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer.

Engineer's Office, Pittsburgh, }
March 22, 1852, }

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,

J. W. BIRD.

East Tennessee and Georgia Railroad.

TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.

THOS. H. CALLAWAY, Prest.

Railroad Office, Athens, Tenn., }
1st March, 1852. }

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,
6m*14 75 Broad st., New York.

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad, }
Supt's. Office, New Haven, March 12, 1852. }

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

Railroad Iron.

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B. J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports of the United States.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision. Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Phila'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

Office, Penn'a Rail Road Co.
Phila'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly. HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction. W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country. H. D. BIRD.
President.

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH.
Sup't Trans. & Motive Power So. Ca. R. R. Co.

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction. F. C. ARMS,
General Superintendent.

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON.

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,
FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square,
BOSTON.

Lithographic Printing,
169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction – India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agen

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS.,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper,

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER, Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,
Of elegant designs and colors.
GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR
Of every description and quality.
New York, 1850. 1y16

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 17] SATURDAY, APRIL 24, 1852 [WHOLE No. 836 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

European and North American Railroad.....257
Susquehanna Railroad.....260
Copper Mines of Lake Superior.....260
Ohio Central Railroad.....260
Ohio County Securities.....260
Trade and Tonnage of the Erie Canal.....2 1
Grant of Public Lands for Railroads.....261
Coal Trade for 1852.....261
Report of the Committee of the New York Legislature in reference to Railroad Accidents..262
Railroads in Tennessee.....263
Western and Atlantic Railroad.....263
Railroad Legislation.....264
Chester Valley Railroad.....264
Baltimore and Ohio Railroad.....264
Indiana Central Railroad.....265
Stock and Money Market.....265
Buffalo, Corning and New York Railroad.....266
Tehuantepec Railroad.....266
Population of the Cities of the U. S.....267
General Appropriations for Internal Improvements.....267
Covington and Lexington Railroad.....268

American Railroad Journal.

Saturday, April 24, 1852.

European and North American Railroad.

The following petition to Congress has been presented in the House of Representatives, and notice has been given of two bills in conformity with the prayer therein:—

To the Honorable, the Senate and House of Representatives of the United States of America, in Congress assembled—

The undersigned, Executive Committee for the State of Maine, to promote the construction of the European and North American railway, and Corporators named in an act passed by the Legislature of Maine, and approved August 20th, 1850, incorporating said company, ask leave to present the claims of that enterprise to the Congress of the United States, and respectfully invite their aid, assistance, and encouragement to the undertaking in such manner, and to such extent, as in the wisdom of Congress, it may be thought worthy to receive.

The plan of the European and North American railway is based upon the simplest principles of physical geography and of commercial convenience. When constructed, it completes the chain of railroad from the city of New York to the nearest available point of this continent to Europe, and will reduce the sea voyage, across the Atlantic Ocean, to the lowest possible limit, and shorten the transit between New York and London, to six and one-half days time, under ordinary circumstances, and to an average of seven days, during the year.

From Arranmore Light in Galway Bay, to Cape Race in Newfoundland, the distance of the arc of a great circle is 1694 miles, and to Louisburgh harbor about 1950 miles, and to Halifax, Nova Scotia, the entire distance from Galway, is estimated to be 2130 miles. From Halifax to New York city the distance is 867 miles, but will be finally reduced to about 850 miles in all; over the entire line of which route, railway trains can pass, without the interruption of a ferry, a break of the line, or the labor of encountering severe grades, or any engineering difficulty whatever.

Experience has now established as a general rule, the fact, that the useful speed of railway trains, may, under all possible circumstances, be three times as great as that of a steam ship or sailing vessel. The advantage gained and the time saved, in the passage of the mails between New York and London by adopting the plan proposed, over the present international postal system, may be illustrated as follows:

From New York to London.

	Miles.	Days.	Hrs.
Railway from New York to Halifax	876		17
Steamer from Halifax to Galway	2130	5	5
Railway from Galway to Dublin	126		2½
Steamer from Dublin to Holyhead	63		3
Railway from Holyhead to London	263		5
	3458	6	8½

In the foregoing estimate a speed of railway transit is assumed, such as is employed on the English express trains, and the speed of the steamer is taken at one-third the time allowed for the passage of the railway train. Allowing 3½ hours for shifting of mails and baggage, and the time occupied in the transmission of the mails from New York to London is 6½ days, employing the present rates of speed on the most approved and best constructed railways in England.

Applying the same rates of speed to the present route from New York to London, and the result is as follows:—

	Miles.	Days.	Hrs
Steamer from New York to Liverpool	3100	7	14
Railway from Liverpool to London	211		5
	3311	7	19

Difference in favor of the European and North American railway route, 1 day 10½ hours.

But this comparison by no means does justic to the relative advantages of the two routes. Steamboats, like race-horses, go with increased speed as you reduce the unnecessary load, and by the shorter sea route, the difference in speed may undoubtedly be increased equal to *two miles per hour* for the entire voyage. Assuming the correctness of the foregoing statement, the following result is shown:

	Days.	Hrs.
Steamer from New York to Liverpool	8	14½
Railway from Liverpool to London		5
	8	19½

Difference in favor of the European and Galway route 2 days 11 hours, equal to 59 hours time saved.

The chances would be in favor of the longest land route and the short sea voyage. The certainty attainable in railway transit, the facilities for repairing accidents, and supplying improved engines to make up for detentions, on the one side; and the increased risks of a long sea voyage on the other; accumulating almost with geometric progression with the distance; significantly urge the adoption of the proposed plan.

The greatest speed yet attained, in an Atlantic sea voyage, was by the American steamship Pacific, during the past year, averaging a speed of 13½ miles per hour, for the entire distance; having made the run from Liverpool to New York in 9 days, 20 hours and 15 minutes.

The speed of ocean steamers has increased very much in the ratio of their size, and it is not hazarding much to say, that within the next five years an uniform speed of 17 miles an hour may be reached in ocean steam navigation, by the adoption of the shortest route across the Atlantic.

We have assumed a speed of railway transit beyond any uniform attainment in this country, but those least informed in the practical workings of railway machinery, know that at present, the question of speed, is a mere question of cost, and has no reference to the absolute capacity for speed of the locomotive engine, employed in railway transit.—The only limit to the speed of a railway train is *the strength of material*, and increased attention to the construction of railway machinery, will enable the locomotive engine, in due time, to measure speed with the wind.

The application of steam power to the purposes of locomotion has within the last quarter of a century, revolutionized the laws of physical proportion, subjected the powers of nature to the easy control of man—changed the established laws of trade—and introduced new relations into every department of business. The differences of political and social condition are rapidly giving way under the same inevitable law, and national animosities are forgotten, in the more grateful exchange of international civilities—already taking the place of the former fierce encounters of hostile and opposing forces.

On this Continent, we are destined, soon to see the entire population, descended from a common origin, and speaking a common language, subject to one commercial law, if not sharing in common, the same institutions, the same political and social advantages.

Actuated by this common sentiment, a convention of delegates from the different British North American Colonies, and the Northern States of the Union, assembled at Portland, on the 31st of July, 1850, and succeeding days, adopted a plan, and agreed upon a system of measures, by which the means of communication between the remote portions of this extended region, should be brought into easy communication with each other, regardless alike of artificial or political lines of boundary.—National prejudices and ideas were alike disregarded, in the common desire to promote the physical, commercial and social advantages of all.

In addition to these considerations, a conviction in favor of the plan of shortening the transit between New York and London, was shared in equal measure by each, and its advantages appealed at once to the commercial necessities of the age. It was clearly demonstrated, that by reducing the sea voyage to the shortest possible limit, and availing ourselves of the superior speed of railway transit upon land, over water carriage, that the commercial capitals of Europe and America might be brought within six days time, under favorable circumstances and ordinarily to seven days at farthest.

The attainment of this result might be regarded as of very questionable value if it were purchased by any sacrifice of comfort, or of business advantage. But the whole movement itself is in accordance with the most obvious necessities of business, the natural laws of trade, and in the line of all the great commercial tendencies of the age.

The commerce of the world is daily becoming more and more concentrated upon the Atlantic Ocean. The soil, climate and natural productions of the Northern Hemisphere mark it out as the home of the highest civilization, the region of continued progress, in all the arts of life; and the enterprise that shall bring the European and the North American Continents into closest intimacy, is the most promising effort of the age.

The European and North American railway, has, therefore, a double purpose, while it seeks in connexion with other railroads to bring the remote portions of the British Provinces into easiest communication with each other and the United States, it also seeks at the same time to bring the business interests of Europe and America into the closest possible intimacy.

The great effort of this age is to speed communication, to shorten and cheapen to the lowest limit of time and cost, the transit between the commercial centres of each continent. To this point the great agencies of business tend, and the world will never rest satisfied with anything short of its actual attainment.

It would be as wise, to send the great mail between New York and St. Louis on a sea voyage by the way of New Orleans and the Mississippi river, instead of, by the railway across the continent, as it will be, to continue to send the mail by water, all the way from New York to Liverpool, on the completion of the European and North American railway.

No one supposes that the ordinary traffic between the two cities of New York and Liverpool, is to be diverted from the circuitous route by sea. The cheaper conveyance of heavy goods by water over land carriage, must always send ordinary merchandise in slow vessels, by the same routes as heretofore. But with the passage of the mails, and valuable packages, time is the great element, and the shortening of the time, is the great purpose for which mail facilities are supplied.

It may be argued that the inconveniences arising from the transfer of baggage, shifting alternately from railway to steamer, required by the proposed line, will more than counterbalance, the advantages, resulting from the saving of time.

It is only necessary in answer to this suggestion, to appeal to the experience of the past. Once establish the fact, that passengers and mails can gain an advantage in the time of arrival, and no inconvenience or annoyance even, can prevent the bulk of passengers from taking that route, which secures this result. The gain of a single day, will often be worth, to a business man, more, than the expenses of a voyage, and the fact of being able to anticipate others in the time of arrival, as all experience shows, will, by securing for such line, the most valuable travel and traffic, enable it, to carry for less cost. By this route too, the dangers of the sea are lessened, accidents mainly occur, inside Cape Sable, or within St. George's channel and the Irish sea.

The increase of business has always gone on in a greater ratio than the growth of population within the United States. In the year 1830, with a population of 12,866,920, the value of imports into the United States reached $70,876,920, and the exports to $73,849,508, making a total of foreign trade of $144,726,428 in that year.

In the year ending June 30, 1851, with a population of $23,965,512, the imports of the United States were $215,725,995; the exports during the same period were $217,517,130, making an aggregate of foreign trade for 1851 of $433,243,125.

The consumption of foreign goods in 1830 was equal to $5¼ to each individual, and the exports held nearly the same ratio, making the extent of foreign trade in 1830 equal to $11 to each person.

In 1851 the consumption of foreign goods had reached $9 to each inhabitant, and the entire foreign trade to an amount equal to $18 to each person in the United States.

The progress of the material interests of this country, as exhibited by the foregoing comparison, is far from presenting the whole truth of the case.

A great change has taken place in the last twenty years in the relations between money and labor. With our increased powers of production, by the introduction of steam and mechanical aids, it is now found that the relative quantity of labor required for the production of any commodity has been greatly reduced, and that prices have been cheapened to a great extent for all commodities, the price of which is measured by a fixed value, like the precious metals, and it may be safely asserted that the actual quantity of goods annually consumed by each individual in the United States has more than doubled in the last 20 years.

Extraordinary as the statement may appear to the people of other lands, we safely calculate upon a more rapid increase for the future.

The unlooked for supply of gold from California, and the rapid extension of railway facilities thro'out the country, must in the next 20 years give a new and still more extraordinary development to the productive powers of our people, which will be more and more felt in every branch of industry, more especially in the cheapening of navigation and locomotion, and the economy of time. The most marked effect of all these changes in the physical condition of our people will be witnessed in the rapidly increasing travel across the Atlantic Ocean, and the greater interchange of the more valuable commodities and articles of trade. Let the next ten years only equal the past in expanding and unfolding our commerce with Europe, and a daily line of steamers, sailing betweeen the ports of the two continents in closest proximity cannot afford the necessary accommodation for travel.

If therefore, we satisfy Congress, that the saving of a single day in the arrival of the mails from London and Paris, will be secured by the European and North American railway, it will be entitled to their support, a support commensurate, with the advantages proposed.

A contract for carrying a daily mail between New York and Halifax, at the highest desirable speed, now attained, paying therefor only the prices now given between London and Liverpool, $600 per mile, would secure the entire line within the next five years, and a contract for carrying the mails from Galway to New York by the overland route through Maine, at the same price as paid by the English Government for the same service between Liverpool and the United States, will enable us to complete the entire line in two years from the present time.

Able parties are ready to place the required steamers on the route.

A careful survey of the whole line from Bangor to Halifax has been made by order of the Governments of Maine, New Brunswick and Nova Scotia. A brief, but able and very satisfactory report, showing the characteristics of the line, by A. C. Morton, Esq., a distinguished practical Engineer, made under the authority of the Governor of Maine is herewith submitted, together with the charters granted in Maine, and in New Brunswick.

We have also submitted herewith copies of the correspondence of Earl Grey in relation to this question: and the Bill passed in Canada and in Nova Scotia, [marked C] making provision for a Main Trunk Line from Halifax to Detroit with a provision for a branch line across the whole breadth of New Brunswick to the boundary of Maine.

It will be perceived by reference to Earl Grey's dispatch of the 19th of June, 1850, that all hope of assistance from the British Government to the Halifax and Quebec railway was thereby apparently cut off; and the project was thereafter regarded by all its friends as abandoned. Under this belief, the plan for the European and North American railway was matured.

The proceedings of the convention, herewith submitted were laid before the Imperial Cabinet together with the proceedings of the committee.

The government of Nova Scotia, instead of firmly adhering to the plans of the Portland convention, made direct application to the Imperial Government, for assistance, in building that portion of the European and North American railway lying within its own Province.

The subsequent despatches of Earl Grey, disclose the most extraordinary change of opinion, between the 19th June, 1850, and the 14th of March, 1851, as will be seen by the copies of which herewith submitted, by which it will be perceived, that an offer is made to advance from the Imperial Treasury, the money required to construct a line through British territory from Halifax to Quebec, on a pledge of the colonial revenues, from the provinces, while the branch line to our frontier is to be built to a point of connection with the railways of the United States; and it will be seen, by referring to the law of Nova Scotia, that it cannot go into operation "*unless provision is made in New Brunswick for building a line from some convenient point of intersection with the trunk line*, to the river St. Croix."

We regard the recent proceedings of the British ministry, in reference to railways in British North America, as an entire departure from her former policy, the consequences of which cannot at the present time be clearly or fully foreseen.

As long ago as 1846, the principle of responsible governments, or in other words, of self government, was conceded to all the North American colonies, and the regulation of their own postal, international and commercial affairs, left to their own adjustment.

The course of the British ministry upon this railway question, has been a striking departure from that rule, and a recent despatch from Earl Grey to Sir Edmund Head, Lieut. Governor of New Brunswick, gives information that the Facility Bills passed by New Brunswick in aid of the construction of the European and North American railway "are still retained by Her Majesty's government and will not receive the Royal assent till the Legislature of New Brunswick shall have had an opportunity to reconsider the whole question."

On the 5th of April, 1851, the Legislature of N. Brunswick, by nearly an unanimous vote of both branches, adopted resolutions, strongly condemning the plan of Earl Grey, and assured the British government that the Legislature "is not prepared to pledge the public credit, or the future resources of the province toward building the great trunk line from Halifax to Quebec," a copy of which resolutions are herewith submitted.

The change of opinion from June, 1850, to March, 1851, in the counsels of the British government in regard to the North American provinces, must be ascribed to their better knowledge of the condition and resources of the colonies; with the conviction, that a feeling of discontent must grow up in the colonies, on a failure on the part of the Imperial government to supply the "*material aid*," which, in the growing importance of the colonies, would ensure the maintenance of their relative importance, and that feeling of independence among her people, so essential to their success.—From 1825 to 1845, a period of twenty years, the

relative growth of Canada was equal to that of the United States; and from 1825 to 1835, the British North American colonies received a greater number of immigrants from the United Kingdom than those arriving in the United States; while from 1835 to 1850, there was an increasing tide setting to our shores, and in 1850 *seven-eighths* of the entire emigration from the British Isles to America, arrived at our own ports.

Not only has the tide of transatlantic emigration turned upon us, but Canada and the Lower provinces have contributed their full quota of emigrants to swell the stream of population, that is now pressing onward, in its restless march across the Mississippi, to the Pacific shores.

The relative importance of the British nation as compared with these United States, has sensibly changed in the last ten years. In 1841 the population of the British Isles was 27,019,555. In 1851 it amounted to 27,452,262, an increase in ten years of only 432,707. From 1831 to 1841 the population of the British Isles increased 2,668,572.

It is believed that the disclosures made by the returns of the last census of the United States, compared with the results of the census of the British Empire, has changed and will change still more, the policy of that government toward her colonies. While in ten years the British Islands have gained in population but 432,707 persons, the United States increased 6,204,138, which, after deducting the population found in the newly acquired territories, would give the United States an increase, in ten years, equal to 6,000,000 of persons, against the 432,707 gained in the British Islands.

It is quite apparent that the former policy of the British Government towards her North American colonies cannot continue to give satisfaction; and that the stimulants which abundant capital and official countenance can give to the material progress of the country, will in future be furnished. We were slow to believe, for a long time, that the proffers of Imperial assistance to railways in the Provinces had any other significance than the ordinary expressions of official courtesy. But from the recent evidence furnished in the proceedings of the Legislatures of Canada and Nova Scotia, and from the refusal of Earl Grey to allow the Facility Bill of New Brunswick, in aid of the construction of the European and North American railway, as a private undertaking, to become a law, it is apparent that the colonial railways in North America, are to be built as Public Provincial works, from funds advanced from the Imperial Treasury, at the risk and expense of the several colonies.

All the doubts that have heretofore or now hang over these matters, are soon to be dispelled by the action of the Legislature of New Brunswick, in accordance with Earl Grey's wishes; for, with all the boasted independence of opinion in the British Provinces, under their system of responsible government, it has never yet been able to resist the seductive charms of ministerial promises, much less to encounter the hazards of an imperial frown.

Regarding the means for building the European and North American railway from Halifax to the frontier of Maine, as now secured by the offers of the British Government, we earnestly, but most respectfully, appeal to Congress for assistance, toward that portion of the work within the State of Maine.

Our frontier position, with a foreign territory around us, retarded the growth of Maine, till within the last few years. The settlement of our north-eastern boundary dispute, by the treaty of Washington, was the dawn of a new era in our history. Our former enemies became friends, and the people of Maine and the neighboring Provinces are anxiously desiring that the same freedom of intercourse shall exist with each other, as with the people of different States of this Union.

To secure the Treaty of Washington, Maine surrendered for a merely nominal consideration, an undisputed territory of many thousand square miles, which is now worth a far greater sum than any grant we ask of Congress. While we take infinite pride in the settlement of that long disputed question, and regard the advantages of peace and friendship with our neighbors, as worth far more than any estimate of the value of the territory lost —we think the time has come when Maine should ask and receive from the general government some equivalent for the concessions and sacrifices she then made for the general good; yielding up a territory, equal in size and fertility to the commonwealth of Massachusetts.

But independent of all these considerations, the enterprise we present has claims upon Congress, for its inherent merits as a commercial undertaking far beyond any statement we are able to give, and for the reasons set forth in this petition, and for the many other reasons and inducements which will occur to the minds of all the enlightened statesmen of the country, we earnestly, but most respectfully, ask that Congress will pass a law authorising a permanent contract for the carrying of the mail between New York and Galway, over the European and North American railway, at remunerating rates, and that a portion of the public lands may be granted to the State of Maine, in trust, for the purpose of aiding the construction of the same, and that Congress will render such other and further aid in the premises as shall enable Maine to build her portion of the line, at the same time that the work shall be finished in the Provinces of New Brunswick and Nova Scotia.

JOHN A. POOR,
ELIJAH L. HAMLIN,
ANSON G. CHANDLER.

January 20, 1852.

The Legislature of Maine, in support of this application, by an unanimous vote, adopted the following resolutions, which have been submitted to Congress in each house, and ordered to be printed.

Resolved, That the commercial position of Maine authorizes her to aim at a leading share in all the great business movements of the age:—while Maine is the natural sea coast for the Canadas and of the larger part of New England, having the finest harbors of the whole country, she is in the direct route of the principal commerce between Europe and America, and the bringing together of two great lines which connect us with Canada and the whole of the United States to a point of junction in Maine,—one from Montreal on the north, and the other from New York on the South, when they shall form *one Grand Trunk* line to be extended from the valley of the Kennebec to the eastern shore of Nova Scotia, is the work that shall make Maine known and felt as a leading State in the confederacy.

Resolved, That while the movements toward carrying out the plan of the European and North American railway have aroused the British ministry to the adoption of measures calculated to counteract the exertions in its behalf, by the proffers of assistance toward building the Halifax and Quebec railway entirely through British Territory:—it is a source of sincere gratification to know that the Provinces will not forego the advantages of the European and North American railway, for the sake of the Quebec line, and that there is now every encouragement to prosecute exertions in behalf of the enterprise we have in view, in the assurance that the line will be met by the Province, at the river St. Croix.

Resolved, That a Trunk line of railway from Halifax to Montreal, through Maine, in connection with the lines now built or in process of construction, is the only measure that can offer proper inducements for the employment of capital, or that can satisfy the wants of the people of the Provinces. Over such a route the traffic and travel of Canada and the west, would find its easiest outlet, and the increasing tide of trans-atlantic travel seeking the shortest possible sea voyage, would give it advantages, ensuring cheaper conveyance than over any other route between the commercial capitals of Europe and America.

Resolved, That the application made to the United States government in behalf of the European and North American railway, through the Executive committee for Maine, deserves support from Congress, and the passage of the bills presented by Hon. Mr. Washburn, one entitled "An act making a grant of land to the State of Maine to aid the construction of the European and North American railway," the other entitled "An act for shortening the transit of the mails between New York and London," are earnestly pressed upon the consideration of Congress.

Resolved, That our Senators and Representatives in Congress, are requested to urge the passage of the bills before referred to, and that they ask such other assistance to the European and North American railway, as it may be in the power of Congress to grant.

Resolved, That the interest of Massachusetts in this question, and the extent of her interest in public lands lying in Maine, justifies us in asking at the hands of that Commonwealth similar support, and that the Legislature of Massachusetts, is hereby invited to unite with us in the foregoing request.

Resolved, That the Governor be requested to transmit each resolves to the President of the United States, and to each House of Congress, and to the Governor of Massachusetts.

Resolved, That the Governor be requested to transmit copies of the foregoing resolves, to each of the Senators and Representatives of this State in the Congress of the United States.

In our issue of the 21st of February we gave the report of the committee on railroads of the Maine Legislature, which was adopted by that body, in which the claims of that State were presented to Congress. The two bills above alluded to, were referred to the appropriate committees; one proposing a grant to Maine of *two millions* of acres of the public lands to be selected from the unsold lands within the limits of the States. The other, authorizes the Postmaster General to enter into contract for carrying the mails by the *overland* route through Maine.

We are gratified to learn that the prospects of the enterprize are most encouraging. The Provinces of Canada, New Brunswick, and Nova Scotia, have finally agreed upon a plan entitling them to the guarantee of the British Government, on the terms offered by Earl Grey's dispatch of March 14th, 1852. The route adopted for the Imperial line, is a virtual abandonment of the Quebec line, and makes the line of the European and North American railway from Halifax to the city of St. John, keep on the western bank of the river St. John as far as Woodstock. From St. John city to Calais, the line is regarded as secured. Mr. Archibald and his company holding the charter of the European and North American railway in New Brunswick, have assented to the modifications of the charter, asked by Earl Grey's dispatch of June 12th, 1851, as a condition of giving the royal assent to the Facility Bills. These bills grant all the unsold lands for *five miles* on each side the line, and a further sum of $1,200,000 in sums of $50,000 each, as fast as the company shall expend an equal amount.

Should any question arise as to the readiness or the ability of the private company to build to our frontier from St. John city, there is no question that the Province of New Brunswick will undertake it herself.

There is no precise information from England on this subject by the Asia. Mr. Hincks was waiting the arrival of Messrs Howe, of Nova Scotia, and Chandler, of New Brunswick.

There is no possible ground on which the British Government can, with any show of honor, withdraw her plighted faith tendered to this work. The money, we are quite certain, will be forthcoming.

As soon as these negotiations are consummated in England, the whole Northern States and Provinces equally, will be alive and at work in accomplishing this project so vital and important to them all.

Raburn Gap Railroad.

The Anderson Gazette says that the charter of the Raburn Gap railroad has been secured by a subscription of $550,000, being $150,000 more than is required by the charter.

Susquehanna Railroad.

The committee appointed at the convention recently held in Baltimore to promote the construction of a railroad through central Pennsylvania, following the Susquehanna river, have submitted a report to the citizens of Baltimore, in which they make the following recommendations: --

1. That the city shall make a loan of their bonds for $500,000 to the Baltimore and Susquehanna and York and Cumberland railroad companies, upon an undertaking, on the part of these two companies, to secure and indemnify the city against loss by a pledge of the property and revenues of these companies respectively.

2. That the bonds be issued for such amounts as may be found convenient, bearing an interest of 6 per cent, and redeemable in 20 years.

3. That the two companies regulate between themselves the ratio in which each shall receive the bonds, and their responsibility to each other in the amount of their security.

4. That the bonds shall be delivered to the two companies, and be applied by them to the construction of the road, as follows—

Whenever the two companies shall demand of the city an instalment of these bonds, and it shall be shown, to the satisfaction of the city authorities, that there have been subscribed and paid to the road, from other sources, the sum of one hundred thousand dollars, then the city shall, upon the requisition of the two companies, deliver to them the like amount of one hundred thousand dollars, in bonds, and so of the next hundred thousand, and of the successive instalments of the same amount, on the same conditions until the whole sum of $500,000 in bonds is supplied. It being understood that this loan by the city and the corresponding subscriptions by which, in each instalment, it is to be preceded, shall be applied to the construction of that portion of the road extending from Bridgeport to Sunbury, and beginning at Bridgeport.

5. That the two companies having thus become the proprietors of the bonds, shall make such stipulations and arrangements with the new company for the application of these funds to the construction of the road, as they find expedient; that is to say, that they shall either loan them to the new company, with the reserved privilege of converting the amount into stock whenever they may choose to do so—or to subscribe the amount at once to the stock, on such conditions as they may find advisable—taking care, in either case, to stipulate for the application of the money to the construction of the road from Bridgeport towards Sunbury.

6. That the two companies, with a view to their own security, and also, with a view to the certain procurement of the funds, which may be necessary to pay the interest on the bonds, shall stipulate with the new company to the following effect:

I. That the new company shall make a mortgage or pledge of all its property to the companies by way of security for the loan of the bonds, or any portion of them, and for the payment of the principal and interest thereon. The security to continue as long as the bonds shall remain as a loan of the amount, and to be extinguished whenever the loan shall be converted into a subscription.

II. That the new company shall also stipulate with the two companies to provide whatever amount may be necessary to enable the two companies to pay the interest on the bonds to the city; raising a sufficient amount for that purpose, before the road is in operation; and after it is in operation, applying the revenues to that purpose, before paying any dividends; and making up any deficiency which may be necessary to the payment of the interest, over and above the amount supplied by the revenues. And that this shall be done whether the bonds be converted into a subscription to the stock, or remain as a loan; the object being to secure the payment of the interest in every contingency.

III. That in order to render this security for the payment of the interest as effectual as possible, the two companies shall contract with any or all of the several coal mining companies, connected with the line of the road to Sunbury, for the raising of any sum or sums of money for the payment of interest until the road shall be in condition to earn, and shall earn and pay a sufficient sum to discharge the interest—which contract with these companies may be made on the basis of an advance, to be paid over to the two companies—for which advance the party paying it shall be entitled to an equivalent in stock in the new company—thus regarding such payments for interest as subscriptions to the stock. It being understood that the new company shall stipulate to allow and adopt this arrangement and to take the proper measures to carry it into execution.

Copper Mines at Lake Superior.

The correspondent of the Tribune furnishes the following information in reference to the Lake Superior Copper Mines.

The Cliff, Pittsburgh and Boston Mines continue to improve. There are now in sight several masses that will weigh from 25 to 90 tons each of Native Copper, that will yield from 75 to 80 per cent. pure copper. The vein is well defined, very large, and producing small masses of barrel and rich stamp-work throughout the mine; expect to ship 1,200 tons this season.

The Copper Falls Mine is improving, equal to any in the country; vein about twenty inches wide, well defined, producing small masses of barrel and stamp-work at every point where they are now working. The ancient works upon this location are very extensive, and are good evidence that much copper has been taken away by the ancient miners; and, from present appearances, the company will receive handsome dividends upon their investment.

The Phœnix Mine commenced working last fall, upon the vein that was abandoned by the old Lake Superior company, and is now opening a very valuable mine. They will ship this season some 40 or 50 tons copper, and next season expect a dividend.

The Dana Mining company commenced work last spring, and have opened a very promising mine. Thus far it equals anything opened to the same extent in the country. The vein is from one to two feet wide, producing small masses of barrel and stamp-work at every point opened.

The Fulton Mining company are now driving up an adit line to drain and ventilate the mine. It has been opened to considerable extent, and is very encouraging. The vein is well defined, varying from a few inches to 2½ feet wide; produces small masses of barrel and stamp copper, and a sprinkling of Silver. This bids fair to be one of the dividend-paying mines.

The Iron City Mine looks much better in the bottom level than at any point above. This will be a valuable mine, but makes copper at a greater depth than many other mines.

The Norwich Mine has improved equal to any other since the close of navigation. The vein is about 20 inches wide, well defined, producing masses of barrel and stamp copper.

The Minesota Mine is the great mine of the Ontonagon. There are several large masses of almost pure copper now in sight—probably 250 or 300 tons. The vein elsewhere produces smaller masses of barrel and stamp copper throughout the mine.

Ohio Central Railroad.

The bonds in payment of the recent subscriptions, on the part of the counties of Muskingum and Guernsey, amounting to $200,000, have been, by the commissioners of those counties, delivered to the railroad company. An order was passed at the meeting of the board of directors, now in session, to advertise for contract, forthwith, that portion of the road between Zanesville and a point some five or ten miles east of Cambridge.

We had expected to have the advertisement in time for publication in this day's Courier, but the officers of the road have been so entirely engrossed with other pressing engagements as to prevent its preparation in time. Bidders may expect to see it in a day or two.

It is the intention of the board to press this work to completion as rapidly as possible. It is hoped that the cars will be running upon it within the next fifteen or sixteen months.

If the city of Wheeling should furnish her proportion of bonds promptly, the remainder of the work will be let in a short time.—*Zanesville Courier.*

Ohio.

It will be seen by the following sections taken from the tax law recently passed by the Legislature of Ohio, that ample security is provided for the payment of interest upon the indebtedness of the counties. This will tend to increase the demand for the county securities.

Sec. 69. The commissioners of each county shall, at their March or at their June session, annually, determine on the amount to be raised for ordinary county purposes, for bridges, for public buildings, for the support of the poor, *for interest and principal on the county debt,* and for the support of common schools. The commissioners, however, shall set forth upon the record of their proceedings, specifically, the amount to be raised for each of the above defined purposes; the County Auditor shall carefully ascertain the net amount collected for each purpose under said levy; *and it shall not be lawful to use any such specific fund for any other purpose* than the one for which the same was specially levied.

Sec. 76. Every County Auditor, and every District and Township Assessor, who shall, in any case, refuse, or knowingly neglect to perform any duty enjoined on him by this act, or who shall consent to or connive at any evasion of its provisions, whereby any proceeding required by this act shall be prevented or hindered, or whereby any property required to be listed for taxation shall be unlawfully exempted, or the valuation thereof be entered on the tax-list at less than its true value, shall, for every such neglect, refusal, consent, or connivance, forfeit and pay to the State not less than two hundred, nor more than one thousand dollars, at the discretion of the Court, to be recovered before any Court of Record in the State.

Chesapeake and Ohio Canal.

The operations of trade on this work are thus noted in the National Intelligencer:

Business on the canal continues fair; 74 boats having arrived from above during the first week of April. The cargoes of these boats have been chiefly flour, wheat and coal. They differ from the boats of a very few years since, in being about double their capacity; whereas, six or seven hundred barrels of flour were formerly considered a large cargo, now they run up from a thousand to fourteen hundred. The ability to navigate boats of these capacities can of course have arisen only from the increased depth and generally improved circumstances of this great work. In order to obtain a fair share of the advantages of the canal, the corporation and people of Georgetown will be induced to raise the bridges which at present prevent the largest class of boats from passing through their town. When this shall have been done there is reason to believe that Georgetown will begin to receive her share of the benefit which the coal trade must confer on the communities at the outlet of canal navigation. The passenger business on the canal would appear to be pretty good, if we take the trip of the Fashion on Wednesday evening. She went up from Georgetown packed with passengers.

New Railroad Route to Boston.

A new route between New York and Boston will be put in operation during the present year. The Norfolk County road (running from Boston to Blackstone) is to be extended from Blackstone to Dayville on the Norwich and Worcester road.—The new road will be about 25 miles in length, and the Norwich and Worcester guarantee the bonds for $100,000, in order to build the six miles from Dayville to the State-line. The New Haven and New London road will be completed in June, and this with the New London and Willimantic road with which the Norwich and Worcester connects at Norwich, will make a continuous railroad route between the two cities. It is anticipated that this road will be in operation by next November.

Tolls, Trade and Tonnage of the Canals.

The following statement condensed from the late report of the Auditor of the canal department, presents an exhibit for several years of the average tonnage of the boat, of the time necessary to make a passage, and the cost to bring a barrel of flour from Buffalo to Albany, of the lockages at Alexander's lock, and the total tons delivered at tide-water from the Erie canal, and of the total tolls, is as follows:

	Average tonnage of boat.	Days betwe'n Albany & Buffalo.	Freight on a bbl. flour.	Lockages at Alexanders Lock.	Tons del'd at tide-water from Erie Canal.	Total tolls.
1841..41	9	71 cts.	30,320	532,520	$2,034,882	
1844..49	7¼	60	28,219	790,816	2,446,374	
1847..67	10¼	77	43,957	1,431,252	3,639,381	
1848..71	9	58	34.911	1,184,337	3,262,212	
1849..68	8¾	56	36,918	1,266,724	3,268,226	
1850..76	9	58	38,444	1,554,675	3,273,896	
1851..78	8½	49	40,396	1,507,677	3,329,737	

A comparison of the results of last year's business with that of 1841, ten years ago, shows that while the boat has nearly doubled its capacity, the time necessary to make a passage from Buffalo to Albany is diminished half a day, transportation is cheapened 30 per cent., or 22 cents on a barrel of flour; and that while the lockages at Alexander's Lock have increased only 33 per cent., the tons arriving have increased 200 per cent. And that though the tons arriving from the Erie canal last year are 77,000 more than in 1847, the lockages are 3,600 less.

A New Bill in relation to the Public Lands.

We received a note from an influential member of Congress a few days since, enclosing the following bill recently introduced into Congress, in relation to the grant of lands for railroads and other public uses, and it is of so much interest that we publish it entire. The opinion expressed by the gentleman referred to was that a general bill like the one proposed was the only project that had any chance of passing at the present session.

Whether the western members will enter into the plan remains to be seen. The older States are likely to favor it.

A BILL

Making grants of land to aid in the construction of railroads, and for other purposes.

Sec. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there is hereby severally granted to the States named herein the following amounts of public land respectively, for the purposes hereinafter mentioned, viz.:

To Missouri, 3,000,000 acres; to Alabama, 2,500,000 acres; to Iowa, 3,000,000 acres; to Michigan, 2,500,000 acres; to Wisconsin, 2,500,000 acres; to Louisiana, 2,500,000 acres; to Mississippi, 2,000,000 acres; to Florida, 2,000,000 acres; to Arkansas, 3,000,000 acres; to California, 3,000,000 acres; to Illinois, 500,000 acres; to Indiana, all the public lands not sold, located, or reserved, lying within her limits; to Ohio, all the public lands not sold, located, or reserved, lying within her limits, and 1,000,000 acres in addition thereto; and to each of the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, North Carolina, South Carolina, Georgia, Maryland, Virginia, Kentucky, and Tennessee, at the rate of 150,000 acres, for each Senator and Representative in the thirty-second Congress, from said States respectively.

Sec. 2. *Be it further enacted*, That the 11 States in the preceding section first named are authorized to apply the proceeds of the lands hereby severally granted to them to aid in the construction of railroads in the said States respectively. And a right of way through the public lands is hereby severally granted to the said States, and they are severally authorized to take necessary materials of earth, stone, and timber, for the construction of the said railroads, respectively, from the public lands adjacent thereto, And, in locating each of the said railroads, and assigning the limits thereto, no more land shall be taken from the United States than is necessary for the convenient construction and use of each of said railroads respectively, including stations and the public buildings of all kinds connected with said roads, turn outs, and such other appurtenances as are necessary or usually enjoyed by railroad companies. And a copy of the location of said several roads, respectively, made under the direction of the Legislature of each State in which said roads are made, shall be forwarded to the proper locat land office, and the General Land Office at Washington City, within ninety days after the same are completed, respectively, and shall be duly recorded.

And there is hereby severally granted to each of the eleven States in the preceding section first named respectively the amount of land therein specified, for the purpose of making railroads therein respectively as aforesaid, to be taken along the entire length of the line or route of said several railroads, so far as the United States own lands on the line of said several roads, in manner following, viz.: every alternate section of land designated by even numbers for six miles in width on each side of said several rail railroads. But in case it shall appear that the United States have, when the lines or routes of any said roads are definitely fixed in the manner and by the authority aforesaid, sold any section or any part thereof, granted aforesaid, or that the right of pre-emption has attached to the same, then it shall be lawful for any agent or agents to be appointed by the Governors of each said States respectively, to select, subject to the approval of the Secretary of the Interior, from the lands of the United States most contiguous to the tiers or sections above specified so much land in alternate sections or parts of sections as shall be equal to such lands as the United States have sold to which the rights of pre-emption have attached as aforesaid, which lands (thus selected in lieu of those sold or to which pre-emption rights have attached as aforesaid, together with the sections and parts of sections designated by even numbers as aforesaid, and appropriated as aforesaid,) shall be held by each of the said eleven States first named respectively to the amount in the preceding section named for each of said several States, for the uses and purposes aforesaid. But the lands to be so located and selected for and on account of each of said roads shall in no case be more than fifteen miles from the line of said road: *Provided*, that the lands hereby granted to the said eleven first named States shall be exclusively applied to construct or aid in the construction of railroads in said States respectively, and shall be sold and disposed of only as the work progresses, and in proportion to the length of railroad completed upon each of said roads, and the same shall be applied to no other purpose: *And also provided*, that any and all lands heretofore reserved to the United States by any act of Congress, or in any other manner by competent authority for the purpose of aiding in any object of internal improvement, or for any other purpose whatever, shall be and the same are hereby reserved, to the United States from the operation of this act, except so far as it may be found necessary to locate the routes of said railroads through such reserved lands, in which case the right of way only shall be and is hereby granted.

Sec. 3. *And be it further enacted*, That of the lands hereby granted to the several States of Missouri, Alabama, Iowa, Michigan, Mississippi, Florida, Louisiana, Wisconsin, Arkansas, and California, a portion thereof shall be applied by said States, respectively, in conformity with the provisions of the second section of this act, to aid in the construction of railroads already commenced by the said States, respectively, or for which the said States have made appropriations, or pledged the credit of said States, respectively; and the remainder of the land hereby granted to said several States to be applied, in the manner aforesaid, to aid in the construction of such other railroads as the Legislatures of said several States may, respectively, designate.

Sec. 4. *And be it further enacted*, That the eighteen States, in said first section of this act last named, are severally authorized to apply the proceeds of the lands, hereby severally granted to each of said States, for the support of schools, or for other useful public purposes. And the Commissioner of Public Lands, under the direction of the Secretary of the Interior, shall issue to each of said eighteen States, respectively, land warrants to the amount, in all to which each of said eighteen States are respectively entitled under this act, (except so far as the lands granted to Ohio are situated within the limits of that State.) And said eighteen States are severally authorised to sell and dispose of said land warrants, and the same are to be valid and effectual in the hands of any owner or holder thereof, and may be located by such owner or holder upon any public lands, subject to private entry, in the same manner as land warrants for military services are authorized by law to be located. And the title of the land so located by any owner or holder of said land warrants, shall be secured or perfected to such owner or holder, in the same manner as other land warrants issued by the United States. Said land warrants shall be so engraved and printed as to prevent deception and counterfeiting—shall be signed by the Secretary of the Interior, or the Commissioner of the Public Lands, or for them by such other persons as the Secretary may direct, and countersigned by the Governor of each State receiving the same, or by such other officer as the said eighteen States may, respectively, designate for that purpose; and said land warrants shall be for not less than 80, nor over 160 acres each: *Provided*, That no State be authorized to locate any warrants in its own name or for its own benefit; and that no warrant issued under the provisions of this act shall be located upon any lands to which there shall be a pre-emption right, or on which there shall be an actual settlement and cultivation, except by the person holding such pre-emption right, or by such settler and cultivator.

Sec. 5. *And be it further enacted*, That each and all of the railroads, in any State in the Union, made either wholly or in part from the proceeds of the lands granted by this act, are hereby made and declared post roads, and shall forever, hereafter, at all times, transport the mails, military stores, forces, and property of the United States, under the direction of the proper officers thereof, and for such compensation as Congress may by law direct or allow.

Sec. 6. *And be it further enacted*, That all mineral lands are hereby reserved to the United States from the operation of this act, except such as are by law, subject to private entry by individuals.

Coal Trade for 1852.

In relation to the coal trade of the present season, the Philadelphia Ledger says:

The Anthracite coal trade now possesses general interest, and everything relating to it comes home to the fireside of nineteen-twentieths of the community. The consumption of 1851 ran so far ahead of all former experience, that the market was barely supplied; though the united energies of all the coal districts were taxed to nearly their full working capacity. The increased production of 1851 over 1850 was a million of tons; and of this we may say every ton was consumed. This increase, we have reason to believe, is due to a general increase of activity in manufacturing, steam travelling and domestic uses, which is not going to fall off, but rather shows marked signs of steady progression. Should the market require the same proportionate increase for 1852, one and a quarter millions of tons additionally must be provided. But suppose that, instead of 30 per cent., the increase of last year, we assume that 20 per cent. increase is all that will be required, [and this will not certainly be overrating it,] then we shall want from the Anthracite coal mines of Pennsylvania 860,000 tons more than last year's supplies—making an aggregate of *five and a quarter millions of tons*. The capacity of our several Anthracite coal fields may be set down nearly as follows. In fact, we give pretty much their own figures:

Schuylkill—railroad	1,800,000
canal	750,000–2,550,000
Lehigh	1,000,000
Delaware and Hudson Co	900,000
Susquehannah canal Co	500,000
Total	4,950,000

Accidents on Railroads.

April 15th, 1852.

H. V. Poor, Esq.,

Sir: I enclose you a copy of a report of the Railroad Committee of the Assembly of this State at the present session which is worthy of publication. The bill presented with the report, containing very valuable provisions, does not pass, by reason of a mistaken sentiment, that will by-and-bye give way. One of the greatest causes of accident and loss of life on the railway, is the practice of persons, having no connection with the railway, walking, and standing on the tracks. This practice is so common, and the inevitable consequence so often follows, that it would seem that people would learn. There was a provision in the bill subjecting persons, not connected with the railroad, to a penalty for walking on the tracks. This encountered opposition, and it was proposed instead, that the railroad companies should make a path-way for foot passengers. No better evidence of an unsound sentiment could be given. The report alludes to the want of discipline among passengers.

There are duties on both sides. Good regulations should be adopted, and cheerfully submitted to, and then accidents will be more rare. Passengers on shipboard must submit to discipline. They should consent to observe rules on railroads, which are made for their own benefit. No person is ever obliged to walk or stand in the way of an approaching train. The rails too plainly mark the prescribed limit, for any one, with proper care, to err.

A Passenger.

REPORT OF THE COMMITTEE ON RAILROADS, RELATIVE TO ACCIDENTS ON RAILROADS.

Mr. Humphrey, from the Committee on Railroads, to which was referred that portion of the Governor's message, in relation to accidents on railroads, and also the resolution of the Assembly in relation to the same subject, reported—

That the committee have had the subject under consideration, and have devoted much reflection to it. In the outset of this examination, they beg leave to say, that though many accidents have occurred upon the railroads, in this country, yet they, by no means, equal those that have occurred in steam navigation, upon the ocean, lakes and rivers.

The following table will show the number of passengers carried on the railroads of the State of New York, for the year ending September 30th, 1851, with the number of passengers and persons injured, and the causes thereof.

NAME OF COMPANY.	No. of passengers carried.	Whole number of killed.	Whole number injured.	Whole number passengers.	Whole number employees.	Whole number strangers.	Company's blame.
Albany and Schenec'y..	303,015	4	..	..	..	4	..
Buffalo and Niagara F.	150 792	..	1	..	..	1	..
Buffalo and Rochester..	322.985	10	3	..	7	6	..
Cayuga and Susq.....	27,731	..	..	..	..	..	..
Hudson River.....	749,124	18	3	2	6	13	2
Hudson and Berkshire.	45 512	..	..	..	..	..	..
New York and Erie...	688,789	27	20	3	28	16	..
Northern	67.538	7	5	..	3	9	..
Oswego and Syracuse.	80.288	..	..	..	..	..	..
Rensselaer and Sarat'a.	178,740	..	..	..	..	..	..
Roch. and Syracuse...	513.241	11	9	7	5	8	3
Saratoga and Wash...	134,224	2	..	..	1	1	..
Schenectady and Troy.	70.473	..	..	..	..	..	..
Syracuse and Utica...	449,870	5	6	3	1	7	..
Troy and Greenbush..	135,458	1	..	..	..	1	..
Utica and Schenectady.	453,731	4	..	..	1	3	..
Watertown and Rome.	56,907	1	..	..	1	..	..
	4,428,448	90	47	15	53	69	5

NAME OF COMP'Y.	Passengers from their own improvidence, or violation of company's rules.	No. walking on track, intemperance, or improperly climbing cars.	Employees, from carelessness of themselves.	Employees and passengers from causes of unavoidable accident.
Albany and Schenectady.	..	4	..	..
Buffalo and Niagara F.	..	1	..	..
Buffalo and Rochester...	..	7	3	3
Cayuga and Susq.....	..	..	..	..
Hudson River.....	..	13	6	..
Hudson and Berkshire..	..	..	..	..
New York and Erie.....	3	16	22	6
Northern	..	9	3	..
Oswego and Syracuse...	..	..	..	..
Rensselaer and Saratoga.	..	..	..	..
Rochester and Syracuse.	4	10	3	..
Saratoga and Wash.....	..	1	1	..
Schenectady and Troy..	..	..	..	..
Syracuse and Utica.....	1	7	1	2
Troy and Greenbush....	..	1	..	..
Utica and Schenectady..	..	3	..	1
Watertown and Rome...	..	..	1	..
	8	72	40	12

By the preceding table it will be seen that the number of persons who travel upon the railroads is very large. The extent of railroads in our country, and the great facilities which they offer for travel, have increased, and must continue to increase, that travel enormously. They have also generated an earnest desire for the construction of railroads through sections of country not now enjoying this mode of communication. An enlarged view of the question will lead us to look upon this subject of accidents in a manner which its importance demands.

While the reports of the several railroad companies in this State show the transportation of a very large number of people during the past year, yet they also show that the number of injuries to persons bear but a very small proportion to the whole number carried. In searching for remedies for accidents or mismanagement, the first thing to be considered is the cause of the evil that we desire to guard against. The wide extent of our country, and the activity and energy of our people, are as yet greatly disproportioned to our capital. The railroads in England cost over $150,000 per mile, on an average, and are generally straight, level and perfectly constructed. We have not the means to so construct them. The liability to accident will be lessened in proportion to the stability of the structures, the perfection of the track, and the excellence of the rolling stock, on railways. They have rapidly improved in this country, and in our own State; if they shall continue to improve for the next ten years in proportion as they have for the last equal period, they will be equal to any in the world. This may be reasonably hoped, because the business is in its nature progressive. Public sentiment, competition, and the efforts of railroad managers, will induce these improvements.

One great cause of accidents with us is, that our railroads are mostly of single tracks. We lack the capital to make them otherwise, in the first instance, and we must wait until the railroad has so developed the resources of the country through which it is opened, as to produce a business that will warrant the cost of a double track. One of the most effectual provisions that we could offer to prevent accidents upon railroads, would be to provide by law that all roads should be of double track, and this has been suggested to the committee as a principle that should now be established. It is quite easy to see that this would in the first place be very oppressive upon many roads now in operation, which are producing great benefits to various portions of our State. In the next place it would operate injuriously upon new projects, and would retard the progress of the system, if it did not entirely stop new works. While the salutary effect of such a provision for the prevention of accidents may be readily seen, it is quite certain in the judgment of the committee that we are not yet ready nor able to adopt it. Another cause of accidents arises from the high speed with which passenger trains are run upon many if not most of our railroads. While this speed is not greater than public sentiment favors and expects, it is obviously true that the liability to accident is thereby increased.

It can scarcely need argument to show, that a body of an hundred tons weight carrying with it two or three hundred passengers, cannot be propelled as safely to them, at the rate of 40 miles an hour, as it could at the rate of 20 miles. It is quite possible that a railroad might be constructed so perfect, and its machinery so complete, that cars could be run at the rate of 40 miles an hour as safely as they are now run on our best roads at the rate of 20 miles, yet the cost would be beyond our present means. Hence we are compelled, in securing these advantages, to take some hazard. It has also been proposed to the committee, that a law should be passed limiting the speed upon our railroads. This would place all upon the same basis and would certainly lessen the liability to accidents, and might be so adjusted as to be reasonable. If all our railroads were double tracked, and were limited to a speed of 20 miles an hour, it is certain that there would be but few accidents. And here we may ask, do we desire, or are we prepared, to reduce the rate of travelling to 20 miles an hour? What would be the effect of such a provision?—Doubtless it would be, to reduce the amount of travel through our State, and turn it through similar avenues, in other States, where there might not be such rules. It is then quite obvious that the public sentiment not only does not require this limitation, but would entirely disapprove of it.

It is said by those having much experience upon our railroads, that there is a lack of discipline upon them; that passengers are restless, and unwilling to keep their seats; that they will persist in getting on and off the cars when in motion; and will walk and stand upon the track, all of which are contrary to the regulations of most of the companies, and which are the causes of most of the injuries that occur to persons on the railroads. It is quite confidently asserted, that if passengers would keep their seats, and not get on or off while the cars are in motion, and would keep off the tracks of the road, as they might easily do, that very few would ever be injured. The reports of the railroad companies show that a considerable portion of the whole number of persons injured and killed happen from these causes.

Another cause of accident is said to be the running of cars long distances. While running a train of cars for several hours in succession, they cannot be examined and incipient fractures detected, as they could be if they were run only short distances, and subjected to frequent examination. The force of this suggestion may be readily seen. On the other hand, it is well known that travellers do not like to change cars, nor have their baggage handled too frequently. Here again the convenience and sentiment of travellers have to be consulted, although it involves some hazard. It is believed that the true causes of most of the accidents on railroads, which result in personal injury to individuals, aside from those which arise from the negligence of companies and their subordinates, have thus been enumerated. This view is strengthened by the accompanying tables from the reports of the railroad companies for the year 1851.

The railroad companies are liable to answer in damages for all cases of personal injury to individuals resulting from the negligence or mismanagement of the agents or servants of the company. They are held by courts and juries to rigid accountability; so much so, that they complain that they are treated with undue severity. They claim that the stockholders, who are scattered over the country, are themselves ignorant of the character of the agents, and innocent of any intention to do wrong. That they seek to employ faithful men, but that like all others, having agents to employ, or officers to select, they are sometimes deceived or mistaken.

Measures of undue severity against railroad companies, may check the progress of the system, and force them greatly to reduce their speed, and thus disappoint the public. They may also render the property in them unstable, and of course reduce the value of it, and thereby impair their working

and improvement. In this State and age, we want railroads extended, improved and made valuable to the proprietors, for then the public will be better served. A watchful public sentiment and an active competition, will be most likely to keep them under proper regulations and insure good management.

To the public and to the railroad companies, it is of the first importance that the agents and persons employed in the various departments of transportation should be skillful, faithful and careful. They should be held to their share of responsibility for misconduct. And while the *companies* may suffer in being compelled to pay for injuries resulting from their mismanagement, *they* should also be accountable to the laws.

In presenting a bill to meet the want of care, and for cases of misconduct on the part of those employed on railroads, the committee have made the provisions applicable to the persons in the wrong. This seems to be the proper course. In consideration of the great increase of railroads in the country, of the number of persons employed upon them, and of their connection with the public interests and personal safety of travellers, it is essential that these agents should be properly impressed with the true responsibility of their respective positions. In this way only can we hope to grow up skillful and careful men to manage this great interest.

The policy of general legislation in respect to railroads, is settled by the general law of 1850, and whatever provisions upon this subject may be adopted, they will properly be amendments of that act. The attention of the committee has been called to the propriety of some other provisions amendatory of that act, and they have incorporated some amendments with those designed more properly to answer the special reference made to them on the subject of accidents. It is found to be seriously embarrassing to the proper use of the railroad, that cattle and other domestic animals are allowed to stray from the enclosures of their owners, or to run at large upon the public highways, and thus get upon the railroads. In many instances, the companies have paid the owners of the adjacent lands, for releasing them from the obligation to build fences, and the owners of the land have assumed to build and maintain such fences. This is neglected, and it is said to be a general rule that in all such cases, there are either no fences, or they are not well maintained. In consequence of this, cattle are run over on the railroad and the trains are thrown off.

As a remedy for this, it is proposed that the owner of the land may pay back the principal sum received for such release of building fences, or for maintaining them, without interest, and that thereafter the company shall support them according to law. If the owner declines to do this, he shall then be liable, to a certain extent, for the consequences that may ensue. This seems to be right, because if the sum received for such fences was large, then he ought to maintain them; and if it was small, then there is but little to be paid back, and all liability would be avoided. This is properly connected with the subject of accidents, which we have been considering. Another matter is the propriety of making some provision to reach the case of persons who seek to travel upon the trains of cars without the payment of the customary fares. They sometimes attempt to ride in exposed situations between the cars, on freight cars without being seen, as well as upon the passenger trains. This is very common, and many instances have occurred where such persons have been thrown off from their exposed situations, and killed. The comfort of the great mass of travellers would be greatly advanced if there were no attempts to defraud, or if these attempts were deterred by some proper legislation.—There are provisions against this in other states, and they are found to be useful. The committee have also added a provision to fund a floating debt.

The provision of the bill prohibiting the employment of superintendents, officers and their subordinates, who are known to be in the habit of using intoxicating liquors as a beverage, seems to be demanded alike for the security of railroad companies, and the protection of travellers. If there is to be no restriction upon the speed on railroads, it is of the utmost importance that all who have the charge of them should be free from the excitements which are often produced by the use of intoxicating drinks. Whatever may be the difference of opinion respecting a law prohibiting the sale and use of intoxicating liquors as a beverage, it is believed that there is great unanimity of sentiment as to the propriety of the provision relating to that subject. Such being the view of the committee they have no hesitation in recommending the adoption of this restriction.

In conclusion, the committee have only to say, that railroads have become an important interest in this State. Looking to the future, it is impossible to predict the limit of their extension. They have already penetrated into sections which have been almost without the means of communication with the seaboard, and they are rapidly developing resources and elements of wealth, which have hitherto been unappreciated or unknown. In connection with connecting roads in other states, and with our inland and external water communication, they will afford facilities for travel and the transportation of merchandize and products equal, if not superior, to those of any other State of the Union.

Railroad Convention at Clarksville, Tenn.

A numerously attended railroad convention was held at Clarksville, Tenn., on the 7th inst., at which the Hon. G. A. Henry presided, for the purpose of promoting the construction of various lines of railroad which propose to connect at that point. The following plan of future operations, suggested by a committee, was adopted, and recommended to be acted upon as speedily as possible:

That the commissioners appointed at Clarksville for this road, and the Memphis commissioners for the Nashville and Memphis road, be requested to employ engineers to survey the route or routes on which a Louisville, Clarksville, and Memphis road is expected to run. The commissioners at Memphis to appoint the engineer to survey the probable route between the Tennessee and Mississippi rivers. The Clarksville commissioners to employ the engineer to survey the route or routes between the Tennessee river and Clarksville, and the Kentucky delegates for Todd, Logan and Warren, or the Louisville and Nashville railroad company, as they may agree to survey the route from Clarksville to Bowlinggreen. That the commissioners on the east and west of the Tennessee river be required to appoint one engineer to survey the road from Clarksville to Memphis, but that the expenses shall be apportioned as above stated, and the commissioners appointed on the Henderson and Nashville road in Tennessee be required to appoint an engineer and pay the expenses of surveying the route of the road from Tennessee State line to Nashville through Clarksville. That an engineer be appointed and paid in like manner as the commissioners appointed in the State of Kentucky to survey the route from Tennessee State line to Henderson. The commissioners aforesaid to pay the engineers respectively employed by them out of the first money subscribed, either privately or by the counties, for the benefit of the railroad.

That the delegates to this convention from the representative sections be hereby appointed committee to appoint speakers to canvass the region of country in the vicinity of the routes to be surveyed, and for the purpose of bringing the subject of these roads in all their bearings before the people.

The following is the report of a committee, appointed to ascertain what Louisville, Clarksville, Memphis, etc., propose to do for the Louisville and Memphis railroad:

The delegate from the city of Louisville is authorised to pledge the Louisville and Nashville railroad company, for the preliminary survey from Bowlinggreen to the city of Clarksville, and we entertain no doubt but the Louisville and Nashville railroad company, with the aid of the counties along the line, will, under their charter, construct the road from Bowlinggreen to the Tennessee line.

The committee further report that there is no doubt that the county of Montgomery will aid in the construction of the road to the utmost of the ability of the citizens of the county, and that the citizens of the county in this convention assembled, hereby pledge themselves for the expense of the preliminary survey from Clarksville to the Tennessee river.

The citizens of Memphis perceive that the citizens of Nashville are about taking active steps to construct the Nashville and Northwestern railroad to the Mississippi river—that being the case, they have determined to construct their road under the Nashville and Memphis charter, so as to connect at some point at or near the Tennessee river, with the Nashville and Northwestern railroad, in the direction of Clarksville, and that they pledge their citizens for the expenses of the preliminary survey from Memphis to the Tennessee river.

Illinois.

Western and Atlantic Railroad.—Below we give the circular of this company. It will be recollected that Mr. Brough was elected President at a recent meeting of the directors. Arrangements have been made for the immediate construction of the road, provided the right of way can be obtained.

To the Stockholders of the Mississippi and Atlantic Railroad Company.

At the recent meeting of your board of directors at Marshall, they elected me to, and I accepted the office of President of the company.

I enter upon this service with the determination of pressing the work in the most vigorous manner, to an early completion.

I regard this road as one of the most important works of the kind in the Union. It is the last link that is wanted to complete the chain of railroads that will connect the Atlantic Ocean and the Mississippi river.

In less than one year there will be an uninterrupted line of railrood from Terre Haute to New York and Boston. It must be extended to St. Louis. The wants of the country—the great interests of trade, commerce and travel, require that this work should be constructed; and it will be built. It is the direct line, and capital will not turn to others while there is even a possibility that this can be accomplished.

The stock of this road, when completed, will be one of the best investments in the West. Capital is now looking to it; and I have the strongest assurances of liberal investments in it.

But there is much for you to do. There is yet but a small amount, comparatively, of stock taken on the line. This can, and must be increased. It is for you to arouse your people to a more lively interest in the work. They need have no fears of the results. These must be good. The road will be built, if those who are most deeply interested, will but lend a fair and helping hand.

There have been some embarrassments to the work, growing out of the provisions of the general law. We must remove these if we can—if not we must overcome them. Nearly the whole of the right of way is now relinquished, and active measures will be taken to secure the small amount remaining. The State of Illinois has a deep interest in the construction of the road. I have faith that her legislators, if they do not favor, will not embarrass, by unnecessary restrictions, so great and important an enterprise.

An effective corps of Engineers, is now forming to re-survey the whole line, and will be early in the field. It is our purpose to secure, as the chief of this corps, a scientific and experienced man, and to charge him with the utmost energy and perseverance in the prosecution of his duties. I hope you will meet him in a cordial manner, and render him every practical assistance. An assessment of eight per cent. has been made upon the capital stock, to cover expenses of these preliminary operations. I trust you will promptly meet this requisition, as without this the whole work must be seriously embarrassed.

Your late active and energetic President, Mr. Wait, has been continued in the service, as Vice President. He will accompany the Engineer force, and give it the benefit of his information and experience. My engagements in other quarters will occupy me until May, or June, when I expect to pass over the line, and make your acquaintance.—I shall rely confidently on your cordial support and

co-operation; and I hope by an energetic prosecu tion of the work, to merit your confidence.

Very respectfully,

JOHN BROUGH.

Pres't W. and A. R. R. Co.

Madison, Ind., March 1st, 1852.

American Railroad Journal.

Saturday, April 24, 1852.

To Subscribers.

☞ We find that, by a mistake of the folders, several numbers of our paper of the 3d inst. were sent out in covers of April 10th. Those of our subscribers who have received *duplicate copies* of the 3d, will confer a great favor upon us, by returning them by mail, *with the endorsement of their names*, and we will send copies of the 10th, and will also pay postage on the returned numbers.

Intolerance of Railroad Legislation.

There is a great want of tolerant legislation upon the subject of railroads, which is working no little inconvenience and mischief in many parts of the country. A number of our States act upon the principle of making most of their position, by laying contributions upon the travelling and commercial community, by imposing onerous conditions upon railroad companies, or by refusing charters for roads upon the best lines for travel and trade, for the purpose of compelling both to take a wide circuit, for some supposed advantage to be derived to the people on the favored route. We are happy to say that this miserable policy has but little influence in New England, and none in New York. But as soon as we step into Pennsylvania, we find it in full vigor. That State, like New York, extends from the lakes to the ocean, and her Legislature seem disposed to make the most of this fact, by imposing their own terms upon travellers, for the privilege of passing over her soil. She looks with the utmost jealousy upon the extension of the eastern roads through the small portion of her territory bordering upon Lake Erie, and would prevent this, if possible, for the purpose of forcing travel through the centre of the State, and Philadelphia. On her other border, she refused to suffer the Baltimore and Ohio railroad to touch her territory for similar reasons. She is now, we are sorry to say, likely to have a taste of this kind of policy, in the case of the Pittsburg and Steubenville road. This proposed road must pass through Virginia, and that State threatens to retaliate with the same kind of treatment which she has received.

Illinois, by the so-called *State policy*, which has in view the building up of commercial towns within her territory, is excluding a large amount of foreign capital, which, with a liberal policy, would be at work developing the immense resources of that great State.

The State of Mississippi has refused permission to the Memphis and Charleston railroad to pass through her territory, unless it should adopt a route some ten miles longer, and which will cost $200,000 more than the most direct and convenient one. This decision will probably force the company to avoid the State altogether.

The above are some of the more obvious instances of unwise and intolerant legislation. It is unwise, because public opinion is in the end certain to correct it, involving a loss of the greater portion of the capital expended upon untenable routes. The same policy should preside over the construction and direction of railroads, that does over the model and the sailing of a ship. Both are the instruments of commerce, and they should always be adapted to its wants. It is just as absurd for Pennsylvania, Illinois or Mississippi to adopt a peculiar railroad policy, as adapted to the supposed peculiar condition of these States, as it would be to assume that all their ships and steamboats should be constructed upon the same model, and pursue the same route.

Railroad Law in Ohio.

It has been recently decided in the courts of Ohio, that the new constitution changes the mode of assessing damages for taking land for railroad purposes. The law of the State prior to the adoption of the constitution, provided the mode of assessing damages, which were determined by *three* commissioners appointed for this purpose. The new constitution provides that no right of way shall be appropriated to the use of any corporation, until full compensation therefor be first made in money, or secured by a deposition of money, to the owner, irrespective of any benefit from any improvement proposed by such corporation, which compensation shall be ascertained by a Jury of twelve men, in a court of record, as shall be prescribed by law.

In the case decided, the company took the ground that the new constitution did not repeal the old law, providing for the assessment of damages at the date of the charter of the company; but that it became a part of the charter, which could not be repealed, being in the nature of a *vested* right. The court held, that though the right to condemn lands remained, the proceedings under which this right was to be exercised, might be altered at pleasure; and that consequently the constitutional provision superseded the old law.

It therefore becomes a question whether the county subscriptions voted since the new constitution went into effect, cannot be avoided for the same reason. This point was not raised in the recent decision in reference to the constitutionality of county bonds. We should like to hear from some of our Ohio friends upon this point.

Pennsylvania.

Chester Valley Railroad.—Contracts have been completed with a firm composed of able and efficient northern contractors, to complete this road, and to have it in readiness for business on the first of December next. The work has already been vigorously commenced, and we learn that it is the intention of the contractors to have 15 miles of the road in operation within three months from the present time. A sufficient quantity of iron for the whole road, now lying in New York, has been purchased, and is to be immediately forwarded to the line.

The above road extends from Downingtown, on the Central road, to Norristown, where it will form a junction both with the Reading and Norristown roads. The whole length of new road to be built will be about 22 miles. From the city of Philadelphia to Downingtown, the distance will be but slightly greater, than by way of the Columbia, or State road. with much better grade. As the Reading, and Philadelphia and Norristown roads, have much more convenient entrances into the city than the State road, the Chester Valley must become one of the most, if not the most, important avenue into the city, for the former. It will prove of great benefit to the city of Philadelphia, in opening another outlet to its western trade, and in preventing too great an accumulation of business at the city terminus of the State road. For a great road, like the Pennsylvania Central, it is highly advantageous to have a number of entrances into the city, to avoid the irregularity and confusion which is unavoidable, when sufficient accommodations for forwarding from the depots are not provided.

The Chester Valley railroad is important, both as a local road accommodating a very rich and highly cultivated section, and as the connecting link between the State, and the Reading and Norristown roads. It is believed that the local business of the route will afford a good income. Its coal traffic must be very large. Over 100,000 tons of coal are annually carted from the Reading, to supply the country traversed by the State road; all of which would pass over the Chester Valley road, with a largely increased amount, from the greater cheapness with which it can be delivered.

On the whole, the road is not only very important to the interest of Philadelphia, but to the roads it will connect, and the country it will traverse.—We cannot understand why it has not been sooner completed. We are happy to learn that the work of construction has passed into the right kind of hands. Those interested in the road may expect to see the work carried forward with energy and dispatch.

European and North American Railway.

In our paper of this week we give the memorial of Maine to the Congress of the United States, praying assistance in behalf of the European and North American railway.

Steel Springs for Railroads.

We invite attention to the advertisement of Messrs. James Jeffries & Sons, of Philadelphia, manufacturers of steel springs for railroads, etc. It will be seen that they offer the highest testimonials in favor of the excellent character of their work. The certificates annexed to their card are from persons entitled to implicit confidence. Philadelphia is fast becoming accessible by railroad from every portion of the country, which gives the best facilities to her manufacturers, for filling and forwarding their orders, with promptness, and at very reasonable rates.

Extraordinary Performance of a Locomotive.

The Baltimore and Ohio railroad company are now working a locomotive up a grade of 520 feet to the mile. This grade occurs at the great tunnel, where a temporary track has been laid over the mountain, for the purpose of transporting material for the road beyond, in advance of opening that work. The locomotive used weighs 24 tons, and the ordinary load attached to it, in addition to its own weight, is 12 tons. This grade has thus far been worked with regularity and safety. The whole power obtained is in the ordinary adhesion of the driving wheels.

This feat is so far in advance of the commonly received opinion in reference to the capacity of locomotive engines, that it would hardly be credited without practical proof of the fact. It shows conclusively that the maximum grades on the road after it shall be completed, will oppose no serious obstacle to a profitable traffic.

The tunnel is nearly completed, and will be in readiness for use in a few weeks. Some 12 or 15 miles of track are laid west of it. Every part of the line is being urged forward with the greatest energy, and no doubt is expressed of its being opened to Wheeling by the first of January, proximo.

Indiana.

Indiana Central Railway.—We learn that this company have decided to open their road by the first of December next, in season for the winter business, and that contracts have been made to that effect. There is no heavy work upon the line, and if the iron arrives seasonably, there will be no difficulty in opening the road at the above date.

If what the company now propose should be accomplished, the above road will be completed in a shorter time than any one of equal magnitude ever undertaken in the west. It has been pushed forward with extraordinary vigor, and as the high credit of the company will place it in possession of ample means, it will be completed at the earliest moment consistent with a proper economy of expenditure. This road may, after all, form a part of the first continuous line of railroad from Indianapolis running east, though only a year has elapsed since it was started. The vigor and energy displayed by the company will exert a very favorable effect upon its securities.

Hanover Branch Railroad.

This road is expected to be opened for business on the first day of June next.

Stock and Money Market.

The stock market continues buoyant, under a plentiful supply of money. Both sound and fancy stocks have reached a high figure. The demand for the best securities of new works continues good, and the supply of those best suited to the market is not equal to the demand, which has had the effect to cause a rapid advance in securities of this class. Money is obtained for new works with comparative ease, and all our numerous lines of railroad in progress are almost without exception making excellent headway.

The prospects are good for an easy money market for the present season. The foreign market is very easy. English Consols have reached nearly *par*, a point which they have not touched since 1844.

The receipts of the Cleveland and Columbus road for March were $38,500.

The receipts of the Albany and Schenectady railroad company for the months of January, February and March last were.....$44,318 11
Corresponding three months of 1850... 35,049 14

Increase, 26 per ct. for three months. $9,269 97

The business for April is very large, and will show an equal increase. The company have $200,000 of their old bonded debt due and falling due in June and December next. For $100,000 of this amount the road was originally mortgaged. A sale has just been concluded with Messrs. Winslow, Lanier & Co. of $200,000 of new bonds at par, the funds of which are to be applied to liquidating the above debt. The new bonds bear 7 per cent interest, payable semi-annually in this city, 1st of May and 1st of November; the principal payable here in 15 years, and they are convertible into stock at the pleasure of the holder. The mortgage referred to will now be cancelled.

The Louisville and Frankfort railway is doing a very handsome traffic. The following shows the earnings for March:—

From freights	$6,682 37
From passengers	8,761 05
From mail	464 29
Total	$15,907 71

The business on the Madison and Indianapolis road continues to be large. For last week the receipts were.....$9,150
Same week last year..... 6,500

Increase.....$2,650

The following table shows the amount of tonnage which entered the ports of Great Britain and the United States for nine years:—

Tonnage Entered Great Britain and the United States.

	UNITED STATES. American.	Foreign.
1842	1,510,111	732,775
1843	1,143,523	534,752
1844	1,977,438	916,992
1845	2,035,486	910,563
1846	2,221,028	968,178
1847	2,101,358	1,120,346
1848	2,393,482	1,405,191
1849	2,658,321	1,710,515
1850	2,573,016	1,779,623
1851	3,054,349	1,939,091

	GREAT BRITAIN. British.	Foreign.
1842	1,680,838	974,769
1843	2,919,528	1,005,894
1844	3,087,437	1,143,896
1845	3,689,853	1,353,735
1846	3,622,808	1,407,963
1847	4,238,056	1,552,095
1848	4,020,418	1,519,046
1849	4,390,375	1,680,894
1850	4,070,544	2,035,152
1851	4,388,248	2,599,988

The above table discloses the fact that in our commercial navy we are but six years behind Great Britain.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, APRIL 24, 1852.

GOVERNMENT AND STATE SECURITIES.	
U. S. 5's, 1853	102½
U. S. 6's, 1856	108½
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	118½
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120½
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	88
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76½
Illinois 6's—interest	48
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	100½
Maine 6's, 1855	103
Maryland 6's	105½
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106½
New York 5½'s, 1865	106½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103½
New York 5's, 1866	105
New York 4½'s, 1858-'59-'64	97
Canal certificates, 6's, 1861	106
Ohio 6's, 1856	106
Ohio 6's, 1860	109½
Ohio 6's, 1870	114
Ohio 6's, 1875	115½
Ohio 5's, 1865	104½
Ohio 7's, 1851	100
Pennsylvania 5's	93
Pennsylvania 6's, 1847-'53	101½
Pennsylvania 6's, 1879	108
Tennessee 5's	86½
Tennessee 6's, 1860	105
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.	
Brooklyn 6's	106½
Albany 6's, 1871-1881	108
Cincinnati 6's	98
St. Louis	95
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	107
New York 5's, 1858-'60	100
New York 5's, 1870-'75	103
New York 6's, 1890	103½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	106
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.	
Erie 1st mortgage, 7's, 1868	116
Erie 2d mortgage, 7's, 1859	104½
Erie income 7's, 1855	97½
Erie convertible bonds, 7's, 1871	95½
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	104
Reading 6's, 1870	79½
Reading mortgage, 6's, 1860	85½
Michigan Central, convertible, 8's, 1860	104
Michigan Southern, 7's, 1860	96½
Cleveland, Col. and Cin. 7's, 1859	104
Cleveland and Pittsburg 7's, 1860	97
Ohio and Pennsylvania 7's, 1865	99½
Ohio Central 7's, 1861	93

RAILROAD STOCKS.
[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	April 14.	April 21.
Albany and Schenectady	100	100
Boston and Maine	105	105½
Boston and Lowell	109	109
Boston and Worcester	101	101½
Boston and Providence	87	87½
Baltimore and Ohio	68	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	142½	142½
Delaware and Hudson (canal)	110½	111
Eastern	97	97
Erie	89	89½
Fall River	98½	98
Fitchburgh	104½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	76½	75½
" preferred	111½	114½
Hartford and New Haven	123	123
Housatonic (preferred)	35	35
Hudson River	64	64½
Little Miami	—	—
Long Island	22½	21½
Mad River	—	—
Madison and Indianapolis	—	100½
Michigan Central	97½	97½
Michigan Southern	113	114½
New York and New Haven	111½	111½
New Jersey	132	132
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	59	58½
Ogdensburgh	25½	27½
Pennsylvania	45	43½
Philadelphia, Wilm'gton & Balt.	29½	30
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	74	77½
Rochester and Syracuse	115	117
Stonington	57½	56½
South Carolina	—	—
Syracuse and Utica	124	128
Taunton Branch	115	115
Utica and Schenectady	130½	131
Vermont Central	20½	19½
Vermont and Massachusetts	20	20
Virginia Central	40	40
Western	103	103½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

New-York.

Buffalo, Corning and New York Railroad.—We have received a recent exhibit of this company, from which we gather the following facts relative to the character, condition, and prospects of their road.

The company was first organised in July, 1850, by the name of "The Buffalo and Conhocton Valley railroad company," but the name was changed by an act of the Legislature, passed March 3d, 1852.

The road which this company are constructing extends from Painted Post, on the New York and Erie railroad, to the city of Buffalo, a distance of 134·29 miles. The use of the track of the Erie railroad to Corning is secured to them, so that they are enabled to offer a much shorter route between Buffalo and New York city to the travelling public than the one now traversed, running through the Mohawk valley and the city of Albany.

At the village of Corning, where the Buffalo and Corning railroad unites with the Erie, a connection is also made with the Corning and Blossburg railroad, which extends to the rich iron, coal and lumber regions of Pennsylvania.

Corning is also at the head of navigation on the Chemung canal, by means of which, a communication is opened with the canals extending through the central part of New York, and is the seventh shipping port, in point of tonnage, on the canals of this State.

These connections, together with the rich and productive territory through which the road passes will, in the opinion of the directors, render it one of the most profitable lines now being constructed in the State.

The general route of the road is as follows:—On diverging from the Erie railroad, it passes up the valley of the Conhocton river nearly to its source, a distance of about 45 miles. Thence it continues in a northwesterly direction, running east of Lake Conesus, to the Genesee river, which it crosses, connecting at Avon with the Genesee Valley railroad. From Avon the road runs to Batavia, in Genesee county. Thence it continues in nearly a straight line to the city of Buffalo. The counties traversed are Steuben, Livingston, Genesee and Erie, all of them rich, fertile, and densely populated, requiring such a road as the Buffalo and Corning to open a market for their surplus productions.

The work on the road is rapidly progressing.—The grading, masonry and bridging, are now fully complete on the first division, extending from Corning to the Livingston county line, a distance of 45 miles. The rails on that portion of the road will all be laid by the 30th of April, and the cars will commence running early in May. The next division of the road, from Steuben county line to Batavia, a distance of 53 miles, has been placed under contract, and a large amount of work has already been done. The grading on 12 miles, to Conesus Centre, is nearly completed, and the road will be opened to that point at an early period.—Contractors are now upon the remaining sections to Batavia, which will be vigorously prosecuted to an early completion.

The cost of the entire road from Corning to Buffalo (exclusive of road equipments) is estimated at $1,706,738, or $12,716 80 per mile. The total cost, including road equipments, will probably be $1,942,778, or $14,467 per mile. The first division of 45 miles has cost, fully complete, the sum of $461,352 27, or $10,252 27 per mile, which sum includes the equipment of the road, depot buildings, water stations, and all other necessary items of expense.

The amount of capital stock of the company, by the articles of association, is $1,400,000, all of which has been subscribed, and is principally held by stockholders resident upon the line of the road.

The directors, in order fully to complete and equip the road, have resolved to issue bonds to the amount of $1,000,000, to secure which they have executed a mortgage, covering their entire road and its equipments. The mortgage provides that only $400,000 can now be issued, the balance to be issued as consecutive portions of the line are completed. The amount of the first issue, $400,000, will constitute an incumbrance equal to $7,150 per mile, upon the 56 miles of the road which are *now nearly completed*, being less than the value of the iron and land.

The estimated earnings of the Buffalo, Corning and New York railroad are based upon the receipts of the Erie railroad, for the year 1851, and the probable receipts for 1852. The receipts of that road for the year ending Jan. 1st last, were $2,800,000, or over $6,000 per mile.

This year they are estimated at $4,000,000, or over $8,500 per mile. There is every probability that the receipts of the Buffalo, Corning and New York railroad will equal those of the Erie per mile, if not exceed them, for the country run thro' is much more thickly settled and productive than that traversed by the latter road, and the through traffic can scarcely be less.

Estimating then the receipts of the Buffalo and Corning railroad at $6,000 per mile, the total for 134 miles will be $804,000. From which deduct 40 per cent for expenses, $321,600, and we have net earnings of $482,400, or equal to 24 per cent on the entire cost of the road. If we should reduce this estimate to $4,000 per mile, which is in fact below the earnings of any completed road in the State, we shall have a gross receipt of $536,000.—From which deduct 40 per cent for expenses, $214,400, and we have left for net earnings the sum of $321,600, or 16 per cent on the entire cost of the road. Even supposing that the entire capital and bonds should be absorbed in its completion, thus overrunning the estimates and contracts by $400,000, still we should have net earnings on the first estimate of $6,000 per mile, of over 20 per cent, and on the estimate of $4,000 per mile, of over 13 per cent.

The directors feel confident that these estimates of earnings will be more than realized, and that their road will be a highly profitable one.

The Cumberland Coal Trade

The Cumberland Coal and Iron company, recently chartered by the Legislature of Maryland, it is stated, has effected a large reduction on the tolls for the transportation of their coals. The Baltimore and Ohio railroad company have reduced the charge for transportation from Cumberland to the wharves of Baltimore to $1 75 per ton. This reduction, it is believed, insures the delivery of coal afloat at prices which will command an almost unlimited market. A similar reduction on the Chesapeake and Ohio canal from Cumberland to Alexandria, will, of course, follow; which, together with the enormous cash capital of the company, exceeding one million dollars, will constitute the Cumberland Coal and Iron Co., a rival that may well be apprehended by the mammoth Anthracite companies of New York and Pennsylvania. The company contracts to give regular employment to one hundred cars of the Baltimore and Ohio railroad company per day. Lines of canal barges are being established, which will convey coal through the Chesapeake and Delaware canal, from Baltimore to Philadelphia, for from sixty to seventy cents per ton; through the Delaware and Raritan canal to New York for from $1 to $1 25 per ton.

Tehuantepec Railroad Company.

We have, says the New Orleans Commercial Bulletin, before us, the report made to the permanent committee of this company, by Mr. Benjamin. It announces that the business, for which the committee was originally organized, has been brought to a successful termination, and that a review of their action would show that all the objects contemplated at the time of their appointment, had been brought about. The domicil of the proposed company, and the control of the entire line across the Isthmus, are permanently fixed in this city; the Garay grant of lands, amounting to some 5,000,000 of acres, and including the sites of the two projected cities on the Gulf and the Pacific, has been transferred to the New Orleans company. In regard to this grant, the report further sets forth:

"In establishing the title of the Garay grant, and the rights of the company in that grant, in so conclusive a manner, as to elicit the necessary action of the Government of the United States for the protection of those rights as matters of national concern, justifying and requiring national interference."

The report then alludes to the extensive surveys which have been made, demonstrating the practicability of building the proposed road at a cost not exceeding the original estimates, and to the existence of safe and commodious harbors on both sides of the Isthmus. The report continues:

"Mr. Benjamin further represented that the estimates contained in the published reports must be regarded as showing the cost and character of the road in its least favorable aspect, because, during the progress of the works, the engineers had discovered at different points indications sufficient to satisfy them that the line could be varied from that surveyed with great advantage; but they were arrested in their examination of these new localities by the orders of the Mexican authorities, prohibiting them from continuing their labors.

It was further stated that the entire expenses of the operations up to this date had been paid in cash, and that arrangements had been made under which the line of communication could be opened from sea to sea, and steam connection established between New Orleans and the Coatzacoalcos, as well as between the port of Ventosa and San Francisco, within three or four months from the date when the Mexican ports should be opened to admit the transit.

The same gentlemen further read a letter from a responsible firm at the North, proposing to the company to build the entire road from sea to sea [as represented in the report of the survey, 166 miles in length,] within three years, at the rate of $40,000 per mile, being $7000 per mile less than the estimate of the report, taking part of the payment in the stock of the company.

A discussion then ensued relative to the measures now necessary to put the enterprise in such a position as to lose no time in establishing the communication when the opening of the Mexican ports, now daily expected, should permit, the current of travel to pass across the Isthmus, and it was determined—

1. To make a definite and final organization of a company in place of the present provisional company, by preparing and adopting a charter under the recent act of the Legislature. And Mr. Benjamin was requested to draft the charter for that purpose, to be submitted to an adjourned meeting of the committee.

2. To apply to Mr. Hargous for an extension of four or six months beyond the period fixed by his contract with the committee, which expires on the

10th May next, the company having been prevented by the conduct of Mexico from complying within the term fixed with the conditions imposed on by the contract.

The meeting was then adjourned until the charter could be prepared, when it was represented that a full attendance of the committee would be desirable.

The progress which the committee have made, as set forth in the above exhibit, is encouraging and satisfactory in a high degree, and reflects infinite credit upon them as men of enterprise and enlarged public spirit. They fully show that they have surmounted the greatest obstacles in their path, by establishing the title of the Garay grant in such a manner as to call for government interference, in case Mexico should not be disposed to respect the clearly ascertained and legally defined rights of an American company; that arrangements have been made to open a line of communication from sea to sea, with steam communication to San Francisco, on the Pacific side, and to New Orleans on the other side, within a few months from the time when Mexican port regulations shall admit the transit; and that a responsible Northern firm have proposed to build the road at a cost less, by $7000 per mile, than the original estimate, and to take stock of the company in part payment.

Western Transportation.

The Buffalo Commercial Advertiser with reference to the reduction in tolls and freights on the Erie canal, says it will be seen that a great reduction has been made in tolls charged on the canal, and a corresponding reduction on freight between Albany and Boston. This has enabled the several transportation lines on the Erie canal to adopt prices for carrying merchandise from New York, Boston, Albany and Troy, to points west of us much less than those charged last year. On down freights there are no fixed prices, but the commercial and forwarding interests of Buffalo have been fully awakened to the importance of having the produce of the west pass through here on its way to an eastern market, and are disposed to do the business and carry the freight at the lowest possible remunerative prices.

From a consideration of the above statement, says the Cincinnati Price Current, we are satisfied that an increased amount of western business will pass through Buffalo, for the obvious reason that the Erie canal furnishes the most direct communication offered for transportation between the eastern and western States; and all that has been wanting to give it *the* carrying trade in years past, has been a proper action on the part of the canal board in charging tolls, and the carriers on it with regard to prices charged for transportation. The former show in their late reduction of tolls, that they have discovered what was wanting in their department, and remedied it to a great extent; the latter have done the same with their prices. There is no doubt but great efforts will be made by rival routes, to carry a large portion of the business of the west *around* us; but if one-half the exertion is put forth by our commercial men and the friends of the Erie canal to keep it in, that will be made to divert it from the *direct* channel, we need have no fear but the result will be in our favor.

Railroad Travel from Albany to Buffalo.

The central roads, [from Albany to Buffalo,] have postponed the adoption of their Spring arrangements, from the 19th to the 26th inst. Thereafter passengers and baggage will be ticketed through to and from this city and the principal places west of Albany.

Population

Of the principal Cities and Towns of the United States, with their decennial increase per cent, from 1830 *to* 1850.

Cities and Towns.	Population of 1830.	Population of 1840.	Population of 1850.	Ratio of inc. 1840.	Ratio of inc. 1850.
New York.	197,112	312,710	515,507	58·64	64·85
Phil. City..	80,462	93,665	121,376	16·4	29·58
Philad. co., exclusive of City..	108,335	164,372	287,386	51·72	74·83
Baltimore..	80,620	102,313	169,054	26·9	65·23
Boston.....	61,392	93,383	136,871	52·1	46·56
N. Orleans.	49,826	102,193	119,461	105 9	16·89
Cincinnati.	24,831	46,338	115,436	86·61	149·11
Brooklyn ..	15 394	36,233	96,838	35·37	167·26
St. Louis..	4,977	16,468	77,860	230 9	372 75
Albany	24,209	33,721	50,763	39·29	50·53
Pittsburg...	12,568	21,115	46,601	68·	120·7
Louisville..	10,341	21,210	43,196	105·1	103·65
Charleston.	30,289	29,261	42,985	*	46 9
Buffalo....	8,668	18,213	42,261	110·11	132·03
Providence.	16 833	23,171	41,512	37·65	79·15
Washin'n†.	18,826	23,364	40,001	24·1	71·2
Newark ...	10,953	17,290	38,894	57·85	124·95
Rochester..	9,207	20,191	36,403	119·3	80·29
Lowell ..:.	6,474	20,796	33,383	221·22	60·52
Williams'g.	1,117	5,094	30,770	356·04	504·4
Chicago...	—	4,470	29,963	—	570·31
Troy	11,556	19,334	28,785	67·3	48·88
Richmond..	6,055	20,153	27,482	232·83	36·36
Syracuse...	—	—	22,271	—	—
Alleghany..	2,801	10,099	21,261	260·19	110·73
Detroit	2 222	9,102	21,019	309·63	130·92
Portland...	12,598	15,218	20,815	20·79	36·77
Mobile	3,194	12,672	20,513	296·74	61·87
N Haven..	10,678	22,960	20,345	21·37	59·98
Salem.	13,895	15,082	20,261	8·24	34·35
Milwaukee.	—	1,712	20.061	—	1,071·78
Roxbury...	5,247	9,089	18,364	73·22	102·04
Columbus‡.	2,435	6,048	17,883	148·37	195·68
Utica.....	8 323	12,782	17,565	53·57	37·41
Chars'town.	8,783	11,484	17,216	30·75	49 91
Worcester.	4,173	7,497	17,049	79 65	127·41
Cleveland .	1,076	6,071	17,034	464 21	180·57
N. Bedford.	7,592	12,087	16,443	59·2	36·03
Savannah .	7,302	11,514	16,060	53·57	43 21
Reading ...	5,856	8,419	15,748	43·61	87 25
Cambridge.	6 072	8,409	15,215	38·48	80 93
Bangor....	2,867	8 626	14,432	200 9	67·28
Norfolk ...	9,814	10,927	14,326	11·26	31·19
Lynn.....	6,138	9,367	14,257	52 6	52 2
Lafayette ..	—	3,207	14,190	—	342·46
Petersburg.	8,322	11,136	14 040	33 81	25·8
Wil'ton§ ..	—	8 367	13 979	—	67·07
Pough'sie..	7,222	10,006	13,944	38·54	39·35
Manchester	877	3,235	13,932	68·87	330·67
Hartfort ...	7,074	9,463	13,555	33·84	43·16
New Brunswick	7,831	8,663	13,387	10 52	54·53
Lancaster .	7.704	8,417	12,365	9·25	46·9
Lockport...	3,823	9,125	12 323	138·68	35·4
Oswego....	2,703	4 665	12 205	72 58	161·62
Springfield.	6,784	10,985	11 766	61·92	7.1
Newburgh.	6 424	8,933	11,415	39 05	27·78
Wheeling .	5,276	7 885	11,391	49 45	44·46
Paterson...	—	7,596	11,338	—	49·26
Dayton....	2,950	6,067	10 976	105·66	80 92
Nashville..	5,566	6,929	10,478	24·48	51·21
Taunton...	6,042	7,645	10,441	26·53	36 57
Norwich...	5,161	7,239	10,265	40 26	41·8
Kingston ..	4,170	5,824	10,233	39·66	75·7
Memphis..	—	2,026	8,839	—	336·27
Augusta ...	3,980	5,314	8,225	33·51	54·77
Bath	3,773	5,141	8,029	36·25	56·
Madison...	—	3,793	8,005	—	110·76
Zanesville.	3,094	4,766	7,929	54·04	66 36
Chillicothe.	2,846	3,977	7,100	39·74	78 52

* Ratio of decrease, 3·39.
† Seat of the National Government.
‡ Columbus, Ohio.
§ Wilmington, Delaware.

Government Appropriations for Internal Improvements.

States and Territories.	Amount.
Maine	$276,574 72
New Hamshire	10,000 00
Massachusetts	596,148 00
Vermont	101,000 00
Rhode Island	32,000 00
Connecticut	160,407 00
New York	1,632,115 80
New Jersey	28 963 00
Pennsylvania	207,981 23
Pennsylvania and Delaware	38,413 00
Delaware	2,033,356 00
Maryland, Pennsylvania, and Virginia	1,901,227 81
Maryland	55,000 00
Virginia	25,000 00
North Carolina	370,377 00
Georgia	243,043 66
Florida	287,712 72
Alabama	201,997 60
Mississippi	46 500 00
Louisiana	717,200 00
Tennessee	11,920 00
Kentucky and Tennessee	155,000 00
Arkansas	486,065 00
Missouri and Arkansas	100,000 00
Missouri	75,000 00
States through which the western rivers pass, (the Ohio, Mississippi, Missouri, and Arkansas)	1,698,000 00
Indiana	1,270,733 59
Illinois	993,601 00
Ohio	2,617,661 37
Michigan	645,721 83
Wisconsin Territory	167,500 00
Iowa Territory	75,000 00
	$17,194,223 21

AMOUNTS APPROPRIATED IN EACH YEAR.

Year.	Amount.	Year.	Amount.
1809.....	$48,400 00	1831.....	$926,311 34
1810.....	60,000 00	1832.....	1,225,008 43
1811.....	50,000 00	1833.....	1,159,451 82
1812.....	30,800 00	1834.....	1,641,621 52
1815.....	100,000 00	1835.....	1,355,243 61
1816.....	10,000 00	1836.....	1,837,520 31
1817.....	4,000 00	1837.....	1,768 218 63
1818.....	317,989 60	1838.....	2,087,044 16
1823.....	32,920 00	1839.....	60,500 00
1824.....	175,000 00	1841.....	75,000 00
1825.....	176,712 00	1842.....	100 000 00
1826.....	284.253 00	1843.....	230 000 00
1827.....	398,541 45	1844.....	696,500 00
1828.....	1,020,120 56	1845.....	50,000 00
1829.....	608,560 25		
1830.....	672,506 03		$17,199,223 21

Lake Superior Travelling Arrangements for 1852.

We are happy to be able to state, says the Lake Superior Journal, that the facilities for transportation of passengers and merchandise to, and on Lake Superior, will, during the coming season, be greatly increased. Ward & McKnight's line will have below the Sault, in addition to the London, already favorably known to the travelling public, the Sam. Ward, and another new low pressure boat of 600 tons to be placed on the route by the 1st of July.—These boats, with the Northerner, belonging to Turner's line, will afford ample accommodations for all who are desirous of visiting the Lake Superior country for the purposes of business or pleasure. And above the Sault, the Baltimore, now hauled across the portage, will fully replace the unfortunate Moncello that was wrecked last fall. Other vessels also will be added to the Lake Superior fleet, that will enable it to supply the wants of the trade in that region. With these accessions of strength, we trust that the miners, and other settlers on the lake will no longer have occasion to lament inadequate means of transportation, or to suffer from the want of supplies which they have heretofore been unable to carry below the Sault.

Vermont Central Railroad.

An informal meeting of the stockholders of this road was held in Boston on the 20th inst., to hear certain disclosures of a Mr. J. W. Seymore, formerly a clerk in the employ of the company, who called the meeting under promise of making certain disclosures, impugning the integrity of the directors. B. T. Reed, Esq., presided.

After Mr. Seymore had read his statement, says the Boston Courier, a committee of three, consisting of Messrs. Torrey, Thacher and Gregerson, was chosen to consult with the leading stockholders and select a committee of investigation, whose duty it shall be to make a thorough examination of the company's affairs, the conduct of its present and past managers, etc., and make a full report thereon. Mr. Seymore accused the President of being a defaulter and of having made exorbitant charges for services, endorsing, etc. He also stated that one of the directors had charged $5000 commission for negotiating mortgage bonds, and $1 per share for disposing of five thousand shares of the Canada railroad stock at $97 per share, [with accrued interest included] which, after deducting Thayer & Brothers' commission of 50 cents per share, netted the corporation but $93½ per share, for a guaranteed eight per cent stock. Other directors were also implicated in a long list of implications. A reply was made by Mr. Putnam, one of the directors, who denied the correctness of most of Mr. Seymore's statements, stated that others admitted of explanation, and defied him or any committee of investigation, to prove that the directors had done anything wrong. In conclusion, he said it was his belief that the meeting was got up to divert public attention from really guilty parties.

Pennsylvania.

Central Railroad.—A meeting of the stockholders of this company was held in Philadelphia on Monday evening last, when the special committee on the subject reported in favor of subscribing for 5,000 shares of the capital stock of the Ohio and Pennsylvania railroad, and a further amount of 3,000 shares to form a connection between the terminus of the Ohio and Pennsylvania railroad and the Pennsylvania railroad at the outer depot of the latter company in the city of Pittsburgh. The committee reported against the propriety of the Central railroad company embarking at present in the construction of lateral roads.

New York.

Syracuse and Binghamton Railroad.—It will be seen by reference to an advertisement in our paper of to-day, that proposals are invited for the construction of this road. We believe the project to be a very important one, as well as one that promises to be highly remunerative. Its line traverses one of the best portions of New York, which is now without railroad accommodations. It will, when built, become the great avenue from the Lackawanna coal fields of Pennsylvania, to Syracuse and Oswego. The transportation of coal alone, would afford a profitable business, to say nothing of travel or the appropriate local traffic of the line.

W. P. Burrall, Esq., of Bridgeport, has been appointed Vice President of the New York and New Haven railroad company, with the understanding that he will hereafter devote his time principally to the affairs of that company, and discharge the executive duties connected with the transportation department, which have heretofore developed on the President,

Kentucky.

Covington and Lexington Railroad.—We learn that the work on this road is going on with energy and vigor. One of the most difficult tunnels on the road has been completed. The work of construction is going forward with all the rapidity that ample means and efficient management can impart. The Covington and Lexington, from its connection with other lines, is getting to be one of the most conspicuous projects in the west, as well as in the whole country.

We may state in this connection that by the yearly census just completed the increase of population of Covington for 1851 was 2,800. The population by the census of 1850 was 9,010. Few western towns can show an equal increase, and none have better prospects for future growth. The completion of the Covington and Lexington railroad will add a new impulse to this already thriving city.

Georgia.

Wilkes County Railroad.—The following gentlemen have been chosen directors of this road for the current year:

Lewis S. Brown President. A. L. Alexander, George W. Palmer, Samuel Barnett, Charles L. Bolton, M. P. Callaway, A. A. Cleveland, I. T. Irvin, Jr., G. P. Cozart, R. H. Vickers, Wm. M. Reese.

Resolutions were passed accepting on the part of this company, the act of the Legislature authorizing a consolidation of its stock with that of the Georgia railroad company, and authorizing the directors to carry it into effect.

New London, Willimantic and Palmer Railroad.

The citizens of New London have voted by a two-thirds majority vote, to loan the credit of the city to the amount of $100 000, for the benefit of the New London, Willimantic and Palmer railroad company—the object being to employ the money in effecting the proposed connection between the road of that company and the Norwich and Worcester railroad.

Canada.

The Montreal and Lachine, and the Lake and St. Louis Province Line railroad companies have been consolidated, under the title of the Montreal and New York railroad company. The Canada portions of the Plattsburg and Montreal road is also in a promising condition. It is expected that the cars will be in operation over the entire line, from Plattsburg to Caughnapaga, by the first of August next.

New Jersey.

Railroad on Staten Island.—A railroad is proposed across Staten Island from Vanderbilt's Landing to Unionville, opposite Perth Amboy, and a company formed for carrying the project out. The President is Joseph H. Seguine; Treasurer, Stephen Seguine; and Secretary, George White.—The cost is estimated at $32,195. The estimated receipts are $64,165 for week day traffic alone; expenses, $41,705: leaving $222,460 as profit, which is about 7 per cent on the cost of capital.—The road will be thirteen or fourteen miles long.

Kentucky.

Value of Stock in the Lexington and Maysville Railroad.—At the recent sale of the effects of the late Mr. Grimes, of Bourbon county, 20 shares of stock in the Lexington and Maysville railroad, [$50 per share,] were sold at $49 75 each—only 25 cents less than the subscription price. This shows the value in which the stock is held in one of the counties through which the road is to pass.—*Frankfort Commonwealth.*

New York Canals.

The Erie canal was opened for traffic on the 20th instant, which was as soon as the lakes were fully navigable. The past winter has been one of unexampled severity, and the business commences upon the lakes at least a month later than usual. The long gap which exists on the lake shore road, has given a decided advantage to the Pennsylvania as a through route, and has secured to Philadelphia a large western trade during the present spring, a portion of which would otherwise have come to New York. The disadvantage under which we have been laboring will be removed in a few months more, and by the first of January, 1853, New York will have uninterrupted communication with most of the important cities of the west.

In view of the large number of new routes which are competing for western trade, the old routes that formerly monopolized, are making the most strenuous exertions to retain it. Large reductions have been made in the charges upon the Erie canal.—The tolls on the Welland canal are now merely nominal. These reductions will compel railroads to make similar concessions. In the west, an active contest is going on between railroads and canals, particularly those of Ohio, and rates there will be very largely reduced. The period has now arrived when the direction of trade will exert more influence in determining the rate of tolls, than the mere question of revenue.

Railroad Compromise.

A compromise has just been concluded between the Vermont Central and Rutland and Burlington railroads, and the Lake Champlain Steamboat Transportation Company, by which these three different corporations, for the remainder of the present season, will act in unison and on friendly terms; and arrangements have also been made with the Ogdensburgh, Champlain and St. Lawrence, Whitehall and Troy, Hudson river, and with nearly all the New England railroads, for the purpose of facilitating travel and transportation, by adopting a course of action and rules by which all concerned are to be governed.

BOSTON BOLT COMPANY,
BOSTON, MASSACHUSETTS.
MANUFACTURE
Screw Bolts of all kinds,
Suitable for Steam Engines & all kinds of Machinery.
Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.
All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.
N.B.—This Company manufacture, also, the most complete Side Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.
W. A. BARRETT, Agent,
75 State Street, Bosto .

Railroad Spikes.
THE Subscribers are prepared to take contracts for Railroad Spikes of any pattern desired.
These Spikes are of our own manufacture, and have been extensively used and approved by various Railroad Companies.
They are manufactured from the best quality refined iron, and are considered superior to any in the market.
We have constantly on hand a large assortment of the different sizes: and all orders addressed to us will meet with ready and prompt attention.
THACHER & SEARS.
Boston, April 20, 1852.

Railroad Iron.
THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms. RICHARD MAKIN,
April 22, 1852. 4 New st., New York.

To Contractors.

SEALED Proposals for the grading and masonry of two divisions of the line of the *Hartford, Providence and Fishkill Railroad*—one extending from Providence to Willimantic, the other from Bristol to the Naugatuck Valley—will be received at the Company's Office, Hartford, up to the 29th inst.

Plans, profiles and specifications will be ready for examination on and after the 22d inst., at the same place, and information regarding the route may be obtained at the Company's office in Providence, Willimantic and Bristol, as well as at the Engineer's office in Hartford.

The directors will require security for the faithful execution of the work, which is to be divided into sections of convenient length.

The Directors also reserve the right to reject such proposals as they may consider unsatisfactory.

SAMUEL ASHBURNER, Chief Engineer.

Hartford, April 5th, 1852.

To Contractors.

SEALED Proposals will be received by the undersigned at his Office in Lambertville, until the 22d day of April inst., for the Grading and Masonry of twelve miles of the Belvidere Delaware Railroad. The work will be ready for inspection, profiles and specifications will be shown, and blanks furnished, on and after the 19th inst.

ASHBEL WELCH,
Engineer B. D. R. R.

Lambertville, N. J, April 7th, 1852.

To Contractors.

PROPOSALS for the construction of the Syracuse and Binghamton Railroad complete, in conformity to a plan and specification which may be seen at the Office of the Engineer, in Syracuse, on and after May 5th, will be received at the Office of the Secretary, in Syracuse, until the 15th day of May next. Payment for the work to be made in cash, and the stock and bonds of the Company.—Proposals to specify the proportion of each, and may be made for the whole or a portion of the work.

A. H. HOVEY, Secretary.

Syracuse, April 15, 1852.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

Jannary 31, 1852. 1m

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fillings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALL.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

S. DRAPER, Auctioneer.

PEREMPTORY SALE OF

FIRST MORTGAGE BONDS

OF THE

Buffalo, Corning and New York Railroad Co.

This company will offer for sale through Simeon Draper, on the 13th day of May next, at 12 o'clock, at the Merchants' Exchange, in the city of New York, $400,000 of their first mortgage bonds, payable in 1867, with seven per cent. interest payable semi-annually, at the "Bank of Commerce in New York."

These bonds are a part of one million, authorised to be issued for the purpose of completing their road, and are secured by a first mortgage on the entire road and its franchises, by deed of trust to John A. Stevens, James S. T. Stranahan, and John A. C. Gray, as trustees, and are convertible into the stock of the company at par at any time within five years from their date.

The road extends from Corning on the New York and Erie railroad, to the city of Buffalo, a distance of 134 29-100 miles, and will, when completed, form, in connection with the New York and Erie railroad, one of the most important and direct thoroughfares between the cities of New York and Buffalo and the far West, and will connect at Corning with the Corning and Blosburgh railroad, now being relaid with T rail, which extends to the rich iron, coal and lumber regions of Pennsylvania.

On diverging from the New York and Erie railroad, this road passes up the rich and fertile valley of the Conhocton river to near its source, at the northerly line of Steuben county, a distance of about forty-five miles, passing through the village of Cooper's Plains, Campbell, Savona, Bath, Kennedyville, Avoca, Liberty Corners, Conhocton and Wayland, thence through Springwater, Conesus, Livonia, Avon, [where it crosses the Genesee river;] and Caledonia, in Livingston county, and through Le Roy and Stafford to Batavia, in Genesee county. This part of the line, for nearly its whole length, passes through one of the richest and most productive portions of our state.

From Batavia the line of the road passes westerly in nearly a straight line, to the city of Buffalo.

The cars are now running on 25 miles of the road west from Corning, and it is expected to have the rails laid by the 30th instant for twenty miles further, when the cars will run 45 miles. The road is under contract to Batavia, and it is designed that the cars will be running over the whole road in all of the present year.

The mortgage provides that only $400,000 of bonds can now be issued, and the balance as consecutive portions of the road are completed. When the whole of said bonds shall be issued, the amount of incumbrance on said road will be something less than $7,500 per mile. The amount of the first issue, $405,000, will constitute an incumbrance equal to $7,150 per mile, upon the fifty-six miles of the road which are *now nearly completed*, being less than the value of the iron and land.

By this arrangement it is believed that the bondholders will be made secure beyond a possibility of doubt, the property of the company being at all times amply sufficient to indemnify them against any loss.

The following gentlemen compose the board of directors of the company:—

John Magee, Bath.	James S. Wadsworth,
Constant Cook, Bath.	Geneseo.
Orson Phelps, Buffalo.	O. Comstock, Avon.
Thos. J. Dudley, "	J. A. C. Gray, N. York.
Wm. J. Miller, "	D. Curtiss, Campbell.
M. P. Lamson, Le Roy.	T. Brown, Caledonia.
	T. Cary, Batavia.

Andrew B. Dickinson, Hornby.

Pamphlets, with a map showing the route of the road, and containing full particulars, with a copy of the mortgage and bonds, may be had on application to either of the directors, or of

S. DRAPER, corner of Pine and William sts.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

Notice to Contractors.

HEMPFIELD RAILROAD.

PROPOSALS will be received from the 19th to the 26th of April, at the office of the Engineers, in Wheeling, for the grading of twelve or more sections of the Hempfield Railroad, including a tunnel 1500 feet in length, through Brady's Hill, east of Washington, and other heavy work between Wheeling and Washington.

Profiles and specifications, with approximate estimates of quantities, will be supplied at the office.

T. M. T. McKENNAN, President.
CHARLES, ELLET, Jr., Engineer.

Washington, Penn., March 23, 1852.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch. WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

To Railroad Contractors.

Office Illinois Central R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian	53 "
Sixth	"	"	Bloomington to the Illinois River	60 "
Eighth	"	"	from Freeport to Dubuque	67 "
Ninth	"	"	Chicago to Kankakee river	55 "
Tenth	"	"	Kankakee river to Urbana	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required. R. B. MASON,
Engineer in Chief Illinois Central R. R.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, JR.,
Chief Engineer.

Engineer's Office, Pittsburgh, March 22, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan. 22, 1852.

Rubber Springs.

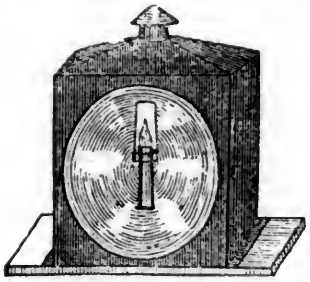
THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.



Olcott & Brother,

INVENTORS and Manufacturers of the celebrated Locomotive Lamps, to whom was awarded the FIRST premiums by the American Institute, and also at the State Fair held at Rochester, N.Y., in 1851. These Lamps are in general use throughout the United States. We are now prepared to furnish Lamps of every description used on Railroads, and a better article than any other establishment in the United States.

A. R. GILLMORE, Agent,
35 Canal st., New York.

OLCOTT & BROTHER, Rochester, N. Y.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers.

JFE, CARMER & CO.,
75 Broad st., New York.

6m*14

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To Mr. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

Railroad Iron.

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports o the United States.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

Office. R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

To MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction.

F. C. ARMS,
General Superintendent.

Macon & Western Rail-Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston

Lithographic Printing,

169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction - India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agen

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK. Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steam ships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.		Fig. Garnet Plush	(Butterfly pat.
" Crimson "		" Crimson "	(Elegant.
" Scarlet "		" " "	(Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.		Gold and Maroon do.	
Gold and Blue	"	" Brown	"
Silk and Wool	"	of every color.	

MOQUETTS,
Of elegant designs and colors.
GERMAN CLOTH FOR CAR LININGS.
The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold.	These goods can be
" " Silver.	furnished in any
Do. Silver ground velvet printed.	dimensions req'd.

CURLED HAIR
Of every description and quality.
New York, 1850. 1y16

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 18] SATURDAY, MAY 1, 1852 [WHOLE No. 837, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Ohio and Mississippi Railroad.....273
Canadian View of the St. Lawrence Route....275
European and North American Railroad.....276
English Railroads.....275, 276
On Railway Axles.....277
New Orleans and Jackson Railroad.....277
Parkersburg Railroad.....283, 278
Quebec and Halifax railroad.....279
Erie Canal.....279
Fairbank's Scales.....280
Montreal and Portland Railroad.....282, 280
Pennsylvania Railroad.....280
Lawrenceburg and Upper Mississippi Road...280
Stock and Money Market.....281
Philadelphia, Wilmington and Baltimore road.282
Railroad Gauge in Canada.....282
Railroad Law.....283
Delaware and Hudson Canal.....283
Chesapeake and Ohio Canal.....283
Baltimore and Ohio Railroad.....283
West Chester Railroad.....283

American Railroad Journal.

Saturday, May 1, 1852.

Ohio and Mississippi Railroad.

ESTIMATE OF VALUE OF STOCK. BY E. D. MANSFIELD.

Office Ohio and Miss. R. R. Co.,
Cincinnati, O., March 26th, 1852.

E. D. MANSFIELD, Esq.,

Dear Sir: I have stated in the body of my report, that the estimates therein presented are fully sustained by the statistical tables which you had the kindness to prepare at my request. If consistent with your other engagements, will you please furnish me with your views on this subject, giving to it as full an examination as your leisure will permit?

Yours, very respectfully,
O. M. MITCHEL,
Engineer in charge Ohio and Miss. R. R.

Cincinnati, March 31, 1852.

PROFESSOR MITCHEL,

Sir: In answer to your note of the 26th inst., I shall reply, as concisely as the nature of the subject will permit. It is an important problem. It involves the interests of numerous stockholders, and of an extended country. It involves not merely a general estimate of railroad property, but of the peculiar value of such property, in a region of unsurpassed resources, and in states just emerging from infancy to unprecedented prosperity.

The United States now affords a large railroad experience; the lines are some of them longer than the length of renowned empires; their aggregate is nearly half the circumference of the globe; and their capital exceeds that of all the banks of the nation. This experience is not only large, but valuable. It is the correct basis of reasoning on this subject; but in extending this reasoning to the valley of the Mississippi, where as yet but little of this experience exists, we must recollect that the problem of profits is at once modified by its vast extent and its enormous resources. In what portion of the earth is there any real analogy to those various and fertile plains, which descend from the Appalachian and the Rocky Mountains, on either side, to the mighty stream of the Mississippi? A country like this has no analogies. We must therefore take the experience of railroads in the United States generally; but in its application to the "Ohio and Mississippi Railroad," modify our reasoning by the greater extent, the greater resources, and the different conformation of this country. This investigation will, of course, lead us to the idea of greater profits than have been realized on the Atlantic slope. But the results are the conclusions of reason from irrefutable facts.

This course of reasoning, and its conclusions, I have developed in the following propositions:

1. Long railroads are more profitable than short ones. In proof of this, the roads which have made the greatest dividends, or have the largest net proceeds, are those which are either long roads themselves or links of a long road. Take, as examples, any part of the line from New York to Portland, Me., from New York to Buffalo, from New York to Dunkirk, from Baltimore to Cumberland, and from Cincinnati to Cleveland. These are the longest lines in America, and are far more profitable than any others. That this may be made clear, I give the following table of long lines, or parts of lines, for the year 1851. It must be observed, that the Erie line was only completed last year, and is hardly yet in full operation, and that the Baltimore line is only completed to a small town in the mountains.

Road.	Length. miles.	Capital.	Profits. per ct.
Buffalo and Albany	329	$14,300,000	11
New York and Erie	464	23,000,000	7
New York to Boston, by Hartford	242	16,572,000	8
Boston to Troy	200	16,775,000	7
Baltimore to Cumberland.	177	8,771,619	7½
Cincinnati to Cleveland, by Columbus	254	6,452,073	12
Georgia Central	192	4,000,000	8
Georgia (Augusta)	211	4,000,000	8
Seven long lines	2,069	94,070,692	
Averages	295	13,434,088	8

It then appears that the longest lines of railroads in the United States have in their infancy paid a net profit of eight per cent. and two of them have exceeded ten per cent! No such results as these have been obtained on any other public highways in the world, and none such can be obtained in any country which does not admit of very long lines, connecting regions of different resources, and uniting great marts of trade. We see here a very extraordinary fact, that after averaging all the results of good and bad management, of extravagant and economical construction, of great varieties of geological conformations, on the Atlantic coast, and in the Mississippi valley, in free and slave states, after averaging all these, an expenditure of nearly one hundred millions of dollars (expended mostly by persons without experience,) is now paying a net profit of eight per cent, while the capital of Europe does not pay four!

The Ohio and Mississippi railroad will have all the advantages of either of these roads, and far more, as I shall proceed to prove. One collateral observation, however, should not be omitted. The Ohio and Mississippi is not only a long line in itself, but will be a link in a line the extent of which neither has, nor can have, any equal upon earth. Supposing (which is impossible) that it will never be carried west beyond St. Louis, it will nevertheless be part of one continuous straight line, moving northeastwardly from St. Louis to Halifax, a line of more than 2,000 miles in length, every mile of which is connected with every other mile, and the material part of which is that it moves *through all the great cities of America*, and if continued to the Pacific, will run through the great cities of the Pacific coast! What effect the vast extent and vast traffic of such a highway may have on any one part of it, we have no experience, but all analogy leads us to the logical conclusion, that the greater the traffic on the whole line, the greater it will be on any one mile of it. If this be true, as we have no doubt it is, most magnificent indeed will be the amount, and the profits of business which must inevitably accrue on this central link of the whole, between Cincinnati and St. Louis. But I am well aware that there are various circumstances and contingencies of importance, which either increase or diminish the value of railroad stock. The most material of these are, the relative cost of construction, the degree of competition to which they are subjected, the amount of freight, as compared with passengers, which they receive, and finally, the points of commerce which they connect. Each of these I shall consider separately.

2. The relative cost of construction is altogether in favor of railroads made in the Mississippi valley, as compared with those already made on the Atlantic slope, or hereafter to be made on the Pacific. The reasons are to be found chiefly in the different geological conformations of those different districts. But in reference to the Ohio and Mississippi railroad, as compared with either of the works in the preceding table, we have a precise standard, for we know what the relative cost will be. The sum agreed to give the contractors for everything, including the stock of the road, is nine millions. We may safely assume ten millions as the ultimate

cost of the road, and 330 miles as its length. Let us now compare this cost with that of the several long lines enumerated above.

Road.	Length. Miles.	Cost per mile.	
Ohio and Mississippi	330	$10,000,000	$30,000
Buffalo and Albany	329	14,300,000	43,770
New York and Erie	464	23,000,000	50,000
New York and Boston	212	16,572,000	70,000
Boston and Troy	200	16,775,000	83,887,500
Baltimore and Cumberland	177	8,771,619	50,000,000
Cincinnati to Cleveland	254	6,472,073	25,000,000
Georgia Central	192	4,000,000	21,000,000
Georgia (Augusta)	211	4,000,000	18,000,000

The average cost of all the long lines enumerated above, now finished, is $45,000 per mile, while the average of the Ohio and Mississippi will be $30,000, or two-thirds that. Let us now compare it with the continuous line from Boston to Buffalo. That line is 529 miles long, and cost thirty-one millions of dollars, or a bare fraction under sixty thousand dollars per mile, or just double that of the Ohio and Mississippi. This line returns to its stockholders the enormous amount of two millions seven hundred and fifty thousand dollars net profits, paid in cash. Now if we suppose the Ohio and Mississippi to have just one half the business of the Boston and Buffalo line, it will yield the same proportion (9 per cent) of net revenue. But there are strong reasons to believe that it will have as much, and a great deal more business than the Boston and Buffalo line; for

3. The Ohio and Mississippi railroad will have far less competition than any line enumerated above. All the long lines we have enumerated (except the Georgia railroads, where the population is quite sparse) have great competition. Let us see; from New York to Boston there are four great travelled routes, competing with the New Haven and Hartford railroad lines. There is the Fall river line of splendid steamboats, there is the Stonington and Providence line, the Norwich line, and the steamboat line to Hartford; and each of these carry large numbers of passengers. Next, on the Boston and Buffalo route, the Erie canal, with its immense commerce, the Northern railroad to Ogdensburg, and the New York and Erie railroad from New York. All were in competition last year, and yet the Boston and Buffalo line yielded nearly 9 per cent! If we turn now to the Ohio and Mississippi railroad, we find there is no competitor but the Ohio river. For, supposing that every railroad lying north of the line of the Ohio and Mississippi railroad, which has even been thought of, shall be really completed, not one of them can enter into competition with that, as a line between St. Louis and Cincinnati, for they must necessarily all of them be comparatively roundabout as a connection between these cities; and it must be again remarked, that the only great artery of communication in any country is that which passes through its great cities. Commerce does not admit of any other alternative. It has its great marts, and to them all traffic tends. On the score of competition then, the Ohio and Mississippi railroad will have great advantages over either of the great eastern routes.

4. The next consideration is the proportion of freight to be carried. The following table shows the proportion which exists between the receipts from tonnage and from passengers, on some of the main lines, viz.:

Roads.	Passengers.		Tonnage.
Albany and Buffalo	19	to	6
New York and Boston	10	to	7
New York and Erie	10	to	10
Baltimore and Ohio	3	to	6

The vast discrepancy between the receipts from passengers as compared with freight, between the Buffalo and Baltimore lines is most striking. The proportion of receipts from passengers on the Buffalo line, as compared with the Baltimore, is as 6 to 1. Had the Erie canal not existed, and the Buffalo railroad been capable of transacting that business, then the net profits of the Buffalo and Albany railroad would have been more than 30 per ct., after allowing for all the wear and tear of its immense traffic! This, too, be it remembered, with all the competition of the Erie railroad.

Now, this immense result, and great difference in the lines of communication pointing westward, is solely due to the surplus products of the west; and wherever there is a great thoroughfare through the central west, the profits of western railroads from this source will rise in proportion. Of the railroads yet constructed in the United States, whose ultimate termination is in the west, the Baltimore and Ohio is the fairest one by which to ascertain the probable results of a great western line, because its course is directly west, and it has less competition than the other routes mentioned. But it must also be remembered that this work has as yet only come *to* the mountains. We can only guess at results when it comes to Cincinnati. The actual business of that road, even in its present condition, will however, give us a little insight into what may be expected of a central line through the great commercial cities of the west. The tonnage of freights going east and west was as follows, viz.:

	Tons.
Tonnage eastwardly	459,000
" westwardly	75,921
Total	534,921

Here we see that the eastward tonnage, composed wholly of western produce, amounted to six times the westward tonnage. Among the articles thus transported were half a million of barrels of flour and four millions of bushels of coal. The traffic in these and all other staple articles of the west will continually increase till we reach the Mississippi river. Here I must remark, that whether a railroad can carry heavy freight advantageously—a question much mooted twenty years ago—is forever set at rest by the experience of the Baltimore and Ohio, and the *western* Massachusetts railroads. Coal, granite and flour are transported with the facility and almost the speed of passengers. The capacity of a railroad is only limited by the extent of its motive power. Its capacity to carry heavy articles profitably is only limited by the actual wants of the market which it supplies. Taking the experience of the Baltimore railroad as a criterion, the Ohio and Mississippi will receive eight per cent net profits from freight alone! But if we take into consideration the vastly greater surplusses of the country through which this road passes, beyond that of the Baltimore road, 12 per cent from freights will scarcely be more than what may reasonably be anticipated.

Is there anything in the nature and resources of Indiana, Illinois, and Missouri, as compared with those of Maryland and Virginia, which can impeach the fairness of this deduction from the Baltimore road? I think not. If 177 miles on that road produced 500,000 tons of freight, can the 330 miles from Cincinnati to St. Louis produce less than a million? On the contrary, is there not substantial reason, in the nature, resources and rising growth of these new states to believe the result will be far greater?

5. I have yet said nothing of passengers, usually the first, and in the New England railroads the great element of railroad calculations. In the rail road line from Albany to Buffalo, a line almost precisely equal in length to the Ohio and Mississippi, the proportion of receipts from passengers, compared with that from freight, was 19 to 6, or three to one. Yet with comparatively so little freight, that line yielded, in reality, 11 per cent! I admit at once, that the region through which the Ohio and Mississippi will pass, is by no means so densely populous as New York, but on the other hand, its rapid growth will be far greater. What will Indiana and Illinois be ten years hence? With what rapidity will towns and villages, marts of commerce and garden farms arise on such a great and wide-reaching thoroughfare? But I propose to indulge in no dreams of fancy or conjecture. He who invests capital in large enterprizes, should reason correctly, and reason from established premises.—We have in regard to passengers, one fixed fact in railroad experience. It is, that in taking a long line into view, the way passengers are the most numerous. It is certain also that these way passengers are all derived from that local territory which depends solely on that line for transit. It receives nothing in that way from foreign sources, and is dependent on no supply from its extreme mouths. I find by reference to the tables of the Baltimore road and the Little Miami road, that leaving out of view the through passengers, there was an average of about 800 way passengers to each mile of railroad. Applying this fact to the Ohio and Mississippi, I find that although the population of the dependent territory is less to a square mile, yet the number of square miles is greater in proportion to the length. It is fair therefore to apply the ratio of 800 to a mile. I find the result to be 264,000 way passengers, which at an average of one-third the through ticket [say $2] each, gives $528,000 for way passengers. The nett profit on the way passengers would be about 3 per cent. on the entire capital.

I shall not touch the question of through passengers, because, as connecting the vast transit movement of the Mississippi river, will all that lies east of it, by a line running through the great cities of the nation, the result must, as yet, be only conjectural. But who can conjecture it to be less than that of the most productive lines of the country? We may assume it as certain, that the receipts from through passengers will not be less, in nett profit, than those from the way transit.

5. But, lastly, what are the commercial points which the Ohio and Mississippi connects? No less than the two hearts of the central West. This consideration is not less important than any other. The trade and attraction of inferior points may be drawn off by rival routes, but those of great commercial marts cannot. Commerce has certain fixed laws, which it always obeys. One of these is, that all products for sale tend from every point to those great cities which have become great *wholesale markets and centres of capital.* If fifty considerable towns, but which are not such great centres of capital and distribution, have railroads to them, they will nevertheless not be able to divert a single ton of freight for wholesale from its ultimate destiny in these commercial centres. It follows then, inevitably, that however many railroads may be made, in the same general direction with the Ohio and Mississippi, but not passing through Cincinnati and St. Louis, they will not sensibly affect the traffic on the main line. The business which is to be done in the West must pass through Cincinnati or St. Louis, and the great current of business in the United States will forever have a tendency to pass through the great central cities of the West, as it takes its course either from or to the East.

This review of the causes which will tend to increase the business of the Ohio and Mississippi railroad leads logically to but one conclusion, that no railroad has yet been made in the United States which promised or makes so large profits as we may reasonably assume from the great Work of the West. The premises we have taken are matters of fact. The conclusions inevitable. The results startle indeed those who have not made this analysis of facts. But are they more startling than the actual growth of such cities as Cincinnati and St. Louis? These cities in 1860 will be as large as New York was in 1830, and but a few years more they will be where New York now is. The country whose markets they are is growing in population, wealth and productive industry at a rate which confounds all beholders, and sets at defiance all ordinary rules of calculation. In a country where a railroad can be made on nearly a straight line, there can be but one great railroad route between those mighty cities. It monopolizes the direct line, and places a successful competition beyond the limits of possibility. You will readily see that I have not attempted to say what per cent. such a railroad will yield, but have simply reasoned from known facts to what seems inevitable conclusions. I do not say that there are no contingencies which might change some of these results, no vicissitudes of nature or of commerce, which may change the conditions of the problem. But I see nothing probable in the future to diminish the prospects of large profits to the stockholders in this magnificent enterprize. On the contrary, there is good reason to suppose that its results will be beyond the anticipations of the most sanguine imagination.

Yours, respectfully,
EDWD. D. MANSFIELD.

From the Journal du Quebec.

Canadian View of the St. Lawrence Route.

* * * If we take Chicago as a point of departure, situated as it is at the extreme end of Lake Michigan, we will have the following results:—

	Miles.
From Chicago to New York	1,600
From Chicago to Quebec	1,600

But Quebec is by 360 miles nearer to Great Britain than New York.

	Miles.
We have therefore for New York	1,960
Quebec	1,600
In favor of Quebec	360

Vessels going to New York, will have to pass through 668 feet of lockage, 81 locks, and 364 miles of canals.

Those that descend to Quebec will only have to pass through 533½ feet of lockage, 49 locks and 28 miles of canal (70 in ascending.)

A steamboat of six hundred tons can make the voyage from Chicago to Quebec in ten days, six from Chicago to Port Maitland, and four from Port Maitland to Quebec. The passage from the same place (Chicago) to New York is made in sixteen days, of which ten are from Buffalo to New York. This gives a difference of six days in favor of Quebec.

But, observes Mr. Tache, in his report of the Department of Public Works for the year 1848—"Although the advantages of the St. Lawrence appear incontestible, the commissioners are of opinion they have represented them in the most unfavorable light, because they have, in comparing the time which vessels take to pass through these respective routes, allowed six days of navigation from Chicago to the foot of Lake Erie, while the passage is virtually the same for American vessels and ours. Therefore, in order the better to understand the importance of the Canadian route, it is necessary to take another point of departure; it is from Port Maitland on the one side, and Buffalo on the other, that we must, in justice to our route, fix the points of departure, because it is at these two points alone that the natural difficulties commence which have to be vanquished on either side. A cargo of three hundred tons, arriving at Buffalo, will have to be re-shipped in five small barges, which will take twelve days, generally speaking, to arrive at New York, while a similar cargo, perfectly entire and without being disturbed in the slightest, will pass through the Welland canal and arrive in four days at Quebec, that is, in one-third the time which the cargo, divided into parcels, will occupy in reaching New York; and, supposing that the boat, having arrived at Quebec, transhipps its cargo on board a vessel ready to sail for Europe, this vessel with a fair wind would have reached the Banks of New Foundland before the cargo passed through the Erie canal had been discharged at New York."

The vessels which navigate the Erie canal, are on an average of about sixty whilst our canals admit vessels of upwards of five hundred tons, or eight and one-third times larger than the former. So that a vessel of five hundred tons, arriving at Buffalo, would have to divide her cargo amongst eight barges, which, arriving at Albany, must either deposit their contents in vessels made for the navigation of the Hudson or proceed slowly to New York. The same vessel will run through the Welland canal in twelve hours, and arrive without obstacle at Quebec. The cargo will undergo only one transhipment from Chicago to Liverpool, and thus will much time and money be spared.

A barrel of flour costs from Buffalo to Albany:—

Freight	31 cents.
Canal tolls	46
Total	77

From Maitland to Quebec:—

Freight	20 cents
Canal tolls	15
Total	35

RETURN FREIGHT.

A cwt. of merchandize costs from Albany to Buffalo:—

Freight	15 cents.
Canal tolls	24
Total	39

or $7 80 per ton.

A cwt. from Quebec to Maitland, costs:—

Freight	5 cents.
Canal tolls	10
Total	15

or $3 per ton.

So we have $4 80 in favor of the St. Lawrence, without counting the storage at Albany and Buffalo, and the freight from New York to Albany.—Yes, and the cool deep waters of St. Lawrence, no matter what Mr. De Witt Clinton may say to the contrary, preserve grain and flour much better than the warm, muddy water of the Erie canal.

The Mississippi and its tributaries, which water a valley of 785,200,000 superficial acres, capable of containing a population of 50,000,000 of souls, according to Mr. Keefer's calculations, present dangers and inconveniences which the genius of man will never be able to overcome. The river itself, narrow and not very deep, runs with a uniform rapidity of three miles an hour. When its waters are swelled by periodical floods, they drag with them in their course large trunks of trees which reach the bottom at almost every point and adhere there by their heaviest ends; the other extremities inclined towards the current and invisible to the eye of the navigator, present themselves like so many fixed lances to the vessel ascending the stream and pierce it immediately. These trunks of trees, to which the old Canadian *voyageurs* gave the picturesque name of *chicots*, destroy in this manner about a hundred vessels a year, or a fifth of all the vessels that navigate the Mississippi; an annual loss of more than a million of dollars. The premium of insurance averages from twelve to fifteen per cent., and the greater part of the steamboats, the only vessels that navigate or that can navigate effectually the Mississippi, cost more than they yield. The capital which represents these vessels, according to Mr. Keefer, is exhausted every fourth year. The cost of transport of a barrel of flour from Cincinnati to New Orleans is two shillings and six pence.

The climate is likewise another obstacle to the future success of the Mississippi route; tobacco, wheat, flour, pork, lard, butter, cheese, etc., become damaged by the action of a warm temperature; and, in this respect, the route is much inferior even to the Erie canal.

Railway Economy--The Permanent Way.

The great inconvenience and expense of the "cross-sleeper" road have hitherto been found to arise from the "joint chairs"—viz: the chairs into which the ends of the rails are fitted and secured—getting out of order. The bolts or pins are continually becoming loose; the ends of the rails get what is termed "play" upon the chairs, and are not unfrequently hammered by the wheels of the engines and carriages, into the "bearings" of the chairs to the depth of a quarter of an inch, or more. It is to this looseness of the ends of the rails in the joint chair and the hammering away of the bed, or bearings of the chair itself, that the incessant clattering of the wheels of the train, so disagreeable to the passenger, is to be attributed. But the serious evil of the common joint-chair is its liability to fracture, and the consequent "tipping" of the end of the rail, or the throwing the engine and train off the metals; and we believe that it would not be difficult to point out many serious accidents that have been occasioned by broken or defective joint-chairs.

The alteration of the permanent way of the Eastern Counties line is confined to an improvement of securing the ends of the rails, and getting rid altogether of the joint-chair. We pointed out the improvement longer than two years since, but certain "practical" men thought very lightly of it, and our opinion of its value had little attention paid to it.—We are glad to learn that the "practical" men are beginning to acknowledge the value of the improvement, which, indeed, will in all probability be carried out upon most of the railways of the country.

The improvement, as we have stated, is very simple. The end of each rail has two holes punched through it, and between the double T of the rail, a piece of iron 18 inches in length, is fitted on either side. Screw bolts are then passed through the "fish" pieces and the rail, and the rails at the joints are in this way made stonger than in any other part. So that in fact the rails are practically made continuous metals; and the knocking and jarring of the wheels of the carriages, so common on cross-sleeper roads, and so destructive to the rolling stock, are entirely got rid of, as is also the joint-chair and the evil consequences of its use.

The Eastern Counties company have already fish-jointed their line as far as Sawbridgeworth [28 miles from the Bishopsgate-street terminus,] and they are proceeding with the alteration over the entire line at the rate of above two miles per week. They have applied to the working of a punching machine the necessary portions of a little vertical boiler locomotive, both of which have ample space found for them on a truck, and as the permanent way men take up the rails the holes are punched in the latter. The rails are immediately relaid with the fish-joint fitted to them.

The economy of the alteration will be best gathered from the fact that, under the old system of joint-chairs the portion of the line to which the fish-joint has been applied cost the company £92 per mile per annum for labor alone, and that the labor for such portion of the line is now contracted for at the rate of £34 per mile—a saving of £58 per mile per annum. It is calculated that the saving to the company from the use of the fish joint will—when the whole line is altered—amount to about £13,000 per annum, exclusive of the saving in the great wear and tear of the joint-chair system.—*English paper.*

Persons Employed on Railways in England.

It appears from a parliamentary return recently issued, that the number of persons employed on railways in the United Kingdom on the 30th of June, 1851, was 106,501, and on the 30th of June, 1850, 118,859, showing a decrease of 12,358 persons, including 10,667 laborers. The number employed on railways in England and Wales, on the 30th June, 1851, was 80,612, in Scotland, 8,802, and in Ireland, 17,087. In June, 1850, the numbers were, in England and Wales, 78,570, in Scotland, 16,495, and in Ireland, 23,794. The number of miles open at the end of June, 1851, was 6,692¾, and in course of construction, 735 miles; the length open at the end of June, 1850, was 6,307¾ miles, and in course of construction, 868¾ miles. The number of miles in abeyance at the end of June, 1851, was 4,525¼, the total length authorised at that date was 11,959 miles.

On lines open for traffic in England and Wales the number of persons employed on 5,200 miles of railway, having 1,669 stations, was 51,979, and at the corresponding period of 1850, 46,787 persons, on 4,901 miles of railway, having 1,610 stations.—On lines open in Scotland the number of persons employed on 960¾ miles of railway, having 304 stations, was 8,107; and at the corresponding period of 1850, 8,516 persons on 891¾ miles of railway, having 291 stations. The number of persons employed on 537½ miles railway, having 134 stations on 30th June, 1851, was 3,477; and at the corresponding period of 1850, on 515 miles of railway, having 129 stations, 4,671 persons were employed. The increase of mileage in England and Wales during the year ending 30th June 1851, was 299 miles, with 59 stations; in Scotland 69 miles and 13 stations; and in Ireland 23 miles and 5 stations.

The number of persons employed on 735 miles of railway in course of construction at the end of June, 1851, was 42,938, of whom 34,948 were laborers, and at the corresponding period of 1850, 58,885 persons were employed on 868 miles of railway. The length of railway in course of construction in England at the end of June, 1851, was 537 miles, on which 28,633 persons were employed,; in Scotland, 21¾ miles, on which 695 persons were employed, as against 81¼ miles in June, 1850, and 7,979 persons employed; and in Ireland, on 176 miles in course of construction, 13,610 persons were employed, as against 192 miles at the corresponding period and 19,123 persons. The number of miles in abeyance in England and Wales being

2,926, in Scotland 796 miles, and in Ireland 803½ miles.

Of the 106,501 persons employed on railways in the United Kingdom on 30th June, 1851, 267 were secretaries and managers, 37 treasurers, 234 engineers, 504 superintendents, 219 storekeepers. 208 accountants and cashiers, 942 inspectors and timekeepers, 1,504 station-masters, 182 draughtsmen 5,168 clerks, 1,681 foremen, 2,258 engine drivers, 2,387 assistant engine-drivers, 2,252 guards and breaksmen, 1,865 switchmen, 1,311 gatekeepers, 1,861 policemen and watchmen, 9,865 porters and messengers 5,605 platelayers, 18,258 artificers, 49,758 laborers, and 105 miscellaneous.—*Herapath's Journal.*

European and North American Railway.

Few enterprises, if in fact, a single one, among all the various projects of the last few years, have attracted so much public attention, since the inception of the undertaking, as the plan of the European and North American railway. In this we include the project of a line of railway from Montreal to Halifax, through the territory of the United States—looking forward also to its ultimate extension to the nearest available port of this continent to Europe.

Much of the interest that has attached to this question, has grown out of its international and intercolonial character, aside from its commercial aspects and relations. To find the people of the neighboring States and Provinces, earnestly at work in a common cause, calculated to foster and promote common interests and enterprises, with the spirit and the heart of one people, presents a pleasing contrast to the history of former years, especially when the border troubles brought Maine and New Brunswick into hostile bearing with each other. The natural result of the agencies that have been at work since the adjustment of all our difficulties with England, is now seen in these railway movements. No sooner had the Treaty of Washington disposed of the northeastern boundary dispute, in a manner entirely satisfactory to all parties, than we saw our enterprising neighbors in Maine taking the initiatory steps to cross the frontier, which had been so valiantly defended before, with an invading force of railway contractors and operatives, to annex their interests, by railway, with the British Provinces.

In 1844, the Portland and Montreal railway was started, looking forward at the same time to its gradual extension east to St. John and Halifax. The intelligent people of Canada readily responded to this movement, and the work of building the line from Montreal to Portland, a distance of 290 miles, was boldly entered upon at each end, with limited means, at the time, but with confident assurances for the future. The hopes excited in England during the railway mania of 1845, were dissipated by the revulsions which followed, at the end of that year, and Montreal on the one side, and Portland on the other, have been forced to assume the load of raising some four or five millions of dollars each; and the road, as we learn, will be opened for the entire distance in July, 1853, at a cost of something less than ten millions of dollars.

No sooner had the Portland and Montreal railroad been fairly entered upon, and the plan of the line east from Portland to Halifax suggested, than the rival project of a railway from Halifax to Quebec was started; and though this movement for a time diverted the attention of a portion of Canada east from the Portland line, it did not seriously retard it. The delay in the completion of the Montreal and Portland line, from the breaking of ground in 1846 to July, 1853, a period of seven years, has arisen from the inability of the two companies more rapidly to command the means.

As soon as the Montreal line was fully secured, the original friends of that route in Portland, turned their attention towards the extension of the line to Halifax. The British ministry, by a despatch of Earl Grey under date of June 19th, 1850, gave a decided negative to the application of the British Provinces for assistance to the Quebec line, and the people of the Lower Provinces at once gave support to the Portland route, while Quebec proposed to connect with the Portland and Montreal road at Richmond, forming thereby a connection with Montreal, and with the Atlantic coast and the Lower Provinces.

A convention of the friends of this whole scheme assembled at Portland in July, 1850, agreed upon the plan of the European and North American railway. This convention excited the most extraordinary interest, not only for its numbers, but for the display of business talent and the most exciting eloquence. We have looked over the account of its proceedings, and cannot but regard it as one of the most fortunate events of the times. The differences of seventy years' estrangement had passed away, and the stronger affinities of a common ancestry, of language, and of religion, found each other out, and the people of the different British Provinces and the Western States, set themselves at work to secure the means of communication with each other, regardless alike of artificial or political lines of boundary.

Its proceedings were immediately transmitted to England. The first indication of hostility to it was shown in Earl Derby's great speech on the subject of railways in British North America, made in the House of Lords, Feb. 14, 1851. Earl Derby then most earnestly advocated the building of an intercolonial line entirely through British territory, without regard to its commercial advantages. This speech will be found in *Hansard's Debates*, vol. 114, page 613. It now excites more interest than at the time of its delivery, from his lordship's position at the head of the government at the present time. This speech excites admiration from the evidence it bears of his Lordship's accurate and minute knowledge of all the details of the railway movements in the colonies.

After this, on the 14th of March, 1851, came out Earl Grey's proposal to advance £7,000,000 sterling to aid the building of railways in British North America. The sincerity of this offer was much questioned; but the provinces acted upon this question, as if the offer was well intended, and finally, after much conflict of opinion and feeling, they have come to an agreement accepting the terms proposed. The Hon. Mr. Hicks, of Canada, the Hon. Mr. Howe, of Nova Scotia, and the Hon. Mr. Chandler, of New Brunswick, are in England, to arrange the terms of the bargain proposed. Whatever doubts existed, as to the intentions of the Russell ministry, none whatever can be raised as to the purposes of Earl Derby. His character is above the suspicion of duplicity, and his policy has been most fully and explicitly marked out.

The provinces found themselves at variance at first, on the question of route. This matter was finally adjusted, by taking the line proposed for the European and North American railway from Halifax to the City of St. John. From thence it is proposed to keep the west bank of the river St. John, till the line shall approach our frontier, near Woodstock, thence following the valley of the St. John to the head waters of the De Loup, which runs into the St. Lawrence river, and thence to Quebec. The proposal is to advance the money from the Imperial Treasury, at the rate of 3½ per cent, on the provincial securities, or to guarantee the provincial debentures at the same rate—the lines to be public provincial works, owned and managed by the provinces respectively.

The completion of a line from Halifax to S. John, will secure at once the extension of the line to the junction of Maine at Calais, a distance of 73 miles, as soon as assurances are given of its extension in continuation of our lines to the same point.

From Calais to Bangor, 96 miles, a charter has been granted, the line carefully surveyed, at the expense of the State of Maine, showing that a cheap and most profitable route for the entire distance. At Waterville, 50 miles from Bangor, the line will connect with railroads extending to this city, a distance of 432 miles, over which trains now run in one day.

The State of Maine cannot loan its credit, for any purposes whatever, from a constitutional inhibition similar to that of New York.

It, however, has asked assistance from the general government in the form of a grant of two millions of acres of public lands, and for a contract for carrying the mails by the overland route through Maine.

That the project has claims to support from all the commercial interests of this country, cannot, we think, be questioned. The completion of these lines at the north or east, must have a most salutary influence upon the business interests of the commercial metropolis; and we cannot doubt its hearty support of the scheme as proposed.—*Journal of Commerce.*

The Position and Prospects of English Railroads.

Why should we continually trouble ourselves about closing capital accounts and benefitting railways, when the parties (the shareholders) most interested betray by their apathy so little concern about either? is a question we often ask ourselves. The only reply we can give is a desire to save a large property from gradual erosion and consequent destruction, and to do our duty, even though that duty is not appreciated or seconded by those for whose benefit we labor.

Does any one require proof of our data, that railways are being gradually eroded, we refer to the table and accompanying statistics, now for several years figuring in the first year's number of Herapath's Journal, by Mr. Hackett. We there have the mortifying fact brought to our view that railways, notwithstanding the intended improvements and greater experience in construction, notwithstanding the additions of late years have consisted mainly of cheap extensions and branches, and notwithstanding the less cost of materials and labor, with iron at about half the price of former years, the average cost per mile has been considerably and annually increased. For example:

In 1847 the average cost was				£31,709	per mile.
In 1848	"	"	"	34,234	"
In 1849	"	"	"	35,214	"
In 1850	"	"	"	35,229	"
In 1851	"	"	"	35,058	"

This is a more serious and alarming fact than at first sight may be apparent to every one. For though the additional miles opened every year have been made cheaper and cheaper, yet the expenditure has been so great and increasing on the old lines, through the lawyers and engineers being allowed to keep the capital open, as to make the average cost of the old and new £3,500 a mile greater in 1850 than in 1847. Had the capitals been closed we should have had the average mileage cost of construction constantly decreasing, instead of increasing. This is not mere assertion, we have the proof before us. For during the past year or two we have been constantly urging the closing of the capital accounts, and the result has been that the average mileage cost in one year has sunk from £35,229 on about 6,200 miles opened, to £35,058 on about 6,500 miles opened. That is, while in former years the mileage cost was gradually increasing as more and cheaper railways were opened, we have now with only 300 more miles opened on 6,200, a positive average diminution upon the whole 6,500 of £170 a mile. In other words, the increase of 5 per cent cheaper miles of railway has reduced the average cost a half per cent. Now we cannot imagine, without a miracle, that the cost of the 6,200 miles opened in 1850 had in 1851 actually become less, and it therefore follows that there has been none, or a very insensible amount, expended on the old lines since our repeated calls for closing the capital accounts, which has caused the cheaper construction of the 300 new miles to exhibit an apparent diminution when spread over the whole.

We may gather from this one fact what has been done under the agitation for closing the capital account, and from that form a pretty good estimate of the effect if the capital was actually closed. If the capitals are kept open the costs will go on increasing until the traffic, could it be worked for nothing, would not pay anything like the interest for the money expended.

To show that we are not incorrect in this view, we will quote the mileage traffics for the several years from 1847 to the past:

1847, mileage traffic			.....	£2,870
1848,	"	"	.....	2,556
1849,	"	"	.....	2,302
1850,	"	"	.....	2,227
1851,	"	"	.....	2,283

Here we have unmistakeable facts of the necessity of closing the capitals. Year after year, with cheaper lines added, has the average cost per mile

increased, and the average mileage traffic diminished. So that if a check had not been given to it by our reiterated representations of the evil effects of open capitals, the profits would have dwindled every year until they sunk to nothing, and calls might even be required to pay the working expenses.—*Herapath's Journal.*

From the N. Y. Journal of Commerce.

On Railway Axles and Wheels, and Curves upon Railways.

MESSRS. EDITORS:—The increasing importance which several of your recent correspondents have attached to the breaking of railway axles, is not without sufficient cause, although, we have not, in this country, as in Europe, a sufficiency of statistical information on the subject, to enable us to ascertain the amount of the evil. But that it is truly appalling, appears to be the unanimous belief.—Even in England, the accidents caused by the breaking of axles and wheels amount to 18 per cent of the whole, according to Lardner's Railway Economy, page 322. The breaking of the axle, frequently arises from a deficiency of strength, caused by a want of homogeneousness in the manufactured iron This is a defect which cannot with certainty be overcome, except by the process of melting, casting and forging; and hence, on the continent of Europe where it would appear that the life of a subject is more considered than that of a citizen is here, cast steel axles, of very superior quality, have very generally been adopted. In a former letter I informed you of the extraordinary quality of these cast steel axles, as to their toughness and strength; and I now forward to you a full report of the same, and also a German copy of a certificate received from the "Cologne and Minden Railway Company," by which you will perceive, that 19 locomotives and tenders, with 446 carriage axles, had been furnished, together with 3450 springs of cast steel, between 1848 and September, 1851.

When iron axles have been long in use, the continuous vibration is said to produce crystalization of the iron, and ultimate fracture in consequence thereof. This appears to me (but with due defference I write it) a mere assumption; because, so far as I know of, it does not occur with cast steel of the proper quality, and next, because it is impossible to tell, *a priori*, whether or not iron is crystaline or fibrous in its structure at any part of it. The fairest assumption, therefore, should appear to be, that axles which, when broken, show a crystaline structure, were so when they came from the hands of the manufacturer, rather than that *that* state was produced by ordinary use; or at least, that it should appear that all axles became crystaline by use—which has not yet been shown to be the case.

It is very questionable, if it be even possible, with any degree of certainty, to make a large forging sound (homogeneous) throughout, under any circumstances whatever; an assertion which will not be appreciated by many who have not seen, as I have, best (so called) iron plates of No. 10 wire gauge, spread like the leaves in a book when being opened, merely by bending to a sharp curve, or examined with a powerful microscope, and then compared with the best cast steel.

It is no unusual thing for comparatively small shafts to disclose, on being fractured, defects in the centre, which could not by any known means be detected before.

Another cause of axles breaking, arises from the practice of raising the outer rail on the curves, instead of the inner one. It is difficult to imagine how such an erroneous principle ever obtained advocates. The practice is believed to be universal, but is certainly erroneous. The intention in elevating the outer rail, is, to counteract the supposed tendency of the train to run off the rails at a tangent to the curve, arising from the centrifugal force generated; just as water is thrown from a grinding stone in rapid motion. But, the fact is, there is no analogy whatever between the two cases, simply because the rail is not supposed to be in motion at all, but at rest; which makes all the difference.—If the inner rail be so elevated as to allow of the due gravitation of the train towards the outer rail, the coning of the wheels, if properly calculated, will alone prevent any tendency of the train to run off the rails. There is in fact no tendency whatever to run off, for no centrifugal force whatever is generated; and a train may be made to run round on a curve, as safely as upon a straight line. If a rail be made perfectly conical, and a locomotive be started upon it, with the axis of its conical wheels perfectly horizontal and pointing to the axis of the cone, then such a locomotive may be run at any velocity, and without flanges to the wheels, without being in any respect whatever more liable to take any other line than a circle round the cone, than another locomotive with cylindrical wheels on a plane surface, will be to take any other than a straight line. And, when the straight parts are joined to the curved parts of a railway, the same conditions are secured, in the lateral play of one inch usually allowed in gauges of 4 feet 8 inches, by the due elevation of the inner rail and the coning of the wheels; the latter being sufficient, with gravitation, to cause the wheels to revolve at equal angular velocities, without any tendency of the inner wheel to overrun, and the outer one to slip, while at the same time, the axle is maintained in a horizontal position. Every condition as herein expressed, is violated by the opposite and ordinary course pursued, of elevating the outer rail, inasmuch as gravitation is opposed to the coning of the wheels, and the flange is thereby pressed towards the inner rail, which, of course causes the larger part of the conical wheels to run upon it, while the reverse of this occurs on the outer rail, and the smaller part of the conical wheels are running upon that, which is just the reverse of what should take place. It is true that this, in some respects, counteracts the tendency of the axle to keep as much out of the horizontal as the rails are on their cross section. Still, all the axles are more or less "in winding," none of them can be horizontal, and hence a racking motion is the result of a curve, and that it is, which so frequently throws the train off the line, assisted by another beautiful contrivance of two engines, which tug first at one side, and then on the other, of a locomotive; and it is a hard case if both combined cannot "knock over" a locomotive, when both happen to get "a long pull and a strong pull," and both pull together. Indeed, to me the wonder is, that they do not topple over much oftener than they do. In addition to this, each wheel is trying a speed of its own, for which the axle has to suffer, and it must be a tough axle that will not break—In announcing this discovery, I beg to state, that I shall apply for a patent for the same, and therefore do not surrender my right. I fear that I have trespassed too much upon your space to extend these remarks further, and, therefore,

I am most respectfully, T. A. R.

Trial and Description of Stevens' Patent Fan Paddle.

On Saturday, December 6th, a trial was made of the efficiency of this paddle, which is the invention of Mr. Lee Stevens. It consists of fixed oblique floats on the circumference of the wheel, and diminishing in surface towards the centre, like a lady's fan, which floats or segments, as the wheel revolves, press alternately right and left against the water, and by their oblique action spread the water as it were towards each side, abaft the paddle, and thus materially dimlnish the back water as compared with the ordinary paddle, and also the vibration on board the boat very considerably. The operation of the paddle is uniformly the same, whether the motion be ahead or astern. The trial above referred to was made entirely at the expense of the Iron Steamboat company, who had one of their boats, namely, the Twilight, fitted with Mr. Stevens' fan floats in a modified form in wood, instead of iron. The inventor expects that when his ideas are carried out by the construction of the fan paddle wheels in iron, as originally intended, their advantage will be still more apparent.

Two vessels belonging to the company, the Twilight and the Bridegroom, being twin boats of equal power, having oscillating engines of 12 horse power each, started together from Cadogan pier with the tide, at a quarter to 2 o'clock, the paddles making 44 revolutions per minute. On reaching Vauxhall bridge, the Twilight was some distance ahead, and on passing Waterloo bridge, she was still further ahead, having passed it 40 seconds before the Bridegroom. On the Twilight reaching London bridge, at five minutes past 2 o'clock, the Bridegroom was about three-fourths of the distance between the two bridges behind her. The revolutions of the paddles were at the rate of 44 per minute. On returning up the river against the tide, at 10 minutes past 2 o'clock, the Bridegroom was given the side of the river, which was, of course, an advantage, the Twilight being all the time out in the river. The paddles revolved at the rate of 40 per minute, and the boats moved at the same speed until they passed Westminster bridge; but on passing Vauxhall bridge, the Twilight got considerably ahead, and on passing Chelsea Hospital, at 39 minutes past 2 o'clock, she was about 300 yards ahead of the Bridegroom, and the paddles were then making 44 revolutions per minute, until she arrived at Cadogan pier. It was stated that the number of revolutions of the paddle wheels on board the Bridegroom averaged 44½ per minute, and on board the Twilight 42 per minute. The vibration in the Twilight was scarcely perceptible in the run both up and down the river, which, together with the steadiness of motion produced by the fan paddles, the effect was very agreeable.

It is understood that the fan paddle is to be applied to one of the large sea-going steamers, with a view to increase her speed, and to get rid of the vibration now caused by the ordinary paddles.—*London Railway Magazine.*

New Orleans and Jackson Railroad.

A very large number of our most respectable and influential citizens assembled at the American theatre last evening, to receive the report of the provisional committee on the New Orleans and Jackson railroad, appointed about one year since, and all seemed to enter warmly into the subject of this proposed work, so important to the commercial interests of our city. We regret exceedingly that the crowded state of our columns this morning, prevents us from giving a full report of the proceedings. Mayor Crossman was called to the chair, and after explaining the object of the meeting, Mr. Benjamin came forward, and on behalf of the provisional committee submitted a detailed report of the steps which have been taken by that body since its organization. From this report it appears that with the advance of five per cent., which was obtained on the $400,000 subscription last spring, surveys have been made, plans drawn, and every preliminary arranged so that nothing now remains to be done but to organize permanently and commence operations. Having compared the different lines of survey, including that of the old Nashville road, the committee has given the preference to a line running up to the river on the bank slope of the highland fronting the stream, to Minor Kenners plantation, and thence across through the swamp to the highlands on the other side of the lake. Forty-six miles of road will have to be built to reach this point, sixteen miles of it running on the highland fronting the river, ten miles through a lower grade, and twenty miles through swamp.

The committee has been unremitting in its labors, and by a most careful collection of data on which to make calculations, they have been enabled to lay before the public an estimate of the cost of each mile of road through the different kinds of land, which, we doubt not, will vary but little if any from the actual results. Going into all the minutiæ of the expenses of embankment, woodwork, rails, etc., it is estimated that the first sixteen miles of road from New Orleans can be made for $8760; the next ten miles for $9860 per mile; and the twenty miles through swamp for $18,247 per mile; in the latter the estimate being made for both piling and embankment. This would make the cost of the forty-six miles, to the high land beyond the lake, about $618,000. From this point, the whole distance to Jackson, (one hundred and fifty-five miles) the line runs through a level, finely-wooded country, with only two or three short bridges to build, and every facility at hand for a rapid and cheap prosecution of the work. The estimate of the entire cost of the road to Jackson, a distance of two hundred and one miles, is $2,200,000, leaving a margin of $800,000 on the capital stock of the company for the purchase of locomotives, cars, and other appurtenances to put the line in working order. Mr. Benjamin impressed upon the minds of the audience that these estimates were by no means the result of guess-work, but that they were founded entirely on well known data, derived from

actual experience. In a brief address, he pointed out in a lucid manner the great benefits which the commerce of New Orleans would derive from the consummation of this enterprise, and the importance of our citizens at once coming forward to its aid.—*N. O. Crescent City.*

Vermont Central Railroad.

The following card appears in the Boston papers in regard to the state of the Vermont Central railroad:

To the Public.—In consequence of rumors in relation to the Vermont Central railroad, and of the affairs of the subscriber, he deems it proper to state, that immediately on the publication of his late pamphlet, he was informed that the directors of the Vermont Central railroad intended to make a reply thereto. About this time an effort was made by mutual friends to make a harmonious adjustment of all differences, pecuniary and otherwise, which it was confidently believed, would be for the interest of all parties. In order to facilitate this adjustment, it was suggested to the directors of the Vermont Central railroad, by mutual friends, to suspend any publication on their part, as such a course would have a tendency to throw additional and perplexing elements into the case. To this course they assented. In consequence of the proceedings of Mr. Seymour, they deemed it advisable to publish their reply at once, and negotiations for a settlement were suspended. I have reason to know that a reply has been prepared, although I have not seen it. The same friends have again attempted a settlement, and, so far as pecuniary transactions are concerned, with fair prospect of success, and they have requested that the publication of the proposed reply should be deferred until the next meeting of the stockholders, on the 4th of next month, to which request I understand the directors have reluctantly consented. I desire to add, what I have already stated in public that I had no connection with the statements of Mr. Seymour, and regret they were made. In my intercourse, as Treasurer, with the directors of this company, I have found them devoted to its service; and although we may have differed in opinion, do not believe that they have knowingly done anything adverse to its interests—certainly nothing implicating their personal integrity. I make this statement to facilitate an arrangement which I confidently believe would be satisfactory to the shareholders of the Vermont Central, and to all concerned.

JOSIAH QUINCY, JR.

Boston, April 22, 1852.

Wheat and Corn Crop of Ohio.

The Assessors' returns from all the counties of Ohio except Ashtabula, Adams, Clermont, Darke, Delaware, Hamilton, Henry, Lucas, Noble, Scioto, Williams, Wood and Wyandott, are published by the Ohio Cultivator. The aggregate of wheat in 74 counties, in 1850, was over *thirty millions* of bushels, and estimating the 12 counties omitted at the same rate of production, the aggregate of the State is more than *thirty-five millions of bushels!* The corn crop returned in 74 counties is over *fifty-six millions of bushels!*

In 74 counties, total acres of wheat, 1,706,948; bushels, 30 051,219; acres of corn, 1,536,861; bushels, 56,615,688. The wheat crop of 1851 is believed to have been equal to that of 1850.

Muskingum, Wayne and Stark in 1850 raised over 1,000,000 bushels of wheat each; Tuscarawas, Seneca, Coshocton, and Licking over 800,000 bushels each; Richland, Montgomery, Logan and Knox, over 700,000 bushels; Morgan, Jefferson, Holmes, Fairfield, Columbiana, Champaign, Belmont, and Ashland, over 600,000 bushels; and Butler, Carroll, Greene, Gutnsey, Harrison, Miami and Perry, over half a million.

Ross, Pickaway, and Butler produced over two millions and a half bushels of corn each; Warren, Licking, Highland, Franklin and Fairfield, over one million and a half each; Preble, Muskingum, Montgomery, Miami, Green, Fayette, Clinton and Brown, over one million each; and Washington, Union, Tuscarawas, Stark, Shelby, Richland, Pike, Perry, Morrow, Morgan, Monroe, Marion, Madison, Logan, Lawrence, Knox, Jefferson, Huron, Harrison, Hancock, Gurnsey, Gallia, Erie, Coshocton, Columbiana, Clark, Champaign, Belmont, Athens, and Ashland, over half a million bushels each.

The wheat statistics of several of the Reserve counties, for 1850 are as follows:

	Acres.	Bushels.
Cuyahoga	6,711	97,966
Erie	12,578	297,587
Geauga	4,236	59,528
Huron	21,882	441,604
Lake	4,183	82,286
Lorain	11,555	206,301
Medina	17,698	350,303
Portage	14,664	255,402
Summit	23,728	485,504
Trumbull	10,718	190,017
Mahoning	16,731	325,497

The corn statistics are as follows:

	Acres.	Bushels.
Cuyahoga	12,018	396,922
Erie	14,569	615,122
Geauga	8,579	310,583
Huron	22,806	878,243
Lake	7,403	287,730
Lorain	12,925	446,224
Medina	12,646	416 063
Portage	10,426	329 539
Summit	10,256	366,446
Trumbull	11,595	413,598
Mahoning	11,901	412,810

Parkersburg Railroad.

The bill authorizing the corporation of the city of Baltimore to lend its aid for the completion of the Northwestern (Parkersburg) railroad, yesterday finally passed both Houses of the Legislature, and is now a law!

It now becomes the duty of the City Council to act, and they should act promptly. There is no time for delay.

As we have heretofore noticed, contracts for the construction of the Hempfield road are to be closed on the 26th of this month—next Monday. This road is to run from Wheeling to connect with the Pennsylvania Central road, about thirty miles this side of Pittsburg, and is intended to draw off from the Baltimore trade and travel, and carry it direct to Philadelphia. Whatever injury the Hempfield road might be to the Baltimore and Ohio railroad, the Parkersburg road is a perfect antidote for.—That the bane may not be presented to us before the antidote is ready, not a day should be lost in entering upon the work of making the Parkersburg road.

It was a mistake in the Legislature to delay the passage of the bill, because if it had been passed, as it might have been at an earlier day, the contracts for making the road to Parkersburg could have been closed by this time. The surveys are nearly completed—the route is located for a greater portion of the road, and is prepared to be put under contract. And besides, large portions of the road to Wheeling are every day drawing to completion, and a great portion of the hands engaged on them, may be transferred to the Parkersburgh road, in a month at farthest, if there is no delay in promptly providing the means to authorize that company to place it under contract. If there is delay, however, and the hands now employed on the Baltimore and Ohio railroad, are allowed to complete their work, and become scattered, a loss of months might follow.

But there is no danger of this. The City Council have shown, in their proceedings, that they understand the importance of the matter fully. It is to their energetic action, in urging the passage of the bill by the Legislature, that we are mainly indebted for the satisfaction we have in announcing the passage of the bill. It is now for the City Council to distinguish themselves, by promptly carrying into effect the authority the bill gives to the corporation. If it be possible, another day should not pass without something being done.—But the City Council know their duty, and they will do it.

Of the importance of this road to the prosperity of the city of Baltimore—of the advantage which it gives to us, over all other cities of the Atlantic, for the trade of the great west and south west—and of the immense trade and travel which must pass over,—we have heretofore spoken. It is not necessary now to say a word on the subject. Look at the map! This Parkersburg road is a link in the *great straight line of railroads* from Baltimore to Cincinnati and St. Louis, and over it, and through Baltimore, is the shortest way from the far west to to the farthest east! That is enough. Give us this road and Baltimore city is the great central point for the trade of the whole country!—*Baltimore Patriot.*

Steam Communication Between Baltimore and Boston.

The Boston Journal, in an article on this subject, says that the project of establishing a regular line of steam propeller boats between that port and Baltimore has not been abandoned by its friends, but that the stock of the proposed company is nearly all subscribed, and that the residue will be promptly taken by the business men of the city, who are aware of the advantages which will accrue from the establishment of a coastwise steam communication with Southern ports.

The benefits which will flow from the consummation of the enterprise, we have no doubt, will be reciprocal, and will be such as must be advantageously felt by both cities. The commercial relations at present existing between Baltimore and Boston have been yearly extending, and the trade thus established is one of great importance. A large amount of breadstuffs find their way from here to Boston, for which in return we take largely of her manufactures. Not only will this local trade feel the influence which the increased facilities of steam communication will give to it, but the subject has also an important bearing when viewed in conjunction with the completion of our railroad connections with the West. Boston, by the enterprise of her merchants and through the manufacturing capabilities of the State of which she is the commercial emporium, has already secured and no doubt will continue to enjoy a large and important share of the trade of the West.

On the completion of the Baltimore and Ohio railroad to the Ohio river at Wheeling,—which important consummation will take place at the close of the present year,—the link which will be formed at this end by the establishment of a steam communication with Boston, will assume an importance too obvious to be overlooked. The route thus formed between the North and the West will be direct, cheap and expeditious, and therefore the most popular; and, it cannot be doubted, will attract to it much, if not the greater part, of the freight which now leaves Boston for the West by other and less direct routes.

In another aspect the movement is one of manifest interest to Baltimore. With the establishment of our city as a rival of Philadelphia as a great coal distributing depot, we may look to Boston as one of the sources from which a large demand for the article will come. This supply is now drawn almost exclusively from Philadelphia, but there is no reason why Boston should hereafter not look to us for it. The establishment of the proposed line, and the sure increase of business relations which it will foster and encourage between the two cities, will be a powerful means of prompting this desired end.—*Balt. American.*

New Hampshire.

Ashuelot Railroad.—Mr. Elliot, the Treasurer of the company, has furnished the subjoined official particulars in regard to the construction of this road. The line was chartered in 1846, and in the course of the two years following, was carefully surveyed and finally located by order of the Connecticut River railroad company. In the fall of 1849, the same company agreed to take a lease of the road, when finished, for ten years from January 1st, 1851, and pay an annual rent of 7 per cent on the cost. Upon this basis a contract was made for the building of the road, work commenced about the 10th of January, 1850, and on about the 10th December of the same year, the trains of the lessees began service upon the line in continuation of their own. Within the last year a question as to the cost of the road was raised, on account of the mode of paying for its construction; but it has been amicably and finally settled by fixing the rent at $30,000 per annum, payable in quarterly instalments.

The road is built in the most thorough manner. Commencing at the Cheshire railway station in

Keene, it traverses the valley of the Ashuelot river—crossing that river four times—through some half a dozen manufacturing villages, and spans the Connecticut by a superb bridge at Vernon Junction, where it unites with the Connecticut River road at the State-line of Massachusetts.

The road has a length in Keene, of one mile and a half; in Swanzey, five miles; in Winchester ten miles; in Hinsdale, six miles and a half, and three-quarters of a mile in Vermont. The length of road, main track, is 23 3-4 miles; maximum grade, 34 1-4 feet per mile; average grade per mile, 18 feet; total rise in the road, 108 feet; total fall in road, 321 feet; shortest radius of curve, 910 feet; total length of straight line, 16 miles.—The construction account amounts, 5th April, 1852, to $496,984 93.—*Keene. N. H., Sentinel.*

The Trunk Railway.

News from England.—We understand that the last English mail has brought advices from Mr. Hincks, and we are happy to learn that Canadian credit never stood higher in England than it does at present. It affords us additional gratification to be able to state that Mr. Hincks anticipates no difficulty in making such arrangements as will ensure the speedy construction of the Great Trunk railway from Halifax throughout the entire length of the Province.

We have reason to believe that action has been taken by the Canadian government to ensure the commencement of the survey of the whole line within a very short period.—*Quebec Gazette.*

Indiana.

Indianapolis and Bellefontaine Railroad.—We learn that the proceeds of the Indianapolis and Bellefontaine road, for the last three months, has been over 200 per cent more than for the corresponding months of last spring, with only 14 miles additional track in use, and that the business on the line is daily increasing. The first train from Yorktown (adding another section to the road) came down last Tuesday morning, with a full complement of freight and near 100 passengers. The track laying and ballasting are progressing, and the expectation is to complete and open the road to Muncie, 54 miles from our city, by the 1st of June; when we may look for a first style railroad ride and celebration, on the grand event of connecting our Muncie neighbors with the Capital.—*State Journal.*

Erie Canal.

An interesting exhibit for several years of the average tonnage of the boat, of the time necessary to make a passage, and the cost to bring a barrel of flour from Buffalo to Albany, of the lockages at Alexander's Lock, and the total tons delivered at tide water from the Erie Canal, and of the total tolls, is as follows:

Year.	Average tonnage boat.	Days between Albany and Buffalo.	Freight on a bbl. flour.	Lockages at Alexander's Lock.
1841	41	9	71 cts.	30,320
1844	49	7½	60	28,219
1847	67	10½	77	43,957
1848	71	9	58	34,911
1849	68	8½	56	36,918
1850	76	9	58	38,444
1851	78	8½	49	40,396

	Tons delivered at tide water from Erie Canal.	Total tolls.
1841	532,520	$2,034,882
1844	799,816	2,446,374
1847	1,431,252	3,635,381
1848	1,184,337	3,252,212
1849	1,266,724	3,268,226
1850	1,554,675	3,273,896
1851	1,508,677	3,329,727

A comparison of the results of last year's business with that of 1841, ten years ago, shows that while the boat has nearly doubled its capacity, the time necessary to make a passage from Buffalo to Albany is diminished half a day, transportation is cheapened 30 per cent, or 22 cents on a barrel of flour; and that while the lockages at Alexander's Lock have increased only 33 per cent, the tons arriving have increased 200 per cent. And that tho' the tons arriving from the Erie canal last year are 77,000 more than in 1847, the lockages are 3,600 less.

It is proper to state that the average tonnage of the boat and the time necessary to make a passage from Buffalo to Albany, as put down in the foregoing statement, was ascertained in this way: The Collector at Albany kept an account showing the boat each day of the largest tonnage which made the passage in the shortest time, as shown by the dates on the clearance of the boat. The result for the year of the average of the statements is put down opposite each. The time may be less than the actual performances of lines of boats, but being made on the same principle for each year, it furnishes a just comparison of one year with another.

The average tonnage of all the boats registered in the last ten years, is about 70 tons, which probably approaches the average tonnage of the boats now in existence. Assuming the number of boats to be 4,047—average tonnage 70—and it gives as the total tonnage of all existing boats, 283,290.

By the data used in arriving at the above, it is found that of the 4,047 boats existing, there are—

		Average Tonnage.	Total Tonnage.
Scows	1,075	70	75,250
Decked scows	1,279	70	89,775
Lake boats	685	70	47,950
Bull heads	382	77	29,414
Line boats	561	69	38,916
Packets	62	32	1,984
Total	4,017		283,290

The total number of boats as ascertained by count in 1844, 1847, 1848, and in 1852, by estimate with their tonnage capacity, and the tonnage delivered at tide water from the Erie canal, is as follows:

Year.	Number.	Tonnage capacity.	Tons from Erie canal delivered at tide water.	Lockages at Alanders lock.
1844	2,125	117,453	799,816	28,219
1847	3,991	266,260	1,431,252	43,957
1851	4,017	283,290	1,508,677	40,396

It is seen that the total number of boats and their aggregate tonnage capacity, the tons delivered at tide water, and the lockages at Alexander's lock, are about the same in 1847 as in 1851. In 1847, a portion of the locks between Albany and Syracuse were single, now they are all double.

The number and tonnage capacity of the boats built and registered in each year, since 1813, has been as follows:—

	Boats.	Tons.
Tonnage added in 1844	378	21,360
" " 1845	297	19,781
" " 1846	477	34,630
" " 1847	1,466	110,745
" " 1848	457	33,815
" " 1849	215	16,370
" " 1850	152	12,260
" " 1851	213	18,450

As the representative of down freight, or freight from the west, in reference to the cost of transportation, it has been usual to take a barrel of 216 lbs; and as the representative of up freight, or freight going west, 100 lbs. of merchandise. To show what have been the variations in the price of transportation of up and down freight between Buffalo and Albany, the following tables have been constructed, giving the average price in each month of each year, from 1830 to 1851, both years inclusive. The tables have been prepared with a good deal of care from the books and shipping bills of the principal shipping merchants at tide water.—The tables give also the average for each season, and distinguish between the toll which goes to the State, and the freight or amount over toll, which goes to the carrier. They are as follows:—

Up freight per 100 lbs. from Albany to Buffalo.

Year.	May.	June.	July.	August.	September.	October.	November.	Average for year.	Tolls ded'ted.	Leaving frg't
1830.	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	51	49
1831.	1 00	1 00	1 00	98	97	99	99	99	51	48
1832.	1 00	1 00	1 00	1 00	100	1 00	1 00	1 00	51	49
1833.	92	79	70	69	69	67	73	74	44	36
1834.	82	82	82	82	82	82	82	82	33	49
1835.	80	80	80	80	80	80	80	80	33	47
1836.	1 05	1 05	1 05	1 05	1 05	1 05	1 05	1 05	33	72
1837.	1 05	1 06	1 01	90	84	75	88	93	33	60
1838.	85	85	88	85	85	83	88	85	33	52
1839.	87	81	76	81	90	90	90	85	33	52
1840.	80	80	85	80	85	84	87	83	33	50
1841.	68	63	59	47	50	58	81	61	33	28
1842.	75	71	61	58	58	60	81	66	33	33
1843.	56	55	51	46	51	61	72	56	33	23
1844.	77	60	48	48	67	77	80	65	33	32
1845.	51	44	48	44	49	47	50	48	33	15
1846.	38	40	41	35	37	40	49	40	24	16
1847.	39	39	39	39	39	39	39	39	24	15
1848.	39	39	39	39	39	39	39	39	24	15
1849.	39	39	39	39	39	39	39	39	24	15
1850.	37	35	35	35	36	37	39	36	24	12
1851.	31	31	30	30	31	31	32	31	22	9
Tot.	1566	1514	1177	1430	1473	1493	1593	1407	735	777
av. for 22 y's.	71	69	67	65	67	68	72	64	33	35

Down freight per bbl. 216 lbs. from Buffalo to Albany.

Year.	May.	June.	July.	August.	September.	October.	November.	Average for year.	Tolls ded'ted.	Leaving frg't
1830.	1 00	99	97	86	99	1 01	1 02	98	55	43
1831.	1 04	97	91	92	90	97	1 02	96	55	41
1832.	1 10	97	90	97	1 00	1 00	1 06	1 00	55	45
1833.	91	82	86	83	90	91	91	88	39	49
1834.	87	78	78	81	85	85	88	83	35	48
1835.	70	65	66	64	64	76	75	68	35	33
1836.	80	78	72	72	76	80	80	77	35	42
1837.	80	80	82	72	83	77	97	81	35	46
1838.	80	73	71	68	73	70	76	73	35	38
1839.	68	67	65	65	78	87	1 00	75	35	41
1840.	80	78	74	67	76	80	1 13	81	35	46
1841.	75	65	68	63	66	73	85	71	35	36
1842.	72	60	60	62	62	63	76	65	35	30
1843.	60	60	59	57	58	62	70	60	35	25
1844.	75	61	55	56	51	57	65	60	35	25
1845.	55	55	51	57	55	53	96	71	35	26
1846	61	61	53	54	53	58	1 05	64	31	33
1847.	1 12	1 02	67	62	57	66	73	77	31	46
1848.	51	51	54	54	52	66	72	58	31	27
1849.	51	55	55	52	52	57	71	56	31	25
1850.	51	51	53	54	53	59	81	57	31	26
1851.	40	46	50	43	46	53	60	49	23	26
Tot.	1665	1564	1491	1465	1525	1613	1824	1602	802	797
av. for 22 y's.	76	71	68	67	70	73	83	73	36	36

The tons arriving at tide-water from the Erie canal, the yearly lockages at Alexander's lock, and the average annual whole charge on a barrel of flour from Buffalo to Albany, is as follows:

Year.	Tons arriv'g.	Lockages.	Charge per barrel.
1830	.....	14,674	98
1831	.....	16,284	96
1832	.....	18,601	1 00
1833	.....	20,649	88
1834	.....	22,911	83
1835	497,835	25,798	68
1836	419,126	25,516	77
1837	387,509	21,055	81
1838	419,248	25,962	73
1839	386,267	24,234	75
1840	467,315	26,987	81
1841	532,520	39,320	71
1842	489,149	22,869	65
1843	635,345	23,184	60
1844	799,816	28,219	60
1845	959,590	30,452	61

1846.....	1,107,270	33.431	67
1847.....	1,431,252	43 957	77
1848.....	1,184.337	34,911	58
1849.....	1,266,724	36,918	56
1850.....	1,554,675	38,444	58
1851.....	1,508,677	40,396	49

In 1841 the canal commissioners estimated that an addition of 225,000 tons to the down tonnage of 1840, would exhaust the capacity of the Erie canal. Not merely 225,000, but 1,041,362 tons have been added to the down tonnage of the Erie canal, and the average freights are 30 per cent less with an arrival of 1,508,677 tons at tide water in 1851, than with an arrival of 467,315 tons in 1840.

American Railroad Journal.

Saturday, May 1, 1852.

Fairbanks' Railroad Scales.

We have had occasion of late to call the attention of our readers to these Scales, and although aware of the practical importance to the railroads and to the public, of having upon these thoroughfares the most perfect and reliable measures of weights, we have not until recently known anything of the great number furnished by these manufacturers.

We would refer our readers to our advertising columns for a catalogue of the different railroads, furnished exclusively, or nearly so, by the Messrs. Fairbanks & Co., who employ some 200 workmen in this important manufacture.

The quantity required by some of our most important railroads is large.

The Messrs. Fairbanks have constructed during the past year a large number of their 30 and 40 ton track scales for the New York and Erie, the Michigan Southern, and other great western lines, besides the ordinary Depot Scales and Portable Scales at the termini, and the way stations, along the lines.

While speaking of Railroad Scales, we may notice their still more massive Weigh Lock Scales, for weighing boats with cargoes as high as 400 tons.

The Messrs. Fairbanks have in operation at the two most important points on the Erie canal—Albany and West Troy—two of these mammoth weighing machines, which have given great satisfaction to the canal commissioners and other officers.

They have also in operation two nearly as large on the Delaware and Hudson canal, one on the Tide Water canal, one at Cleveland, Ohio, and three others in course of construction for the Ohio canals, one near Cincinnati, one at Toledo, and one at Carroll.

Iron.

The following result of an experiment of coupling chains, lately made at Manchester, England, by the London and North Western railway company, will be interesting to the consumers of iron:

Best Staffordshire iron—First experiment—
Diameter of chain 1¼ inch.
Stretched 3¼ inches.
Broke with 27 tons, 10 cwt.

Best Staffordshire iron—Second experiment.
Diameter of chain 1¼ inch.
Stretched 4¼ inches.
Broke with 25 tons.

LOWMOOR IRON.
Diameter of chain 1¼ inch.
Stretched 7 inches.
Broke with 55 tons, 16 cwt.

The Staffordshire iron was made expressly for the trial.

Dubuque and Keokuk Railroad.

The Dubuque Herald contains an abstract of the report of the survey of the northern portion of this line, with estimates of the cost of construction from Dubuque to Cedar Rapids. This distance is divided into three divisions, "for convenience in arranging report and estimates:" first, from Dubuque to Cascade 26·1 miles; second, from Cascade to Anamosa, 22·4 miles; third, from Anamosa to Cedar Rapids, 22 6 miles—making the whole distance 71·1 miles. Mr. Eaton states, that "the topographical features of the country traversed by this route, vary materially from those of any other western country over which railroads have been projected or made; inasmuch as the line crosses several streams, between and parallel with which are ridges, having an elevation much above the streams. By glancing at the map of Iowa, it will be perceived that in the eastern portion of the State there are many tributaries to the Mississippi river, all of which have a southeasterly direction, while the country east of the river is not so watered; consequently, the construction of railroads east of the Mississippi, is not as expensive as in the eastern part of Iowa."

As a compensation for the greater cost of this road, than the average of western roads, the report says: "It is apparent to all, that railroads cannot be constructed so cheaply over this rolling country, as upon the level prairies of Illinois. I believe this undulating surface is the best guarantee that nature can give for the rapid growth of your State. The farming is and must continue of greater importance than any other. If the agricultural interests are in a prosperous condition, the State must flourish; while without it, every branch of industry and enterprise must languish; and although the construction of a railroad is attended with more expense than over the level country, the cause for this increased outlay, is the same that gives to Iowa greater attractions for farming purposes, than to any other western State."

The estimated cost of building the road, including the superstructure is, for the first division, per mile, $18,887 39. For the second division, per mile, $15,377. For the third division, per mile, $17,883. This makes a total cost of $1,241,560.

Maine.

Through Construction of the Atlantic and St. Lawrence Railroad.—We are gratified in being able to announce, says the Portland Advertiser, that final arrangements for the connection of the Atlantic and St. Lawrence railroad with the associated company's road in Canada, have been consummated, and definite contracts for that purpose were concluded and exchanged, in Portland, on Saturday last. These transactions embrace full contracts with Mr. John M. Wood, Esq., our efficient and enterprizing contractor, by which the early construction of the sixteen miles between Island Pond and the boundary line is provided for. The work of grading that portion will commence as soon as the stakes can be put down.

The immediate execution of these contracts on the part of the Canadian company, was entrusted to a committee with full powers, consisting of William Molson, Esq., the Vice President of that company, and the Hon. George Moffatt, who were in that city several days of last week, accompanied by Mr. Gzowski, the Chief Engineer, and Mr. Webster, the Secretary of the company. The very satisfactory conclusion of the arrangements referred to, is due not only to the sentiment of what is for the manifest interest of the two companies, and in accordance with their uninterrupted harmony for six years past, but also to the very high personal character of the gentlemen to whom, in this instance, as uniformly, at all other times, the concerns of the Canadian company have been entrusted.

Pennsylvania Railroad.

We stated some time since, upon the authority of Pennsylvania newspapers, that the above company, during the recent press of business, refused to forward over their road, merchandise *not* purchased in Philadelphia. In reply to these charges the company state that they only refused to take merchandise from *other* places than their warehouse in Philadelphia; that being unable to forward all that offered, they were obliged to adopt the above regulation, to ensure order and regularity in the business operations. The company state that all goods sent to their warehouse, were forwarded in the order received.

Lawrenceburg and Upper Mississippi R. R.

We give in another column the advertisement of sale of the bonds of the Lawrenceburg and Upper Mississippi railroad company.

The proposed road will, in connection with the Ohio and Mississippi railroad, open a railroad communication, by the shortest practicable route, between Cincinnati and Indianapolis, the capital, and the commercial and geographical centre, of Indiana. Indianapolis must become one of the largest inland towns in the west. It is to be the terminus, and point of intersection of eight extensive lines of railroad. The business resulting from these railroads alone must build up a town of 50,000 people. The line that shall connect this town with Cincinnati, the commercial emporium of the Ohio valley cannot fail to become one of the best projects in the country. The above road will form a part of a great through line to St. Louis and Chicago. It can be built at about the average cost of western railroads It traverses one of the best portions of Indiana, and must enjoy a lucrative local traffic. On the whole, we cannot name a road possessing better prospects.

Rutland and Central Vermont Railroad.

The Montreal Gazette says it is informed that an understanding has been entered into between the Vermont Central and Rutland and Burlington railroads, by which the latter will make use of the Vermont and Canada road from Burlington to North Alburgh, where they will construct a pier, and whence their passengers having crossed the lake, will be forwarded to Montreal by the Champlain and St. Lawrence railroad.

The Canal Railroad.

A public meeting was recently held in Springfield, for the adoption of measures to enlist the influence of the town in favor of the application which comes again before the Legislature at the present session, to authorise the diversion of the northern terminus of the Canal railroad from Westfield to Springfield, so as to give a direct line of communication from the latter place to Hartford, independent of the existing New Haven, Hartford and Springfield road. This change of line is of course opposed by the people of Westfield and Northampton, [to which latter place it has been proposed to extend the line,] on the ground that it will defeat the object of a more direct communication with New Haven and New York than by way of Springfield. The meeting adopted resolutions favorable to the project of making Springfield the northern termination of the road.

Tennessee.

Nashville and Chattanooga Railroad.—The Nashville Banner says that the Nashville and Chattanooga railroad is now completed over seventy miles. It cannot do the business as fast as it crowds upon it, such is the astonishing increase.—They are providing additional cars and locomotives as rapidly as possible. Large piles of freight make head at the different depots and way stations

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Stock and Money Market.

There has been a good degree of uniformity in the stock market for some weeks past. Money remains very abundant, and there is a gradual improvement in nearly every kind of securities. At the going rates, there is no difficulty in obtaining money for new projects that promise well. Prices of course vary according to the strength and prospects of the concern. Our railroads are attracting increased attention both at home and abroad, and at the current rates their securities offer better opportunities for investment than anything else.

The following statement will show the amounts of revenue from customs, collected at forty-three of the principal ports of the United States, from the first of July, 1851, to 31st March, 1852, and the comparison with that of the corresponding period of the preceding year:

	1850–51.	1851–2.
New York	$24,375,012	$22,121,112
Boston	4,924,400	4,711,473
Philadelphia	2,830,899	2,890,043
New Orleans	1,777,682	1,806,471
Baltimore	776,380	800,742
Charleston, S. C.	501,388	455,263
San Francisco	596,931	1,779,945
St. Louis	142,406	197,990
Portland	142,169	180,321
Savannah	159,602	113,632
Salem	117,970	89,429
Mobile	62,398	90,729
Alburg, Vermont	57,684	28,422
Oswego	56,259	59,746
Buffalo	51,240	78,021
Richmond	55,463	48,901
New Haven	49,454	57,722
Norfolk	45,153	34,853
Cleveland	51,578	80,052
Cincinnati	78,712	87,517
Louisville	48,897	41,605
Plattsburgh	40,396	48,585
Petersburgh	23,041	65,493
Sandusky	19 913	33,580
Eastport	18,305	14,163
Gloucester, Mass.	17,244	14,085
New Bedford	15,832	16,763
Providence	30,849	22,423
Bristol	17,209	11,991
New London	15,604	7,781
Rochester	11,284	9,377
Lewiston	11,595	18,215
Ogdensburgh	12,320	16,878
Detroit	23,545	23,921
Nashville	10,085	55,844
Pittsburgh, Penn	2,177	12,386
Chicago	4,861	2,186
Bath	11,214	6,683
Wilmington	11,270	19,174
Cape Vincent	6,114	15,521
Newburyport	3,061	12,530
Georgetown, D. C	9,936	13,022
Alexandria, Va	5,724	27,686
Sackett's Harbor	1,950	12,483

It will be observed that there is a decrease in the ports of New York and Boston, and a slight increase in those of Philadelphia, Baltimore and N. Orleans. The greatest proportionate increase is in San Francisco. The inland ports generally exhibit a very large increase.

We are gratified to learn that the Lawrenceburg and Upper Mississippi railroad company have made a satisfactory arrangement for 8,000 tons of rails, enough to complete their entire road to Indianapolis. About 1,000 tons of this purchase will be shipped west from this city immediately, and the residue will be delivered at New Orleans with all convenient dispatch, to enable the company to lay down 63 miles of the track this fall, and the residue to Indianapolis early next season.

The receipts of the Sandusky and Mansfield railroad for March, 1852, were as follows:

Passengers	$7,812 91
Freights	19,419 55
Total, March, 1852	$27,232 46
The whole number of passengers carried in March is	9350

The following is a statement of the corresponding month, 1851:

Passengers	$4,776 25
Freights	12,574 06
Total, March, 1851	$17,350 31
Increase, over 50 per ct.	$9,882 15
Whole No. of pas., March, 1851	5,328
Increase nearly 100 per cent.	4,022

The gross receipts of the Virginia Central railroad company for the six months ending first of April show an increase of $19,185 40 over the corresponding period of the previous year.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 1, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	108½
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	89
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	100½
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	106½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	103½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	106
Ohio 6's, 1856	106
Ohio 6's, 1860	109
Ohio 6's, 1870	112½
Onio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	93
Pennsylvania 6's, 1817,-'53	101½
Pennsylvania 6's, 1879	108
Tennessee 5's	87½
Tennessee 6's, 1880	106
Virginia 6's, 1886	110½

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	107
Cincinnati 6's	98
St. Louis	94½
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858 '60	100½
New York 5's, 1870-'75	103
New York 5's, 1890	103½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	106
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	117½
Erie 2d mortgage, 7's, 1859	105½
Erie income 7's, 1855	97½
Erie convertible bonds, 7's, 1871	96
Hudson River 1st mort., 7's, 1869	106
Hudson River 2d mort., 7's, 1860	97
New York and New Haven 7's, 1861	104
Reading 6's, 1870	80½
Reading mortgage, 6's, 1860	87
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	96
Cleveland, Col. and Cin. 7's, 1859	104½
Cleveland and Pittsburg 7's, 1860	96½
Ohio and Pennsylvania 7's, 1865	99½
Ohio Central 7's, 1861	94½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	April 28.	April 21.
Albany and Schenectady	100	100
Boston and Maine	105½	105½
Boston and Lowell	108½	109
Boston and Worcester	101½	101½
Boston and Providence	88	87½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson (canal)	112	111
Eastern	96½	97
Erie	88½	89½
Fall River	99½	98
Fitchburgh	103½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	74½	75½
" preferred	114½	114½
Hartford and New Haven	128	123
Housatonic (preferred)	35	35
Hudson River	63	64½
Little Miami	—	—
Long Island	21½	21½
Mad River	—	—
Madison and Indianapolis	100	100½
Michigan Central	98½	97½
Michigan Southern	115	114½
New York and New Haven	112	111½
New Jersey	132	132
Nashua and Lowell	106	106
New Bedford and Taunton	117	117
Norwich and Worcester	58	58½
Ogdensburgh	26½	27½
Pennsylvania	43½	43½
Philadelphia, Wilm'gton & Balt.	29	30
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	79½	77½
Rochester and Syracuse	116½	117
Stonington	57	56½
South Carolina	—	—
Syracuse and Utica	126½	128
Taunton Branch	115	115
Utica and Schenectady	131	131
Vermont Central	19½	19½
Vermont and Massachusetts	20½	20
Virginia Central	40	40
Western	103½	103½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Philadelphia, Wilmington and Baltimore Railroad.

We learn from the 14th annual report of the directors of this road, that the receipts for the year ending Nov. 30th, 1851, were $580,723,68. The expenses of the company were $379,199,36; leaving a balance of $201,524,32. The receipts of the Newcastle company during the same time were, $137,286,74; expenses $133,993,10; net earnings $3,293,64, which sum added to $201,524,32, makes a joint surplus of $204,817,96 for the two companies. After deducting $135,905 for dividends paid, and $67,926 for additions to the renewal fund, a surplus of $986,96 remains, which, added to the balance of revenue per last report, produces the sum of $55,198,16.

A comparison of the foregoing revenue with that of the year preceding, shows an increase in the aggregate on both lines of $27,355,93. This increase would have been larger had there not been a slight falling off in receipts up to August 1st., occasioned by the reduction of fare during the winter, from $4 to $3. This reduction of 25 per cent. required an increase in the travel of 33 1-3 per cent. to give the same amount of money as the fare of $4.

From December 1st., 1849, to April 1st., 1850, the whole number of passengers paying $4 each, was 25,669¼, who paid in all $102,679. From December 1st., 1850, to April 1st., 1851, the whole number paying $3 each was, $31,112¼, who paid in all $93,337,50, showing a falling off of $9,341,50, or 9 1-10 per cent.

The whole number of through passengers on the railroad in 1850 was 113,948¼, paying $340,000.—The whole number in 1851 was 122,966, paying $334,000, showing a loss during the year on receipts from through travel of $6,000, and a gain in the number of through passengers of 9,018.

The whole number of way passengers in 1850 was 208,891, paying $106,634. In 1851 the number was 237,629, paying $117,768; showing a gain in the receipts from way travel of $11,134, and a gain in numbers of 28,738.

The receipts from freight and expenses in 1850 were $61,914 16; in 1851 $83,259 93; showing a gain of $21,345 77 from freight and expenses. The receipts from mail and other sources in 1850 were $44,851 68; in 1851, $45,695 19, showing a gain of $843 51. Total gain in the receipts on the road for 1851, $27,323 84.

Quite a large appropriation has been made to the renewal fund during the past year, which, together with the new works and improvements charged to current expenses, amounts to upwards of 2½ per cent on the capital stock of the company.

During the past year, the road has been relaid with heavy T rail, at a cost of $258,790, in order to meet the exigencies of a constantly increasing business. The company have also erected a new station house at the corner of Broad and Prince streets, Philadelphia. This building is 400 feet long by 150 wide, and is believed to be one of the most commodious passenger houses in the United States.

The total debt for improvements is $346,477 22, which will be required at different times within the next two and a half years. The company expect to provide for this sum in part as follows:—First by adding yearly to the renewal fund the amount of $67,926 00; second, by annually saving in expenses the sum of $35,000, a saving to be effected by the improvements for which the expenditures are made. These two sums added together make an annual appropriation of $102,926, which in two and a half years will amount to $257,315. Deduct this amount from the debt for improvements, and there is left $89,162 22. Should the prospects of the road continue as favorable as they now are, all this can be effected, and a rate of dividend, at least equal to the present, be maintained in the meantime.

Portland and Montreal Railroad.

We learn that the final location of the line of the Atlantic and St. Lawrence railroad, and of the St. Lawrence and Atlantic railroad has been agreed upon by the two companies, through the northern part of Vermont, and that the work is in progress over the whole line.

In approaching the point of junction for these roads, several routes were proposed, either of which afford favorable gradients, but involving a variety of considerations calculated to affect the interests of the two companies.

The people of Stanstead and at the Derby line have extended every possible influence to have the line carried by their route. Some delay has consequently occurred in agreeing upon the place of junction and connection of the two roads. Some half dozen lines east of Derby have been proposed and examined.

The final location has been made by the way of "Island Pond," as it is called, following the west branch of the Nulhegan river, and crossing the summit in the town of Brighton, Vermont. The Montreal company extend their line some 14 miles into Vermont by an arrangement between the two companies, making the point of junction at Island Pond, near the line dividing the townships of Brighton and Warlock. By adopting this route the distance of the whole line between Portland and Montreal is 290 miles. The increased distance over the more eastern routes is more than compensated by the more favorable grades secured by the Island Pond route. Of this 290 miles, 150 miles are built by the Portland company, and 140 miles by the Montreal company.

The point of junction at Island Pond seems likely to become a most important locality, from the fact of its being the half way station between Portland and Montreal. At this point, also, the Passumpsic railroad will be able to form a connection with Maine and Canada, by extending their line through Burke and Newark to the same common junction, a distance of 29 miles from St. Johns, as a favorable route is said to have been ascertained therefor. From the same common point it is proposed to extend a line to Rouse's Point, under the charter of the Missisquoi railroad, which has been authorized to extend its line from Lewiston, on Lake Champlain, to a point of junction and connection with the Passumpsic and the Atlantic and St. Lawrence railroads at Island Pond.

A glance at the map shows the great advantages to the upper part of Vermont, and in fact of Canada and all New England of the arrangement of these great lines. We know of no place in New England where so important a point can be shown as a railroad centre.

From Island Pond to	Portland is	150	miles.
" "	Montreal	140	"
" "	Quebec	163	"
" "	Boston	220	"
" "	New York	354	"
" "	Rouse's Point	60	"

By extending a line from Rouse's Point to Portland the distance is but 210 miles, while from Rouse's Point to Boston the distance is 296 miles by the Fitchburg route, and 286 miles by the Concord route.

Railway Gauge in Canada.

The Great Western railway company of Canada, has finally adopted the medium broad, or the 5 feet 6 inch gauge—so that this gauge is now established for the trunk lines throughout British North America.

We do not propose to engage in the discussion of the comparative merits of the gauges, but note the fact as an interesting item of railroad history, which will excite more and more attention as the influence of this decision is more clearly developed by subsequent results. We have carefully watched the history of the gauge question in Canada, as the discussion of its merits has progressed, and we think a brief statement of these matters may not be uninteresting to our readers. Until the building of the Portland and Montreal railway, the gauge of all the New England roads was 4 feet 8½ inches, or what is called in England the *narrow gauge*. The plan of the Portland and Montreal road contemplated a commercial line over the most direct route from the St. Lawrence river to the Atlantic Ocean, and the route proposed placed this line in a position of comparative independence toward the railway system which had its centre of operations at Boston. The two companies in Maine and Canada, after a long discussion, agreed upon the gauge of 5½ feet as likely to secure to them the greatest advantages, taking into account the position of the two cities of Portland and Montreal, and the characteristics of the line. A. C. Morton, Esq., the Engineer of the two companies, on whose recommendation the 5½ feet gauge was adopted, had been connected with the Erie railroad, and advised a 5½ in preference to the 6 feet gauge adopted by the Erie road.

After an agreement between the two companies establishing this gauge was consummated, an attempt was made to defeat it, by the passage of a law in Canada, in 1847, establishing the narrow gauge. This movement originated in Boston, in connection with some of the officers of the Montreal and Lachine railroad company. The general law fixing the gauge of railroads was not carried through Parliament, but an amendment to the charter of the St. Lawrence and Atlantic railroad company, passed July 28th, 1847, referred the question of gauge to the decision of the Governor General in Council; it declared that in case no order in Council to the contrary was passed within six months, the gauge of 4 feet 8½ inches should be the gauge of that road. It was understood at that time that a dispatch from the Home Government had advised the Governor General to adopt measures, to secure uniformity of gauge in all the Provinces.

Under these circumstances, unusual importance was attached to the decision of this question, and the two companies between Portland and Montreal united in an effort to retain their gauge of 5½ feet. The whole question of gauge was fully discussed, and the readers of the Journal in 1847 recollect the report of Mr. Morton on this subject which was published at full length at that time. A delegation from the Lower Provinces was consulted on the question, and a final decision had in the autumn of 1847, establishing 5½ feet as the gauge of the Portland line. In Major Robinson's report in 1849, on the Quebec line, he advised a gauge of 5½ feet for that road, mainly on the ground of its adoption for the Portland road.

No law has yet been passed in Canada establish-

ing the gauge for railways. The roads south of the St. Lawrence, connecting with the roads of New York and Vermont, are built on the 4 feet 8½ inch gauge. In 1851 a general railway act was passed in Canada. The railway committee reported a section in their railway clauses bill, establishing the gauge of 5½ feet. This clause was striken out of the bill, before its final passage, and the question of gauge left open at the request of the friends of the Great Western railway company of Canada.

But in the facility bill providing assistance for the trunk lines of railway through Canada, the question of gauge was left to the decision of the board of Railway Commissioners, consisting of the Inspector General, the Receiver General and the Chief Commissioner of Public Works.

The Ontario and Simcoe railroad, from Toronto to Lake Huron, adopted the 5½ feet gauge, but a strong effort was made to allow the narrow gauge on the Great Western railway of Canada. The narrow gauge lines from Albany to Buffalo, and the Michigan Central railroad company have made various proposals to aid the building of the Great Western, thereby securing the most direct line from Detroit to Albany and Boston.

The first distinct intimation of the policy of the Canadian government in regard to the gauge of the Great Western road was in the speech of the Hon. Mr. Hincks of Canada, to the citizens of Halifax, in February last, on the subject of the intercolonial, or imperial lines, in which he spoke of the movements of the Americans to control the Great Western railroad, and to lay down the narrow gauge. He said that fortunately for Canada, the government had a right to decide this question of gauge, and "*that 5½ feet was the gauge of Canada.*"

It is understood that the Great Western railroad had the option of the narrow gauge, if the company chose to go on without claiming the government guarantee for one half the cost of the work. The company finding themselves unable to build their line without this assistance of the government, have therefore adopted the Canadian gauge of 5½ feet, and in to-day's paper is an advertisement for furnishing the equipment of the line.

In this connection, it may be of interest to note the fact that the Pacific railroad of Missouri, from St. Louis west, has adopted the same gauge. This fact we suppose will control the question of gauge west of the Mississippi river, so that, north of the Lakes and West of the Mississippi, the 5½ feet gauge has become firmly established, and from the line of the Portland and Montreal railroad east, this gauge will predominate. The line of the St. Andrews and Quebec railroad is built on this gauge, and the friends of the European and North American railway in Maine, are supposed to be committed to it.

As soon as the lines with rival gauges meet, a "*war of the gauges*" will arise in this country, the influence and the results of which we have now no time or disposition to discuss.

Tennessee.

Nashville and Chattanooga Railroad.—A late number of the Chattanooga Advertiser says, we learn from Mr. Grant, Chief Engineer on the Nashville and Chattanooga railroad, that the track laying is proceeding at the rate of a mile and a half per week on the western division. He is confident in the opinion, that the road will be open for through travel by November next—connection being made at the river by steamboat.

Virginia.

North Western Railroad.—The following is the act which has just been passed by the Legislature of Maryland, authorizing the city corporation of Baltimore to issue its bonds to the amount of one million five hundred thousand dollars, in aid of the construction of the Parkersburg railroad:—

An Act giving certain powers to the Mayor and City Council of Baltimore in regard to the North Western Virginia railroad.

Sec. 1. Be it enacted by the General Assembly of Maryland, That the Mayor and City Council be and are hereby authorized and empowered to give such aid to the North Western railroad company of Virginia as they may deem expedient, either by lending to the said railroad company the stock and bonds of the said city, on condition that the said railroad company shall pay the interest on said stock or bonds until the time when the said railroad shall be completed and opened to the Ohio river, or by a guarantee of the bonds of the said railroad company. Provided, however, that the am't for which said city shall be responsible shall not exceed the sum of one million and five hundred thousand dollars.

Sec. 2. And be it enacted, That to enable the said Mayor and City Council to meet the liabilities to be incurred by them for principal or interest, under the authority hereby conferred on them, they are empowered hereby over and above any existing privilege to raise money heretofore imposed upon them, to borrow any amount of money not exceeding one million and a half of dollars from such persons, on such terms, and for such length of time, as they, the said Mayor and City Council, from time to time may find convenient and expedient for the accomplishment of the purposes contemplated by this act.

Sec. 3. And be it enacted, That the said Mayor and City Council of Baltimore are hereby authorized and empowered, in addition to any power of taxation heretofore vested in them, to levy upon the assessable property within the limits of the city of Baltimore, or collect by tax, according to the usual mode of raising money by taxation in the said city of Baltimore, any sum or sums of money which may be necessary to pay and discharge the principal and interest of any loan or loans which may be obtained by the said Mayor and City Council of Baltimore in pursuance of this act.

Debt of New Orleans.

The following is a tabular statement of the present debt of New Orleans:

General sinking fund, old city debt..	$2,992,760 00
First municipality.....	1,057,800 09
Second municipality.....	2,380,502 64
Third municipality.....	948,587 01
Lafayette.....	491,749 20
Total.....	$7,871,398 94

Of this debt a considerable portion is past due and maturing City bonds, to the amount of $234,000 are past due, while the interest matured amounts to $256,750; besides which, the three districts and Lafayette owe nearly $200,000 on the same account. The Mayor in his late message earnestly recommends the adoption of measures which will provide for this debt, restore the credit of the city, and brighten up our tarnished financial reputation.

New Hampshire.

Concord and Portsmouth Railroad.—We learn from a reliable source, says the Manchester Mirror, that this road will be opened the whole length, for travel, as soon, at least, as the middle of June. The road is all graded, has the rails, sleepers, plank, and everything ready to put down—needing only about forty working days to complete it. No road in New England ever contended with so many obstacles for so long a time, and we heartily rejoice that it will soon be in the "full tide of successful operation."

Railroad Law.

Another Decision upon Ross Winans' Patent.—We copy the following report from the Pennsylvania Inquirer of an action recently tried in that State, involving the validity of Mr. Winans' patent:—

Philadelphia, April 12, 1852.

U. S. Circuit Court, Judge Kane—Patent Right Case—Ross Winans vs. The York and Maryland Line Railroad Company.

This was an action to recover damages for the infraction of a patent granted to the plaintiff for an improvement in the construction of cars, rendering them better adapted to American railroads.—The object of the invention is, among other things, to make such an adjustment of the wheels, axles, and connection with the body as shall cause the car to pursue a more smooth, even and safe course, than it does as they are ordinarily constructed. It was proved to be indispensable to comfort and safety at the speed now run by passenger trains. The Jury brought in a verdict for $5,400 damages and costs.

St. George T. Campbell and George Harding, for plaintiff. G. Mallory and Isaac Hazlehurst for defendants.

Delaware and Hudson Canal Company.

This company have issued their usual circular, fixing the prices of coal at Rondout at 35 cts. higher than the prices of last year, with an advance of 10 cents on the 1st of July next, and a further advance of 10 cents on the 1st of September. The opening prices are as follows:

Furnace lump.....	$3 50	per ton of	2,240 lb.
Steamer lump.....	3 60	"	"
Broken and egg.....	3 65	"	"
Stove.....	3 70	"	"
Chestnut and pea.....	2 75	"	"

Freight from Rondout to New York, 50 cents per ton.

The net receipts of the Vermont and Massachusetts railroad for March, 1852, were.... $19,215 63
Same month last year..... 15,096 88

Gain..... $4,118 75

Chesapeake and Ohio Canal.

The Chief Engineer of the Chesapeake and Ohio canal, Mr. C. B. Fisk, in a communication to the editors of the National Intelligencer, gives an authentic statement of the damage to the canal by the late flood. He says:—

I returned last evening from the upper part of the canal, having been over and seen, or received accurate information respecting the damage done to about seventy miles of it. The information thus obtained, in addition to what I have since my return received from the remainder of the line, justifies me in expressing the opinion that the navigation of the entire line of the canal may be restored for eighty thousand dollars, and that the repairs may be made in from two to three months.

In the course of a very few days I shall be able to speak with more certainty and confidence, both in regard to the amount of damage and time required for its repair. I cannot, however, be materially in error in the opinion above expressed.

Extension of the Baltimore and Ohio Railroad.

The Wheeling Gazette of Thursday says: We saw several of the contractors in town yesterday, from along the line of the Baltimore and Ohio railroad. They all agree in saying that the work is progressing rapidly, and that there can be no doubt of their finishing up in time for running the cars by the first of January next.

We are gratified in announcing that the entire stock of the Union line of steamboats, from Wheeling to Louisville, to commence running with the opening of the Balt. and Ohio railroad, has been so taken as to combine the best interests at both points and intermediate ports.

Pennsylvania.

West Chester Railroad.—The stock for the construction of a railroad from this city to West Chester, Chester county, has all been taken and the road will be constructed with as little delay as practicable. The company have sold their property on Broad street, known as the "West Chester House," and purchased a lot on Market street near Schuylkill Fifth Street, for which they have paid $30,000, on which they intend erecting suitable buildings for their passenger and transportation business immediately.

New-York.

Troy and Greenfield Railroad.—At a meeting of the Troy and Greenfield railroad company, held at Charlemont, April 7th, J. M. Potter, Henry Chapman, E. S. Hawks, Jenks Kimball, Erastus Rice, R. H. Leavitt, E. G. Lamson, Cephas Root, Otis Clapp, Peter Clark, J. V. C. Smith, J. L. Tucker, and John Porter, were chosen directors. A committee was chosen in each town on the line of the road, to provide teams to get the tunnelling machine from Greenfield to the mountain. The machine is expected in Greenfield this week or next.

AN INVESTIGATION OF THE STRAINS UPON THE DIAGONALS OF LATTICE-BEAMS, WITH THE RESULTING FORMULÆ.

The experiments detailed were made on a model 12 feet in length, so constructed that the diagonals in compression [which were strips of mahogany, let into the top and bottom, but not fastened to them, and the ties which were of hoop iron chains,] must of necessity take their respective bearing and strain; and by the substitution of a dynamometer for any one of the ties, the strain on it could be accurately measured.

The results of the investigation [which were given in a table, showing a remarkable coincidence between the strains as measured and calculated] were, that for a parallel beam of one span, supported at each end and loaded at the centre, the strains throughout the diagonals were uniform, and the horizontal strains were greatest at the centre, decreasing uniformly at the points of support. For a similar beam, uniformly loaded over its entire length, the strains on the diagonals commenced at the centre, increasing uniformly to the points of support; while the horizontal strains decreased from the centre to the ends, in the ratio of the ordinates of a parabola. These results were arrived at by different methods of reasoning, and the formulæ derived from them were stated to be applicable to the more complex form of a closely intersected lattice, taking into consideration the increased number of triangulations.—*London Journal of Arts and Sciences.*

Runaway Engine.

On Wednesday afternoon, the driver of an engine on the Great Northern railway, having occasion to go into the station at York, he left his engine in charge of the stoker, who, in order to save time, as he thought, endeavored to shoot it on the other line. For this purpose he partially put on the steam, and then got off and went to turn the points, intending to jump on the engine as soon as it had passed on to the proper line. Unfortunately, however, the escape valve closed, and away rushed the engine out of the station at the rate of 30 miles an hour, which afterwards increased to 60 miles.—About a mile from York, the driver of a coal train, who was proceeding along the down line, saw the runaway engine approaching, and he instantly reversed his engine. No sooner had he done this than the other engine was upon him, and he and the stoker jumped off just as the collision took place, and fortunately escaped uninjured. The shock produced by the opposing engines was tremendous, several of the coal waggons were completely shattered, and the tender of the runaway was forced up to the top of the engine, where it remained fixed and firm. The damage is estimated at upwards of $3,000. The stoker has been placed in custody.—[*English paper.*

Portland and Montreal Railroad.

We are happy to learn, that all questions in relation to the location and place of junction of the Atlantic and St. Lawrence, and the St. Lawrence and Atlantic railroads, have been amicably adjusted, and definitely settled. Further, we learn from Mr Wood, that a contract for completing the hitherto *debatable* portion (16 miles) has been taken by him, and the work will progress without further delay, and with all proper dispatch. Our citizens may rest assured, therefore, that the completion of this great enterprise within a reasonable period, is now made certain. We refer to this subject, for the reason that the public mind has been not a little disturbed by certain rumors, originating in local interests, and propagated in anything but a friendly spirit. As usual, the Boston interest has been very busy in the matter; and as usual, they have *demeaned* themselves for nothing. This influence will never cease to show itself, whenever and wherever there is a possibility of affecting this railroad line injuriously. A great effort has been made to divert the course of the road, and make it sweep as far west as Stanstead on the boundary.—This would have been contrary to the fundamental articles of agreement, mutually entered into, and solemnly ratified, six years ago. This agreement stipulates and provides, "*that in no case shall the point of connection and junction be further west than the Conticook river.*" In accordance with this express covenant, the parties have agreed to the location of the road in the valley of that stream.—*Portland Argus.*

Ohio.

Cincinnati, Wilmington and Zanesville Railroad.—We have seen a letter received by Mr. Tallmadge from the President of the company, who is now in New York, by which we learn that he has succeeded in making an unusually good contract for 9,000 tons of iron. This will be sufficient, we understand, to lay the track from the Little Miami railroad to this city, a distance of ninety miles.—It is to be delivered in New York and New Orleans.

The recent unfavorable weather has, to some extent, retarded operations in the neighborhood of this city; but every preparation has been made to progress rapidly. There is now a force in the vicinity of this city, another three miles west, and a third in the neighborhood of Amanda. Near Circleville some two or three miles of the road have been graded. In a few days the force will be largely increased, and the work pushed to a rapid completion. It will be finished, it is generally understood, in the stipulated time, and it will be noticed that no delay will be caused for want of iron.—*Lancaster Gazette.*

To Contractors.

Central Ohio Railroad.

SEALED PROPOSALS will be received at the Office of the Company in Zanesville until the 10th day of May next, for the Grading, Masonry and Bridging of so much of the line of the road as lies east of Zanesville, and extending into Guernsey county to a point about four miles east of Cambridge.

The work to be let will comprise some thirty sections—embracing some tunnelling, and a fair share of heavy work.

Bids proposing to receive a certain portion of pay in the stock of the road would be preferred; but such preference will not exclude the consideration of bids for cash payments entirely.

Proposals may be made for the whole line, or for distinct sections.

Where parties bid for the whole line it is desired that their proposals should contemplate taking a certain proportion of pay in stock and bonds of the road.

The line will be open for examination by the 25th inst.

Plans and specifications will be furnished at the Engineer's Office, Zanesville.

ROBERT MAC LEOD,
Chief Engineer.

N. B.—The line of the road extending east from the above work to the Ohio is expected to be ready for examination shortly. R. M. L.

Fairbank's Railroad Scales.

ONE reason why these Scales, in long use, prove so much more durable and reliable than any others, is the fact that they are made stronger and more massive, being capable of sustaining an amount much greater than their rated capacity.

The Track Scales which have been constructed for the New York and Erie Road, and other Western Roads, being ample for sustaining Fifty Tons and the thrust of the cars while passing over them.

Every variety and description of Scales required for Railroads and Forwarding Houses, furnished at short notice, on application to the subscribers or their agents. E. & T. FAIRBANKS & CO.,
St. Johnsbury, Vt.

FAIRBANKS & CO,
89 Water st., New York.

The following Railroads have been furnished exclusively, or nearly so, with Fairbank's Scales:

Androscoggin & Kennebec,	New Haven and Northampton, or Canal,
Ashuclot.	N. Hampshire Central,
Atlantic & St. Lawrence,	New York and Erie,
Aurora Branch, Ill.,	N. York and N. Haven,
Baltimore and Susq.,	Norfolk County,
Baltimore and Ohio,	Northern, N. H.,
Bath Branch, Me.,	" N.Y., or Ogdensb.,
Bost., Concord & Mont'l,	Norwich and Worcester,
Boston and Lowell,	Old Colony,
Boston and Maine,	Oswego and Syracuse,
Boston and Providence,	Peterboro and Shirley,
Brattleboro' Branch,	Petersburg, Va.,
Buckfield Branch,	Philad. and Reading,
Buffalo and N. Y. City,	Pittsfield and N. Adams,
Canandaigua and Elmira,	Port., Saco and Ports'th,
Central, Georgia,	Portland and Kennebec,
Central, Virginia,	Providence and Worc'tr,
Charlotte and S. Carolina,	Rensselaer and Saratoga,
Cheshire,	Richmond and Danville,
Cincinnati, Clev'd & Col.,	Richmond and Petersb'g,
Cochecо,	Rome and Watertown,
Concord,	Rutland and Washingt'n,
Concord and Claremont,	Rutland and Burlington,
Connecticut River,	Salem and Lowell,
Conn. and Passumpsic R.,	Sangamon and Morgan,
Contoocook Valley,	Shelbyv. and Knightst'n,
Eastern,	Shelbyville and Rushv'le,
Essex,	South Reading Branch,
Galena and Chicago,	South Western, Ga.,
Georgia,	Stony Brook,
Greenville and Columbia,	St. Charles Branch,
Hart., Prov. and Fishkill,	Sullivan,
Housatonic,	St. Lawr'ce and Atlantic,
Hudson River,	Syracuse and Utica,
Hudson and Berkshire,	Troy and Greenbush,
Macon and Western,	Vermont Central,
Manchester and Lawrence,	Vermont and Canada,
Michigan Southern,	Vermont and Mass.,
Milwaukee & Mississippi,	Western,
Nashua and Lowell,	Worcester and Nashua,
Naugatuck,	Utica and Schenectady.
Newburyport,	

Many other Railroads are supplied with Fairbanks' Scales in part.

May 1, 1852.

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company, in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, Jr.,
Chief Engineer.

Steubenville, April 26, 1852.

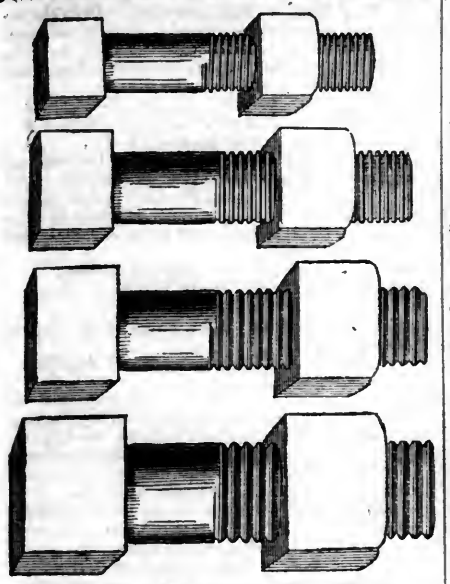
Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Side Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

W. A. BARRETT, Agent,
75 State Street, Bosto .

LANTERNS.



RAILROAD,
LOCOMOTIVE,
CAR, HAND,
SIGNAL,
and other
LANTERNS,



Manufactured by WILLIAM PORTER,
258 Water street,
(Cor. of Peck Slip,) New York.
W. W. TAULMAN, Agent,

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fillings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALL.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

SALE OF MORTGAGE BONDS.

OF THE

Lawrenceburgh and Upper Mississippi Railroad Co.

THIS COMPANY OFFERS FOR SALE FIVE HUNDRED THOUSAND DOLLARS of their seven per cent. First Mortgage Bonds, with Interest Coupons annexed.

These bonds are in sums of $1000 each, payable 1st March, 1866, with interest on the 1st days of March and September, at the office of the Ohio Insurance Life and Trust Company in the city of New York, where the principal is always payable. They are convertible into the stock of the Company at par, at any time within five years from their date, and are secured by a first mortgage on the entire road, its franchises and equipments, by deed of trust to George S. Coe, of the city of New York.—This being the first and only lien upon the road, and this being the entire sum authorized to be issued by the mortgage.

The road extends from the road to run from Cincinnati to St. Louis, at Lawrenceburgh to Indianapolis, the Capitol of the State of Indiana, a distance of 90¼ miles, and will, when completed, with the twenty miles of the road aforesaid, between Lawrenceburgh and Cincinnati, form the nearest and most direct line from Indianapolis to Cincinnati.

It passes through several important towns and over a most fertile and well improved country, and by means of railroad connections made and making at Shelbyville and Indianapolis, this line will be placed in communication with fully one half of Indiana, forming the best, and for much of the country, the only avenue of travel and trade to Cincinnati.

Seven railroads are made or making to Indianapolis, the most of which will be important feeders to this Cincinnati road—three railroads are made to Shelbyville, the business of which must naturally seek an outlet over this road.

The entire line is under contract, about 20 miles is now ready for the iron—the grade will be prepared to receive the superstructure as far as Shelbyville, 63 miles, this fall, which place is already connected by railroad with Indianapolis, and the contracts for the road complete to Indianapolis expire on the 1st October, 1853.

The rails for the entire line, 9,200 tons, are purchased, 1200 tons are on the line, and are now being laid down; 1000 tons will be forwarded from this port immediately; 4,200 tons are ready for shipment in Wales, and the residue is to be delivered in New Orleans next winter.

The total cost, with rolling stock and equipments, ready for business, is $1,250,000; $800,000 of stock has been subscribed and the largest portion of it paid in and expended. This mortgage provides for only $500,000, and is the only one intended to be given, as with it the means of the Company are ample for the entire work, and the lien thus created only amounts to $5,500 per mile.

Indiana is now the fifth State in the Union, and is fast advancing in wealth and population. Indianapolis, her seat of government, is likely to be the largest inland city in the west. There is being concentrated at it a net work of railroads, which, with connections, will penetrate every part of the State. It must be evident that the road which shall form the nearest and best connection with this system of public works, and Cincinnati, the great Emporium of the West, must become an important trunk line, and amply repay the expenditure upon its construction.

In addition to the mortgage the directors and principal stockholders of this road have deposited with the Trustee their personal guarantee to the holders of these bonds for the punctual payment of the interest thereon until the road is completed. Proper certificates and references are given, showing the entire ability of those parties to fulfil their engagements.

Sealed Proposals for any amount of these bonds, not less than $1,000, will be received until Saturday, the 22d of May next, at 3 o'clock P. M. Proposals to be directed to Messrs. DE LAUNAY, ISELIN & CLARKE. No. 63 Wall street, and endorsed "Proposals for Lawrenceburgh and Upper Mississippi Railroad Bonds."

Fifteen per cent of the purchase money to be paid on accepting the bids, the remainder in equal monthly instalments of 15 per cent each. The takers of the bonds to be at liberty to pay at any time in full. Interest on the bonds to run from date of payments.

The above $500,000 bonds will be sold absolutely to the highest bidder.

Pamphlets and Maps, and any further information relating to these securities, can be had by application to

DE LAUNAY, ISELIN & CLARKE,
63 Wall st.

Great Western Railroad,

CANADA WEST.

SEALED TENDERS, endorsed "TENDERS FOR CARS," will be received until Nine o'clock A. M., WEDNESDAY, May 26th, for furnishing the following CARS for the Great Western Railroad Company, to wit:—

25 Eight Wheel Passenger Cars,
4 Eight Wheel Express and Mail Cars,
8 Eight Wheel Baggage Cars,
20 Eight Wheel Emigrant Cars,
100 Eight Wheel Platform Cars,
150 Eight Wheel House Freight Cars,
100 Four Wheel Gravel Cars,
25 Four Wheel Repair Cars,
15 Hand Cars.

The above Cars are to be manufactured in the City of Hamilton, in buildings erected for the purpose, by the Railroad Company, and are to be completed on or before the First day of July, 1853. A portion of the same are to be completed by the First day of October, 1852.

Plans and Specifications will be ready for examination on and after the Eighteenth day of May next. Plans of the buildings can be seen at the Office of the Engineer.

The Contractor will be required to rent the buildings of the Company, and to furnish all of the requisite machinery, except the Engine and main line of shafting, which will be provided and put up by the company.

Information will be furnished by mail to parties wishing to tender.

The gauge of the road will be five feet six inches.

The Directors reserve the right to accept or reject tenders, as they may consider for the interest of the company.

R. G. BENEDICT,
Chief Engineer, G. W. R. R.

Office of the Great Western R. R.,
Hamilton, April 20th, 1852.

FILES.

THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make.

WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms.

RICHARD MAKIN,
April 22, 1852. 4 New st., New York.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch.

WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, JR.,
Chief Engineer.

Engineer's Office, Pittsburgh,
March 22, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
No. 9 Liberty Square, Boston.

Jan. 22, 1852.

Rubber Springs.

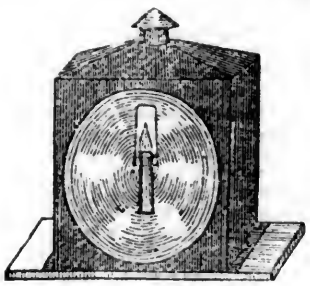
THE New England Car Spring Co. have just received the following letter from Mr Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.



Olcott & Brother,

INVENTORS and Manufacturers of the celebrated Locomotive Lamps, to whom was awarded the FIRST premiums by the American Institute, and also at the State Fair held at Rochester, N.Y., in 1851. These Lamps are in general use throughout the United States. We are now prepared to furnish Lamps of every description used on Railroads, and a better article than any other establishment in the United States.

A. R. GILLMORE, Agent,
35 Canal st., New York.
OLCOTT & BROTHER, Rochester, N. Y.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers.

JRE, CARMER & CO.,
75 Broad st., New York.

6m*14

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)
Memphis, Tenn.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To Mr. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself.* Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

Railroad Iron.

1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B. J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports of the United States.

S. DRAPER, AUCTIONEER.

PEREMPTORY SALE OF

FIRST MORTGAGE BONDS

OF THE

Buffalo, Corning and New York Railroad Co.

This company will offer for sale through Simeon Draper, on the 13th day of May next, at 12 o'clock, at the Merchants' Exchange, in the city of New York, $400,000 of their first mortgage bonds, payable in 1867, with seven per cent. interest payable semi-annually, at the "Bank of Commerce in New York."

These bonds are a part of one million, authorised to be issued for the purpose of completing their road, and are secured by a first mortgage on the entire road and its franchises, by deed of trust to John A. Stevens, James S. T. Stranahan, and John A. C. Gray, as trustees, and are convertible into the stock of the company at par at any time within five years from their date.

The road extends from Corning on the New York and Erie railroad, to the city of Buffalo, a distance of 134 29-100 miles, and will, when completed, form, in connection with the New York and Erie railroad, one of the most important and direct thoroughfares between the cities of New York and Buffalo and the far West, and will connect at Corning with the Corning and Blosburgh railroad, now being relaid with T rail, which extends to the rich iron, coal and lumber regions of Pennsylvania.

On diverging from the New York and Erie railroad, this road passes up the rich and fertile valley of the Conhocton river to near its source, at the northerly line of Steuben county, a distance of about forty-five miles, passing through the village of Cooper's Plains, Campbell, Savona, Bath, Kennedyville, Avoca, Liberty Corners, Conhocton and Wayland, thence through Springwater, Conesus, Livonia, Avon, [where it crosses the Genesee river;] and Caledonia, in Livingston county, and through Le Roy and Stafford to Batavia, in Genesee county. This part of the line, for nearly its whole length, passes through one of the richest and most productive portions of our state.

From Batavia the line of the road passes westerly in nearly a straight line, to the city of Buffalo.

The cars are now running on 25 miles of the road west from Corning, and it is expected to have the rails laid by the 30th instant for twenty miles further, when the cars will run 45 miles. The road is under contract to Batavia, and it is designed that the cars will be running over the whole road in all of the present year.

The mortgage provides that only $400,000 of bonds can now be issued, and the balance as consecutive portions of the road are completed. When the whole of said bonds shall be issued, the amount of incumbrance on said road will be something less than $7,500 per mile. The amount of the first issue, $405,000, will constitute an incumbrance equal to $7,150 per mile, upon the fifty-six miles of the road which are *now nearly completed*, being less than the value of the iron and land.

By this arrangement it is believed that the bondholders will be made secure beyond a possibility of doubt, the property of the company being at all times amply sufficient to indemnify them against any loss.

The following gentlemen compose the board of directors of the company:—

JOHN MAGEE, Bath. JAMES S. WADSWORTH, Geneseo.
CONSTANT COOK, Bath.
ORSON PHELPS, Buffalo. O. COMSTOCK, Avon.
THOS. J. DUDLEY, " J. A. C. GRAY, N. York.
WM. J. MILLER, " D. CURTISS, Campbell.
M. P. LAMSON, Le Roy. T. BROWN, Caledonia.
T. CARY, Batavia.
ANDREW B. DICKINSON, Hornby.

Pamphlets, with a map showing the route of the road, and containing full particulars, with a copy of the mortgage and bonds, may be had on application to either of the directors, or of

S. DRAPER, corner of Pine and William sts.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from Cairo	to Big Muddy River	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian	53 "
Sixth	"	"	Bloomington to the Illinois River	60 "
Eighth	"	"	from Freeport to Dubuque	67 "
Ninth	"	"	Chicago to Kankakee river	55 "
Tenth	"	"	Kankakee river to Urbana	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

To Contractors.

PROPOSALS for the construction of the Syracuse and Binghamton Railroad complete, in conformity to a plan and specification which may be seen at the Office of the Engineer, in Syracuse, on and after May 5th, will be received at the Office of the Secretary, in Syracuse, until the 15th day of May next. Payment for the work to be made in cash, and the stock and bonds of the Company.—Proposals to specify the proportion of each, and may be made for the whole or a portion of the work.

A. H. HOVEY, Secretary.
Syracuse, April 15, 1852.

Railroad Spikes.

THE Subscribers are prepared to take contracts for Railroad Spikes of any pattern desired.

These Spikes are of our own manufacture, and have been extensively used and approved by various Railroad Companies.

They are manufactured from the best quality refined iron, and are considered superior to any in the market.

We have constantly on hand a large assortment of the different sizes; and all orders addressed to us will meet with ready and prompt attention.

THACHER & SEARS.
Boston, April 20, 1852.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car-Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston.

Lithographic Printing,

169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agen

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK. Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India-rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. Pickering,
BOSTON, MASS,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steam ships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,
Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR
Of every description and quality.
New York, 1850. 1y16

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 19] SATURDAY, MAY 8, 1852 [WHOLE No. 838, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Reading Railroad....289
Memoir of G. W. Whistler....290
Railroads in Southern Ohio....291
Brunswick and Pensacola Railroad....291
East Tennessee and Georgia Railroad....291
Alabama and Tennessee Railroad....291
English Railroad Traffic....293
Toledo, Norwalk and Cleveland Railroad....293
Pennsylvania Railroad....295, 293
Railroads in France....294
Cincinnati and St. Louis Railroad....294
Evansville and Illinois Railroad....295
Influence of Railroads upon the value of Land.295
Northwestern Railroad....295
Baffalo and Corning Railroad....295
Stock and Money Market....296
Providence and Bristol Railroad....298
Finances of Louisville....298
European and North American Railway....299
Providence and Worcester Railroad....299
Rochester and Syracuse Railroad....299
Covington and Lexington Railroad....299
Virginia and Tennessee Railroad....300

American Railroad Journal.

Saturday, May 8, 1852.

Reading Railroad.

We copy the following from the Philadelphia North American, being one of a series of articles upon "Pennsylvania Coal and its Carriers."

Few persons seem to be aware of the importance or the magnitude of the great coal interests of this city. In this connection we more particularly refer to the Reading railroad company, with a capital of $17,000,000
The Schuylkill Navigation, with a capital of.... 10,200,000
The Lehigh company with a capital of 7,500,000

Total $34,700,000

The Reading railroad company alone has invested in its works a sum about equal to one-half the capital of the late Bank of the United States, with annual earnings to the amount of $2,314,340, a net annual profit of $1,125,393, and an annual tonnage of coal shipped from its port at Richmond *greater than the whole foreign tonnage of the city of New York.* Surely such an establishment deserves to be better known than it is, not only to capitalists, but to citizens generally.

The history of the Reading railroad, in its main features, is like that of almost all our public works, except, perhaps, the Pennsylvania railroad, now in progress. It was commenced on a capital not sufficent to complete it. The property acquired by the original stockholders has, therefore, been pledged successively to bondholders and holders of preferred stock, to obtain the necessary means of carrying out the original design. These several investments may be summed up briefly as follows:

Common stock	$4,159,832
Preferred stock	1,551,800
Sinking fund stock	393,700
Bonds	10,794,183
Total	$16,899,515

In obtaining the large amount of money represented in these figures, during a period of sixteen years, from 1836 to 1852, no doubt many sacrifices have been made. Had the original proprietors entered upon the business with $17,000,000 cash in hand, it is but reasonable to suppose that all the property now owned by the company might have been acquired with a much less expenditure of money. Without professing to be entirely familiar with the history of its financial operations, this much we suppose may be taken for granted. The important practical question, however, still remains, namely: is the property, represented by this $16,899,515, capable of perpetuating itself, and at the same time of producing a fair annual dividend on the whole amount?

Before proceeding to answer this question, it is proper to remark that the work of the company is now fairly complete. The road itself is made, with a double track for the entire distance, from tide water at Richmond, to the mines, and with the numerous sidings and turnouts necessary for such a vast business. The company have obtained by purchase, the city terminus of the State railroad, extending three and a half miles from Broad and Willow to the Junction on the other side of the Schuylkill. They have secured a site for a depot of the largest dimensions at the junction of Broad street and Willow, besides constructing an office with ample accommodations for the general business of the company in Fourth street. They have not only their immense wharves at Richmond, but sufficient additional wharf room secured in the same vicinity, to supply any additional increase in their business. They have their Iron Foundry, Brass Foundry, and Steam Tilt-Hammer Shop, for supplying and repairing the necessary machinery at the shortest notice and the cheapest rates.

The only increase to their permanent investment, therefore, that seems at all possible, is in the running power. The company have at present invested in this item, that is, in engines and cars, $2,276,576. With this they can perform the general business of the road, and bring to market 2,000,000 tons of coal annually. The utmost capacity of the road, suppose it to be covered with a continuous line of cars, running night and day, is estimated at 4,000,000 tons. Should the business of the road ever reach its utmost capacity, as it is not at all impossible it may, an additional investment in locomotives and cars would be necessary. But such an increase of business, all other expenses remaining comparatively stationary, would be accompanied with such an enormous increase of profits as to make the procuring of the necessary capital the easiest thing imaginable. Indeed, it is not improbable, in such an emergency, that the additional machinery would be obtained out of the excess of profits, and without increasing the capital investment.

Be that as it may, one thing is perfectly obvious, namely, that the work of the Reading railroad company is now substantially completed. Their last large investment was made in 1850 and 1851, when they bought the city terminus of the State railroad, the additional wharf room in Richmond, and the real estate in Fourth street and at the corner of Broad and Willow. They now have access to a port of their own (Richmond) for all coal intended for the foreign or coastwise market, and direct access, on a road of their own, to the very heart of the city, for all coal intended for home consumption. They have the necessary offices, depots, wharves, workshops and running power, all in a state of complete efficiency. More than even this, they have adopted a settled policy of laying aside from their annual earnings a sum sufficient to renew the wear and tear of the road and machinery, and to perpetuate the property in its present condition. This sum, (three cents per hundred tons a mile,) known as the Renewal Fund, has been fixed upon after an experience of ten years, and a comparison with the experience of all other roads in the world engaged in the same kind of business, and has been found amply sufficient.

We repeat, therefore, the only question to the capitalist is, whether this vast machinery, a railroad of a hundred miles, with its multiplied apurtenances, is capable of earning for its owners a steady and sufficient income on the capital invested on it.

The last year was a trial one. The company was put to a more earnest trial of strength, probably, than it will ever be again. There was, at the beginning of the year, a general misunderstanding among the parties interested in the different coal regions. A severe and determined competition was the result. The Lehigh company and the various New York companies engaged in the Lackawanna region, particularly the latter, put their coal at greatly reduced prices. To prevent the withdrawal of the trade from the Schuylkill region, the Reading railroad and the Schuylkill Navigation companies both reduced materially their rates for transportation. The railroad reduced its freight on coal from $1 53¾ to $1 22½, or 31 cents per ton. This had the desired effect. The road not only maintained its accustomed amount of business, but largely increased it. What is more, even at these reduced rates, while the stock of its main rival, the Delaware and Hudson Canal company, fell during the competition $50 per share, the Reading railroad

earned more than six per cent. on its whole investment, after paying all expenses, and after laying aside the annual sum provided to renew the works and keep them in repair. The gross receipts of the road were $2,314,330. The total expenses $1,188,936. Add $109,847, [the sum set apart for the renewal fund] and we have still a net balance of $1,015,547, or a small fraction over six per cent. on the entire investment of $16,649,515.

The effect, therefore, of the keen contest of 1851, has been to show that the Reading railroad can afford to transport coal at rates that would be ruinous to all the other companies. The other companies, in view of this clearly established result, have now changed their policy, leaving the railroad free to raise its freight without loss of business. The small increase of ten cents per ton, which is proposed, and which is now entirely practicable, would, without any increase of tonnage, make an addition of $165,000 to the receipts of the company; or, in other words, an increase of four per cent. in the profit on the common stock.

But there is a prospect, perhaps we might say a certainty, of a largely increased business. The coal transported on the road in 1851, was 1,605,270 tons, being an increase of 298,768 tons over the year previous. Nor was this at the expense of the rival companies. All the companies had an increased business. The whole amount of coal brought to market from the Schuylkill, Lehigh, and Lackawanna regions during 1851, was 1,101,051 tons more than in any previous year. Yet, with all this increase, the market has not been glutted, the price has at no time been such as not to yield profitable results to the producer, and the principal markets are at this moment bare. There is not coal enough now in the city of New York to last the winter out.

Taking the increase of the last year [298,768 tons] as the basis for a calculation of the business of the Reading railroad for the year 1852, and supposing no special causes to exist, ensuring even a greater increase, the amount of coal which it will have to transport the present season will be 1,949,038 tons. But there are reasons why even a greater increase may be expected. In the first place, every season thus far has opened some new method for using coal profitably in mechanical and commercial business. In the second place, the extraordinary severity of the present winter has nearly doubled the amount consumed for domestic purposes. The increased consumption from this source alone, according to the estimate of those familiar with the subject, is not less than 300,000 tons. This will make the business unusually brisk during the whole of the next season. Under all the circumstances, it can hardly be doubted that the railroad during 1852 will be freighted to the full capacity of its present engines and cars, say 2,000,000 tons.

We have said nothing here of the increase in other items of business. The merchandise and passenger business has thus far increased pari passu with that of coal. As it constitutes, however, only about one-seventh of the whole business of the company, it is not material to the present argument — So far as these items are to be accounted at all, they only go to swell the general force of our conclusions.

In estimating the bearing of these conclusions upon the value of the company's stock, it should be remembered, that this large increase of profits is not to be divided equally among the whole sixteen or seventeen millions invested. Nearly eleven millions of this investment consist of bonds bearing a definite interest of five and six per cent. All the net savings of the company, after paying the five and six per cent. interest on, say eleven millions of bonds, are to be distributed among $6,105,332 of stock.

Now suppose an increase of 25 per cent in the business of the company, which was the rate of increase last year. The gross receipts last year were $2,314,330; add 25 per cent to this, and we have, as a probable conjecture, $2,891,662 as the gross receipts for 1852. The net profits for 1851, (after deducting the sum laid aside as a renewal fund,) were 43 8-10 per cent of the gross receipts. The recent successful experiments in the use of anthracite coal for locomotives will, no doubt, lessen materially the working expenses, and consequently make the net profit bear a still larger ratio to the gross income. But supposing the ratio to be the same, 43 8-10 per cent on $2,891,662 gives us $1,266,548 as the net profits of 1852. This is on the supposition that the business will continue to be conducted on the same terms as in 1851. But, it will be recollected, ten cents per ton, additional freight, is to be paid on coal, which on 2,000,000 tons would make a net increase to the income of $200,000 additional, or $1,466,548 in all. The interest on the bonded debt is about $647,650, reckoning it all at six per cent. This would leave $818,898 to be divided among $6,105,332 of stock, or a clear dividend of more than 13 per cent.

There is still another feature of the company, which tends to impart stability to its operations, and which, at this particular time, is supposed to give additional value to their stock. They commenced, three years ago, laying aside $100,000 annually from their earnings, as a sinking fund.— This sum is expended in buying up and cancelling their own bonds, thus gradually and surely reducing their indebtedness. At the same time, to give the stockholders for the time being the full benefit of the earnings of their property, this $100,000 is distributed among them, in the form of stock; thus, should the net earnings of the road, for any one year, be 10 per cent, the shareholders would receive about 7 per cent in cash, and 3 per cent in stock. The stock thus created we have called, for convenience, the sinking fund stock. The plan has been in operation for the last three years, during which time a stock dividend of 9½ per cent has been declared and set aside, but not actually distributed. This accumulation of 9½ per cent sinking fund stock, together with whatever of the same kind shall be created the present year, (making, say 12 per cent altogether,) is to be distributed to the stockholders at the close of 1852, besides a cash dividend, such as the earnings during the year may warrant.

If to all these considerations, we add the almost indefinite increase of business before the company in coming years, it seems difficult to divine a reason, why its stock should not ultimately be among the choicest investments in the market. It has not, like the Camden and Amboy company, a legal monopoly, but it has, what is far better than any monopoly of man's making, physical advantages that enable it effectually to distance all competition.— These advantages arise from the nature of its business, and the character of the region in which it is conducted. It is of the very nature of a heavy coal business, that the cars or boats carrying it to market have to return empty; hence a most serious waste in the use of that which is, of necessity, the main item of expense—the motive power. The hauling is all one way. Now, in this respect, the Reading railroad has a peculiarity, which distinguishes it from all other railroads in the world.— Such is the gradual slope of the Schuylkill region, through which the railroad runs, that the track has, on an average, a descending grade of about six feet to the mile, the whole distance from the mines to the water; in other words, a great part of the actual transportation is effected by the mere force of gravity. The engine which brings a loaded train down is only required to be powerful enough to take the empty cars back. In this respect, it has an advantage over every other railroad in existence, for this specific business—an advantage which depends, not upon any act of legislation, but upon the unrepealable laws of nature, as its main business does upon the most imperative of the wants of man.

Rabun Gap Railroad.

We learn from a gentleman just from Rabun county, Ga., that books of subscription were opened at Clayton, in that county, for the stock of the Blue Ridge railroad, on the 6th inst., and that on that day and the following the sum of £553,000 was taken up.

The capital of the company is one million of dollars; hence it appears that more than half the stock has already been subscribed.

We are also assured that effective action will speedily be taken under the charter obtained from North Carolina, for continuing the great enterprise through that State to the Tennessee line, where it will meet with friends already at work to carry it through to its destined terminus. The feeling that has everywhere started up spontaneously to support this undertaking, is the best proof that the real wants of the country call for its completion, and this being established, it does not require the gift of prophecy to foretell that it will be done.—*Charleston Mercury.*

George W. Whistler.

We present our readers in this number with a portrait of George W. Whistler, an engineer of deserved celebrity in this county, and well known, both at home and abroad, as the gentleman selected by the Emperor of Russia to superintend the construction of the magnificent system of internal improvements projected in that empire. And when we reflect upon the magnitude of the engineering works with which the older countries abound, we can but regard with a feeling of pride, the fact that an American should have been selected for so high a trust by a European government, possessing every opportunity and means for securing the highest professional talent which the world could offer.— Nor should it be forgotten that this selection of our countryman did not arise from any necessity which the Russian government felt for obtaining professional aid from abroad, growing out of a lack of the requisite material at home; on the contrary, the engineers of the Russian service are perhaps the most accomplished body of men to be found in any country. Selected by the Emperor in their youth, irrespective of any artificial advantages of birth or position, but merely for the evidences which they may happen to have manifested of a genius for the military art, or for those studies upon which perfection in this art so materially depends, they are trained to a degree of excellence in the physical sciences wholly unknown in this country, and, by comparison, but imperfectly reached either in the English or French schools. Such was the body of men with whom Mr. Whistler was called upon to co-operate, and whose professional duties, if not directed specially by himself, were controlled by his judgment, upon which the government was accustomed to rely in all cases requiring the exercise of a high combination of science and practical skill; and here, with a happy tact peculiarly his own, Mr. Whistler secured the warm friendship of men whose professional acts he found himself called upon in the exercise of his high trust to condemn.

The Russians are proverbially jealous of strangers; and no higher evidence of their appreciation of his sterling honesty and sound discriminating judgment could be afforded, than the fact that all his recommendations on the great questions of internal improvements, opposed as many of them were to the principles which had previously obtained, and which were sanctioned by usage, were yet carried out by the government to the letter.

That his reputation is identified with that of our country, and one in which as Americans we should take pride, is evinced in the circumstance of the Russian government, on the occasion of his death, looking to this country as alone able to make up to them their loss.

It has been our high privilege to serve under Mr. Whistler in all the grades known to the profession in this country; and however indifferently qualified we may be to pass judgment upon those professional abilities which marked him pre-eminently as the *Engineer*, none had better opportunities than ourselves for forming a true opinion of those high social and moral qualities which constituted the *Man*.

Mr. Whistler was but little known as a public man. Retiring and modest almost to a fault, less from any diffidence of his own powers than from a highly refined sense of delicacy and good taste, which ever prevented him from obtruding himself or his opinions upon others; he was, from his rapid and acute powers of observation and analysis— from the stores of a well-filled mind, combined with a happy faculty of imparting his ideas, together with a most fascinating exterior and address, peculiarly fitted to command admiration and win applause; yet he was of all men the very last to seek or desire such rewards.

A sense of delicacy almost feminine—a highly refined and elevated taste—a keen appreciation of the beautiful, with a rich vein of humor—a kindness of heart whose sphere of action was unstinted in its range—a warmth of feeling which insensibly

kindled all within its influence—a temper mild and forgiving—a disposition generosity itself—the whole cast in a mould of high toned truth and manliness; a character gentle without weakness, firm and manly without harshness. In a word, a gentleman—a nobleman. Such was the man at home. And if we have dwelt upon the softer attributes of his character, it was not that the sterner qualities were wanting, but so held in balance as not prominently to mark his character. And our readers may well believe, that to know him, was to love him.

An accomplished friend (Prof. Alexander, of Baltimore,) has, in an article furnished to Silliman's American Journal of Arts and Sciences, vol. 8, 1849, paid a just tribute to his professional talents—and did space permit we would gladly transcribe it. Our own pen is wholly unequal to the task of doing justice to his many virtues; and with a few incidents in his life and career as an engineer we will close, leaving his memory embalmed in the hearts of his many friends, and his reputation as a sacred trust to his countrymen.

George Washington Whistler was the son of Major John Whistler, who, until the year 1812, was in the artillery service of the United States.—He was born at Fort Wayne, in the then Northwest Territory, May 19, 1800. His early associations and tastes led him to enter the army as cadet at the military academy at West point in 1814, and he graduated in the artillery in 1819. He remained as assistant professor at the military academy until 1821, when he was detailed for duty on the Northern Boundary Commission, under the orders of Col. Abert, the present Chief of the Topographical Engineers. In this service in the field and office, he remained until the completion of the labors of the Commission in 1828. The great system of internal improvements which has since spread its arms throughout the length and breadth of the land, was at that date scarcely in its germ, and the pioneer in the great enterprise, the Baltimore and Ohio railroad company, solicted his services of the government in their behalf. In company with Capt. McNeil and Jonathan Knight, he visited Europe in the service of this railroad company, and returned in May, 1829. In June, 1830, he was transferred to the Baltimore and Susquehanna railroad company, where he remained until the latter part of 1831, when he removed to New Jersey to direct, in conjunction with his friend McNeil, the construction of the Paterson and Hudson river railroad, as also the Boston and Providence railroad. Upon the completion of these roads, his labors were directed to the construction of the Stonington and Providence railroad.

In 1835 he was appointed engineer to the Locks and Canal company of Lowell, engaged in the construction of locomotive engines. Here he remained until 1837, about two years, devoting his whole time to the construction of machinery. In 1837 he was again induced to turn his attention to railroad construction; and from this time until 1842, the direction of the Stonington and Providence railroad, and the location and construction of the Western railroad through Massachusetts, occupied his attention. In addition to the works above enumerated, on which his personal attention was required in the direction of the detail of construction, he was consulted on most, if not all, the important questions connected with the internal improvements of the Northern and Atlantic States. In this year, 1842, he was invited by the Emperor of Russia to take the direction as engineer of the system of internal improvements then projected in his empire. Mr. Whistler accepted the appointment tendered him under so highly flattering circumstances, with the understanding, that at the expiration of seven years he should be permitted to retire.

His duties in the service of the Emperor were of the most varied and extended character. In addition to the St. Petersburg and Moscow railroad, and the establishment of manufactories for the construction of engines, cars, etc., on a most stupendous scale, alone sufficient to engross the time of any one man, he was appointed engineer of the naval arsenal at Cronstadt, another of the magnificent works projected by the Emperor. The location and construction of fortifications and docks, the improvement of harbors and rivers, the construction of bridges, etc., were all subjects upon which he was required to exercise his judgment and skill. The works which he had planned, were at this date so far matured during the seven years which he had devoted to them, that the temporary absense which he proposed, for the benefit of his health, now impaired by the effects of climate, would not sensibly delay their early completion.—His labors, however, were closed by his sudden death, April 7, 1849, as he was about to revisit his American home. And we are informed that the government have with jealous care prevented any changes whatever being made in his plans, including those merely planned by him, and not in process of construction, as well as such as were partially completed at his death.

Few men, in so short a life, have, in the quiet walks of scientific pursuits, built themselves so wide-spread a reputation, and none have done more abroad to command respect for our professional men, and to elevate the character of our countrymen.

In this connection it may not be out of place to remark, that an effort lately made to raise funds by subscription* for the purpose of erecting a monument to his memory, in Greenwood Cemetery, has been misunderstood, so far as to suppose that none will be allowed the privilege of subscribing save his professional brethren; this is not so. All his friends may claim the right, and are invited to participate in so sacred an object.

Railroads in Southern Ohio.

The ultimate success of the several railroads projected in Southern Ohio, as well as other parts of the State, can no longer be doubted. The enterprize and perseverance which characterize the citizens of this State will surmount every obstacle, and carry through to their final completion the entire *network* of railways already contemplated in this State. An impulse has been given to this class of improvements which is full of encouragement, and in those instances, now being multiplied, where railroads have gone into operation, the numerous advantages and practical benefits resulting from their construction are tending rapidly to an increased confidence in this manner of improvement.

Our friends at Jackson are enjoying the prospect of a railroad connection with Portsmouth, on the Ohio river, to be completed during the coming fall, when the operations of the road are expected to secure the most important advantages to that place and the surrounding country. During the construction of their road thus far—*nine-tenths of the grading and bridging being now completed*—an excellent market has existed at Jackson and along the line, *for every description of garden and farm productions*, with every variety of marketing necessary in the boarding of hands, while there has been and continues to be, a steady demand for labor and a great variety of materials necessary in the progress of the work.

The distance from Jackson to Portsmouth, by the railroad, is 43 miles, and the iron for 25 miles is now purchased, and its arrival at Portsmouth daily expected, while the remainder will be forthcoming as soon as practicable.

By an extension of this road only *nine miles* on very favorable ground, an intersection will be formed with the Marietta and Cincinnati railroad, upon which our Jackson friends can proceed with us to the Atlantic cities—as the gauge will be the same upon both roads. Some of the early settlers of *this* country can refer back in their memories to the time when they visited the present site of the flourishing town of Jackson, *with their pack-horses, for salt*, having to remain, in most cases, several days, and *assist in the manufacture*, before obtaining a supply. Another twelve-months and a visit to that place will present a very different appearance.—The sound of the Iron Horse will echo through the same grounds where the camp-fires and other evidences were then seen, showing that the country was not fully reclaimed from aboriginal possession.

We learn that Jackson is rapidly growing under the stimulating influences already imparted by the work of construction and the certain prospect of the early completion of their railroad.—*Athens Messenger.*

* The treasurer of the association formed for this purpose is George M. Dexter, Esq., of Boston, who will receive subscriptions.

Railroad from Brunswick in Georgia to Pensacola.

A new enterprise is about being taken in hand, which, when consummated, will be of material interest to the country generally, and to the city of New Orleans in particular. A company has recently been organized, composed of influential citizens of Georgia, and wealthy capitalists of Washington and New York, for the purpose of constructing a railroad across the upper portion of the peninsula of Florida, from the port of Brunswick in Georgia, to the city of Pensacola.

The town of Brunswick has occupied public attention for many years past, and the Legislature of Georgia has granted to it at different times many valuable privileges; among others a charter for a canal connecting it with the Altamaha river, so that the richly timbered country of Southern Georgia may find a market for its valuable productions; and likewise a charter for a railroad from the port of Brunswick to Pensacola on the Gulf. The excavation for the canal was commenced some ten years since, but for want of funds it was suspended; it has now been renewed under most favorable auspices, with every prospect of successful prosecution. The charter with the entire property of the company, embracing the larger portion of the town of Brunswick, has been purchased by a New York company, which has set to work in right good earnest. One hundred and fifty hands are already actively employed, and by the first of January next, the entire canal will be completed, thus bringing the valuable timber and cotton lands of the Altamaha and its tributaries, in direct contact with a market on the Atlantic.

The contemplated railroad is to be commenced forthwith, and the company having it in charge, design making it a first class railroad, connecting the two termini on the Atlantic and the Gulf with branches to Tallahassee, and Albany on the Flint river. The distance from Brunswick to Pensacola is about two hundred miles, and the road will run through one of the best timbered and fertile regions in the whole South: the physical features of the country are as favorable as can be wished, and the entire cost of the road, with equipments, is estimated at $1,500,000.

The port of Brunswick has the best harbor south of Chesapeake Bay, and the only place on the Southern Atlantic coast where vessels of the largest class can enter, and load and discharge at the wharf without difficulty, and at all stages of the tide. The other terminus of the road, Pensacola, is a naval station, with the best harbor on the Gulf. The utility and profitableness of such a road cannot be questioned. The Georgia Telegraph, speaking of the benefits reaped by Northern enterprise, and particularly in securing the travel, and carrying the trade of the Pacific, makes the following judicious and sensible remarks:

"Let a connection of the railroads of Georgia with the Gulf be made and the whole Southern country will not only be placed in closer proximity to the West Indies, South America, Mexico, and our own rich possessions on the Pacific, but this monopoly, by the North, of the commerce and travel to the Pacific will be broken up and a large portion of it secured to our own cities on the Gulf and south Atlantic coast. Let a railroad be started from Brunswick to Pensacola and steamships be started from the former place to New York and from the latter, via New Orleans and Havana to Chagres or Tehuantepec, and the route even from New York to San Francisco will be shortened a whole week or more in time and between the Southern and Western States and San Francisco, there will be a saving of more than two weeks in time, and a large sum in money."

It is the intention of the company to complete the road in five years; and from our knowledge of the character and resources of some of the members composing the association, we have not a shadow of doubt that their expectations will be realized.—Messrs. Robert J. Walker, of Washington, S. R. Brooks, Amos Davis and William Chauncey, of New York, with some half dozen strong, substantial men in Georgia, have the ability and will to commence the work and give it a lively impetus,

while Robert Collins and Elam Alexander, Esqrs., will embark in the enterprize, and give it their personal superintendence. The latter gentleman is well known through the South as a practical man of great sagacity and energy of character, and to this community as the efficient President of the Washington and New Orleans Telegraph company; the former gentleman, Dr. Collins, is a man of a thousand, one of those rare master spirits which give tone, character and prosperity to a country.—For many years he has devoted his exclusive time, and all the energies of his strong astute mind to works of internal improvement, and there is scarcely a road in central Georgia, in the construction of which he has not participated, and been the main instrument of its progress or completion. Men of such stamp deserve success, and they are very sure, in time, to attain it; a few such among us would in a few years make Louisiana what Georgia now is, the Empire State of the South.

The Brunswick and Pensacola railroad company do not ask of us any "material aid;" they know well how much we lack the will and ability to help ourselves; for the present, we must husband our resources, and try and build our own railroads, and escape the reproach which now rests upon us, of being the least enterprising State in the Union.—But we can sympathise with and admire the dashing and go-ahead spirit of our neighbors, and cheer them on in their efforts, and in this enterprize in particular, do we feel a warm sympathy, for it must eventually be of great service to us.—*N. O. Commercial Bulletin.*

East Tennessee and Georgia Railroad.

The Editor of the Knoxville Register, having recently passed over the above road, gives the following notice of its operations:

The road is doing a much better business than we had anticipated. The following is a statement of the gross earnings of the road for the first quarter of the present year—

Earnings for January	$2,676 32
" February	2,497 73
" March	4,886 05
	$10,060 10

This has been done with a road but little over 50 miles long the greater portion of the time. During the next season, when the road will have reached the river, we shall confidently expect a very heavy increase of the business. Everything considered, the road has done remarkably well.

The road is universally acknowledged to be one of the best, if not the best in the whole country. It has been constructed and equipped in the most substantial and superior manner, and in this the company acted wisely. When completed, it will require but very little to keep it in repair, while most roads in the south absorb large amounts of the earnings for this purpose, thus lessening the dividends. For the substantial road we have, much is due to the accomplished Chief Engineer, Mr. M. B. Pritchard, who has, from his connection with the enterprise, labored solely to promote the interests of the company, and to the construction of a first class road. He has given the best illustration of his fitness for the position he occupies.

Ohio.

Junction Railroad.—We have great satisfaction in learning, from the President, who has just returned from the east, the favorable condition and prospects of the Junction railroad company. A recent negotiation of its officers has resulted in a sale of its bonds to the amount of $600,000. Five thousand five hundred tons of iron rail has been purchased, sufficient to supply the track from Cleveland to Sandusky. In addition to this a contingent contract exists for four thousand two hundred tons, to be laid upon the next fifty miles, and which will reach beyond the Maumee river. We have already noticed the vote of Williams county in favor of a subscription of $100,000 towards a further extension. Further aid is expected, both from Fulton county and from the city of Toledo, which will unite our interests with all our western neighbors, and will place this road in the line of communication between the rich valley of the Wabash and the eastern markets.—*Sandusky Register.*

Alabama and Tennessee Railroad.

Annual Report of the President and Directors to the Stockholders.

The financial condition of the company on the 8th day of November, instant, is exhibited by the treasurer's report, herewith submitted.

The whole amount received from all sources since the organization of the company (including $91,641 44 received from the State, of the two and three per cent funds) is $221,111 77. The expenditures during the same period for engineering, construction, etc., (the items of which appear in the treasurer's report before referred to) amount to $192,611 77.

In addition to the expenditures above mentioned, it is proper to remark that the sum of $28,500 has been deposited in Mobile to pay for a cargo of iron rails of about 800 tons, recently arrived in the Bay of Mobile from Wales, and now in course of delivery.

The board of directors, prompted by a desire to complete the road to Montevallo at the earliest day practicable, in the month of October, 1850, put under contract the grading, masonry and bridging of 55 miles of the road extending to a point within about half a mile of Montevallo; and in the month of February, 1851, despatched the Chief Engineer, Lewis Troost, Esq., to the north, with authority to contract for the iron rails and equipments for this portion of the road. He was instructed that, if on arriving at the north, he should ascertain the iron rails desired could not be procured there as advantageously as in England, to proceed at once to England. On arriving at the north, and informing himself of the state of the market, he found that the rails could be purchased, on terms deemed advantageous, without going beyond New York. In the latter city he concluded a contract, under our advisement, for 5600 tons of best quality T rails, 60 lbs. to the yard, with the agents of two extensive manufacturers of Wales, at the favorable prices stated in the Chief Engineer's report. Three cargoes of rails, thus contracted for, amounting to 2,330 tons, have arrived, and advices have been received of the shipment of two other cargoes, which are expected to arrive at Mobile about the middle or latter part of December. The balance of the 5,600 tons is to be delivered during the coming winter and spring.

The directors deemed the completion of the road to Montevallo at an early day, to be greatly desired from the consideration that from that point, it would command a comparatively large and remunerating business, from which the company would derive considerable aid in the further prosecution of the work.

Contracts were also made at the north, by Mr. Troost, for spikes, a portion of the chairs, a locomotive, a passenger car, and the iron work for 8 freight cars; and a portable steam saw mill for sawing cross ties. The locomotive has been received and placed upon the track; and the saw mill has also been received, and has been in operation for several months.

Favorable contracts for the transportation from Mobile to Selma, of the iron rails and all other materials and equipments required for the road, have been made with responsible steamboat companies, payable in the stock of the company.

An advantageous contract, partly payable in stock of the company, for laying the track from Selma to Montevallo, has been made with Isaac Hudson, Esq., of Talladega county. Up to this date between three and four miles of the track have been laid. The business of track laying would have progressed much more rapidly, but for the fact that owing to the extraordinary low stage of the river, the boats of the companies with which contracts were made (their boats being large) could not run the river with heavy freights. In consequence of this, a sufficient supply of iron could not be obtained, and only a small force of track layers were employed. The tracklaying will be vigorously prosecuted so soon as a sufficient supply of rails can be obtained, which is soon expected.

The work of preparing the road for the superstructure, from Selma to Montevallo, has been energetically and faithfully conducted by the contractors, Messrs. W. D. Riddle & Co., Waddill & Ware; and a large portion of the work has been executed.

Under the contracts which have been made, the grading, masonry and bridging are to be completed to Montevallo by the month of June next, and the track to be laid to the same point by August.

From this brief sketch of the operations of the directors on this part of the line, it will be observed that the board have rigidly carried out your wishes as expressed in convention, held in September, 1850, for the early completion of the road to Montevallo.

In conformity with a resolution of the stockholders at the last annual convention, the grading of the second section of the road, embraced within the counties of Talladega, Benton, and part of Cherokee, was offered to stockholders in the month of March last, and in the months of April and May, the grading of about 65 miles, (which includes all the road in these counties except about 18 miles,) was let to responsible stockholders, all of whom are now actively engaged in fulfilling their contracts, which are to be completed in May, 1853. Favorable proposals have been made by stockholders for the grading of the remainder of the road in these counties, but the work being light and requiring but little time for its execution, the board deemed it unnecessary, as yet, to accept them.

The board have also recently received from stockholders, proposals entitled to favorable consideration, for furnishing cross ties for the whole road in Benton county, and for the execution of a portion of the work between Montevallo and the Coosa river in Shelby county.

The right of way over most of the line, as adopted, and also depot grounds at different points, have been secured; and the only expense in procuring them thus far, has been for the employment of an agent for a few months, and the cost of removing fences and several small buildings A few persons here and there have refused to relinquish the right of way without compensation; but it is hoped and believed that most, if not all of them, will finally pursue the liberal course which so many others have done. There may be cases where some compensation may be proper, but the board cannot see the justice or propriety of a demand for compensation for right of way through lands which will be enhanced in value greatly beyond any injury which the owners can sustain by the passage of the road through their lands. The charter expressly provides, that in estimating damages for the right of way, the jury shall take into consideration the advantages of the railroad to the owner of the land.

A statement is herewith submitted, showing the amount of stock subscribed in the different counties on the books of the company, to be $958,140 00

To this amount should be added additional stock secured by contracts made for grading, laying track, furnishing materials, and freight; the precise amount not ascertained, but which is estimated to exceed..... 45,000 00

Making.....$1,003,140 00

Amount appropriated by the Legislature to the road from Selma to Gadsden, of the two and three per cent. funds, as stated to be in the Treasury of the State..... 178,016 14

Making the total means of the company to build the road to Gadsden, including the expenditures hereinbefore stated.....$1,181,156 14

The act appropriating portions of the two and three per cent. funds provides that one-half of the entire two per cent. fund, as received or to which the State might be entitled at the passage of the act, (4th February, 1850,) from any source, and all of the three per cent. fund on deposite, or to which the State might then be entitled, not exceeding $100,000 of the three per cent. fund, should be appropriated to the Alabama and Tennessee River railroad, and the Tennessee and Coosa railroad, pro rata, according to distance.

Under this act, it was expected that this company would receive as much as $260,000, and perhaps $300,000; but it turns out that considerably less of these funds was in the Treasury than was supposed; and that of the amount of the two funds actually on hand, this company was entitled to but $178,016 14. There was, however, at the time of

the passage of the act in question, about two years of these funds in arrears, which had not (and has not) been paid into the Treasury. Besides, the State has a claim, believed to be well founded, on the General Government for several hundred thousand dollars more on account of these funds. This claim, it is believed, must be recognised for at least $150,000, and perhaps a much larger amount; and the probability is, that this company will yet receive, under the act of appropriation referred to quite as much as was originally anticipated.

As respectable as, under all circumstances, the private subscriptions to the stock of the company may appear on the whole, it is a subject of regret that they are not larger. It was the intention of the board to press this subject on the country during the late summer, and it was done to some extent, and some subscriptions were obtained. It was found, however, impracticable, owing mainly to the decline in the price of cotton and the very unpromising prospects of the crops both of corn and cotton in the counties principally relied on, to obtain any large increase of cash subscriptions, and the efforts were suspended. The board entertain strong hopes and confidence that when the causes which prevented their success during the late summer shall have passed away, large additional subscriptions can and will be obtained.

Considering the fact that but little more than two years have elapsed since the organization of this company, it is a subject of congratulation to the stockholders and the country, that so much has been accomplished towards the success of this great enterprise, rather than discouragement that more has not been effected. Probably no work of this character, undertaken at the South, has ever before made such rapid and gratifying advances within so short a period.

From the disposition manifested hitherto by the stockholders generally, it cannot be doubted that it is their wish and intention to have the vigorous system heretofore pursued, rigidly persevered in; but to do this, it is indispensable that the calls which have been and may be made upon them, should be promptly responded to.

As it is expected to complete the road to Montevallo in the course of the next summer, it is greatly to be desired that also that section lying between Montevallo and Coosa river in Shelby county, should be placed under contract at an early day, so that the road may be in operation to that point within the shortest period practicable. The road completed to the Coosa river, would not only afford great facilities to the inhabitants of the fertile and extensive region beyond, but would do a large and remunerating business, and thereby furnish the company with large means, and render them very important assistance in the further prosecution of the work. But desirable as this object is, the Board feel bound to declare that under the policy which has been adopted in pursuance of the wishes expressed by the stockholders at their last annual convention, of putting under contract the grading of so large a portion of the road eastward of the Coosa river, the means of the company would not justify at present the making of any large additional contracts. To fulfil the contracts already in existence —will doubtless require as rapid and heavy calls upon the stockholders as most of them can bear— unless some assistance beyond the present subscriptions can be obtained to procure iron and machinery. If means were provided for these objects, then arrangements might be made forthwith, to place under contract the grading, masonry and bridging of the road between Montevallo and the Coosa river.

Four instalments, amounting in all, to 50 per cent. on subscriptions, [the last instalment being 20 per cent., and payable the 20th instant,] have been called for from the stockholders residing west of the Coosa river; and three, amounting to 30 per cent., from those residing east of the river; the last being 20 per cent., payable on the 20th inst.

The board of directors felt that an important, delicate and responsible duty was imposed upon them in the definite location of the road.

No difficulty was presented in making the location from Selma to Montevallo, or within about half a mile of that place. Between that point and the Coosa river, no location has yet been made; there being no immediate necessity for it. It was deemed advisable to make a more thorough examination and survey of this portion of the route before making the location. This has been done, and some material improvements in the lines have been the result. The Chief Engineer has made his final report on this subject, and no difficulty is apprehended in making a suitable and satisfactory location.

The great difficulty presented itself beyond the town of Talladega, where several rival and competing lines, each with strong and ardent advocates, were offered. A choice was necessary, and the responsibility of making it devolved upon those who constitute the present board of directors. The board regretted the fact that no choice could be made which would give satisfaction to all the stockholders and friends of the road. After a full and careful consideration of the whole subject, with an anxious desire, not only to select the route which would be most advantageous to the company as a whole, but also satisfactory to the stockholders, the decision was made unanimously in a full board; and that route was adopted which, passing centrally through the large and important counties of Talladega and Benton, would afford the greatest facilities to the largest number of stockholders and others of these counties, command the largest amount of business, and thus, would be productive of the greatest revenue and profit to the company. These considerations with the important fact, that one hundred thousand dollars additional subscriptions to stock could be secured, determined the choice of the directory.

A full, elaborate and carefully prepared report from the Chief Engineer, containing ample and accurate details in relation to the operations of the company from its organization, is herewith submitted. The results of these operations, as exhibited in that report, showing with what economy, as well as energy, the affairs of the company have been conducted, and the comparatively small cost of the road as far as placed under contract, and the durable and substantial manner in which the work is being executed, cannot, it is believed, prove otherwise than gratifying and highly encouraging to the stockholders.

J. W. Lapsley, *President.*
Selma, November 15, 1851.

Return of English Railway Traffic.

From a return of the railway department of the Board of Trade, it appears that the total receipts on railways in the United Kingdom during the half year ending the 30th of June, 1851, amounted to £6,749,522, of which £3,359,937 was for passengers, and £3,389,586 for goods, cattle, parcels, mails, etc. The total receipts for the corresponding period of 1850 amounted to £6,057,291—for passengers to £3,010,357, and for goods, cattle, parcels and mails to £3,046,933, showing an increase in the total receipts of £692,231, or 11½ per cent. The length of line over which the traffic was conveyed at the commencement of the half year was 6,621 miles, against 6,032 miles in 1850; and at the termination of that period 6,698 miles, against 6,308 miles in 1850. The total number of passengers conveyed during the half year was 37,881,703, against 31,766,503 at the corresponding period of 1850. The number of first class passengers was 4,540,250, against 3,775,005 at the corresponding period of 1850; of second class passengers, 13,764,114, against 11,905,919; of third class, 7,910,215, against 7,055,181; and of the parliamentary class, 11,667,124, against 9,028,398. The increase in the total number of passengers conveyed as compared with the corresponding period of 1850 was 6,115,200. The receipts for first class passengers during the half year amounted to £1,061,034, against £927,608 in 1850; for second class, £1,304,108, against £1,205,969; for third class £315,231, against £307,317; and for the parliamentary class £679,563, against £569,463 in the corresponding period of 1850. The total receipts for traffic on the railways in England and Wales during, the half year, amounted, on 5,200 miles of railway, to £5,825,243, including £3,924,619 for passengers, and £2,900,623 for goods, cattle, etc.; for traffic, on 961 miles of railway, in Scotland to £663,925, including £269,409 for passengers, and £394 516 for goods, etc.; for traffic, on 537 miles of railway in Ireland, to £260,354, of which £165,909 was for passengers, and £94,445 for goods. This return shows that while the receipts in England and Wales for passengers amounted to rather more than 50 per cent. of the total receipts, the receipts for passengers in Scotland amounted to 40½ per cent, and in Ireland to 64 per cent, of the total receipts. The total number of passengers in England and Wales during the half year was 30,883,566; in Scotland, 4,333,135; and in Ireland, 3,665,002. The number of passengers as above conveyed on railways in England and Wales averaged 5,939 per mile; in Scotland, 4,509 per mile; and in Ireland, 4,965 per mile. —*Herapath's Journal.*

Ohio.

Toledo, Norwalk and Cleveland Railroad.—Chas. L. Boalt, Esq., the energetic and efficient President of the Toledo, Norwalk and Cleveland railroad company, arrived last evening from Europe, with the gratifying intelligence of the successful result of his mission to purchase iron for this important road. He has purchased eight thousand tons of best Welsh rail, to come forward immediately, the greater portion being already on the way. The iron purchased will complete the whole line, and is to be landed in New York. Mr. B. happened to strike in a very favorable state of the iron market abroad, and got rails low and on favorable terms. The work is to go forward with all possible despatch, so as to be completed by the time anticipated —the 1st of January, 1853. It is the intention to have the cars running from Cleveland to Monroeville in September.

The road will connect with the Cleveland, Columbus and Cincinnati road at Grafton, and nine-tenths of the whole road to Toledo, 87 miles, is composed of straight lines connected by light curves which occur in the vicinity of stations. The aggregate length of curved line is less than nine miles, and the total curvation is 344 degrees. The maximum grade is 30 feet per mile. The total amount of ascent and descent is 1129 feet, mostly in short undulating planes, and the highest elevation attained above the lake is 330 feet. The route is nearly parallel with the lake shore and about 10 miles back, passing through a well settled, productive country, and a succession of flourishing towns and villages. The distance from Cleveland to Toledo by this route will be 111 miles, and the road will form a very important link in the great through ironway from Galena to the Atlantic.—*Cleveland Herald.*

Pennsylvania.

Pennsylvania Railroad.—An election has recently been held by the stockholders of this company, to test the question whether the company should make a subscription to the stock of the Ohio and Pennsylvania railroad company. The result was declared to be as follows: 226 stockholders voted 16,732 shares for the subscription, and 40 stockholders voted 1926 shares against the subscription, leaving a clear majority in favor of the subscription of 185 voters and 14,806 shares. The resolution was, therefore adopted, and the subscription will be made. We subjoin a copy of the former for the information of our readers:

Resolved, That the Board of Directors be, and are hereby authorised to subscribe, on behalf of this company, (legislative sanction being first obtained,) for 5000 shares in the capital stock of the Ohio and Pennsylvania railroad company, for the general purposes thereof, and a further amount of 3000 shares, applicable to form a connection between the terminus of the Ohio and Pennsylvania railroad, and the Pennsylvania railroad, at the outer depot of the latter company in the city of Pittsburgh, in accordance with the terms and conditions prescribed in the resolutions passed September last, Provided, the Board of Directors shall be satisfied that the Ohio and Pennsylvania railroad have, with the subscription aforesaid, ample funds, by subscription or permanent loan, to finish their road to Crestline; and Provided further, that the Ohio and Pennsylvania railroad company shall, before any subscription is made, formally agree to construct the connection aforesaid by a railroad bridge over the Allegheny river, at the point indicated, as soon as the same may be required by the directors of this company.

We rejoice that this subscription has been di-

rected, as it will be of invaluable service both to the Pennsylvania and Ohio railroad, and our own great Central road. While it will enable the direction of the former to urge that most important link in our great western connections to a rapid completion, it will, at the same time, secure the speedy erection of a bridge over the Allegheny, and a direct communication between the two roads, which, under other circumstances, might have been a long time delayed. The necessity for the transhipment of goods at the present Pittsburgh termini of the two roads will thus be avoided, as well as delay and expense to transporters.

Gen. Robinson, the efficient and intelligent President of the Pennsylvania and Ohio company, to whose incessant and well directed exertions the procurement of this subscription is mainly to be attributed, has been in the city for several days, watching the progress of the vote; and, as the indications were all in favor of a successful issue, with commendable courtesy he withheld the vote of Allegheny, Philadelphia and the other corporations interested having declined to interfere.—*Philadelphia North American.*

The Railways in France.

Instead of a confused and a complicated system of railways, as we have in this country, established at a "ruinous sacrifice,"—as the cheap haberdashers have it,—arising from Parliamentary expenses, the rapacity of landowners, the miscalculations and the blunders of "eminent engineers,"—radiating in every point of the compass, "cutting up the country," to the great discomfort of the fox-hunting squires of the "Downs" and the "Wealds" of "Merrie England"—pinched and squeezed by local taxation, *plus* the income-tax on their scant "dividends;" and cutting one another's throats by an insane competition for "the traffic of the district."—What do we see in France?

We see an uniform and an intelligent system of main trunk lines of railway, radiating from the capital, northwards to the Belgian frontier and the English channel; eastwards to the German frontier and the Rhine; south-eastwards to Lyons and the Mediterranean at Marseilles; westwards to the port of Havre (the Liverpool of France,) and to Cherbourg (the Portsmouth of France,) the port of Nantes and Saint Nazaire, once so eminent when France had transatlantic colonies; the maritime ports of La Rochelle and Rochefort, on the Bay of Biscay; the city and port of Bordeaux; the Pyrennees, and the Spanish frontier at Bayonne; and, finally, joining the Atlantic and the Mediterranean, by a line from Bordeaux to the Toulouse and Cette!

This is an intelligent and an intelligible system of railways, obtained at little cost, executed in great part at the cost of the State—unburthened by any tax, save the trifling land-tax for the site of the railway, and the 10 per cent passenger duty, which is levied upon, and paid by the public.

Not only will no competing lines be granted, but the principle of the amalgamation, and the consolidation of interests is, at present, the order of the day in France!

The cool, clear head that presides over the destinies of the French people at the present moment has the intellect to conceive, the indomitable will to insist upon, and the firm hand to carry out, the great principle of amalgamating the various groupes of French railways, so as to concentrate their various interests into one whole. Thus avoiding the evils of the competition of particular lines one with another, while the public are amply protected from the evils of monopoly, by the low tariff, and the stringent nature of the "*Cahier des charges*," or conditions by which the relations of the public with the railway companies are regulated.

He has set at rest, once and forever, the *vexata questio* recurring at stated intervals, of the working of the railways by the State, or by private enterprise, by granting the uniform term of 99 years to all the railways in France!

We are indebted to an esteemed literary and railway friend—whose name is intimately associated with the introduction of the English capital to the railways of France—for the clear and convincing analysis of the amalgamation of the most important group of the French railways, which appears elsewhere in our columns this day. It is a complete mathematical demonstration not only of the utility, but of the necessity of this amalgamation, to protect the interests of all the railway companies comprised in the fusion.

Individual sacrifices must always be made for the general good. We doubt not that the distinguished members of the railway boards which are comprised in this amalgamation, have most cheerfully made the sacrifice of their individual emoluments to accomplish a great benefit for the shareholders at large, whose trustees they are.

We doubt not also that the shareholders in these several companies, duly appreciating the valuable services, and the disinteresteduess of their directors, will gratefully recognise the value of their services, and vote them more than mere empty praise, at the close of their official career.

Cincinnati and St. Louis Railway.

Within the last few weeks six engineering parties have been engaged on the line of the railway to St. Louis. Some of them have nearly finished the location of their sections, and all, we are informed, have met with fewer obstacles, and found better routes, than was anticipated.

Messrs. H. C. Seymour, (late State Engineer of New York,) and A. C. Morton, (Engineer on the St. Lawrence and Atlantic railway,) two of the contractors have also explored the ground, and returned highly pleased with the results of their inquiries. Like many—even the most intelligent eastern men—they expected to meet difficulties, and deficiencies, which do not exist. They expected that some portion of that region was comparatively a wilderness, but have found, on the contrary, much of it a fertile, populous, and productive country. On the east fork, and principal streams of White river, Indiana, this is specially the case. For forty miles, in one section, a broad vale of corn-fields meets the eye, and will furnish a large business to the railway. After leaving the White river, the road passes in a nearly direct line over a fertile plain to Vincennes, where it intersects the valley of the Wabash. The praries of Illinois are not so populous as Indiana; but it is the want of the facilities of locomotion chiefly, which has held back their settlement. They have the elements of wealth and population, when commerce is opened to them.

Another difficulty anticipated by the contractors and which is a very important one in the eyes of an engineer, is also found to disappear on examination. This was a supposed want of facilities for the transportation of materials, provisions, iron, etc. On the contrary, these facilities exist in a remarkable degree. After leaving those counties adjacent to the Ohio river, the Madison and Indianapolis railroad intersects the route of this work, 72 miles from Cincinnati, and from that, materials may be distributed either way. At 85 miles, the Jeffersonville and Columbus railroad intersects it, being but 13 miles from the former intersection.—We next come to the valley of White river, which is navigable for boats forty miles, to the intersection of the New Albany and Salem railroad, which is now running cars part of the way, and will soon be finished to White river, near Orleans in Orange county. Here the valley of the east fork may again be used, till the plain between White river and Vincennes is reached. The Wabash valley will then supply all necessaries. In Illinois, the Kaskaskia river crosses the route, and at the west end, communications will easily be made with St. Louis.

The result of this examination, by Messrs. Seymour and Morton, on the part of the contractors, is that they are anxious to commence the work immediately, waiving the delay which might arise from more minute surveys. It is probable that, in the course of the next forty days, 75 miles at the St. Louis end of the line, and 40 miles at this end—making 115 miles, will be commenced, and prosecuted with vigor.

The connections of this work—which will take effect as soon as its several parts are finished—are most important, and will in a short time afford most profitable results. In Indiana, there are *five* railways already finished, or partly finished, which will intersect the Cincinnati and St. Louis, viz:—The Lawrenceburgh and Indianapolis, the Madison and Indianapolis, the Jeffersonville and Columbus, the New Albany and Salem, and the Evansville and Vincennes. Four of these are in operation, and the other, we are assured, will be in course of the present year. The intersections of these routes are at the following distances, viz:

Lawrenceburgh	22 miles.
Vernon, [or near it]	72 "
Point on Driftwood Fork	85 "
Orleans	125 "
Vincennes	185 "

These railways are all lateral, running nearly at right angles to the Cincinnati and St. Louis line, and therefore the best possible tributaries from the country either side. It is obvious the distances could not be better arranged to give the utmost convenience in the construction of the work, and the utmost amount of lateral traffic when made. When the Cincinnati and St. Louis line shall reach the Jeffersonville and Indianapolis railway, a direct railway communication with Louisville will be formed on one side and with Indianapolis on the other. When it reaches Evansville there will be a direct railway communication from this city to Evansville. But there is another connection which has been unnoticed, and yet it is of very great importance to the entire West, and especially to the city of St. Louis. We mean *a direct railway from St. Louis to Louisville.* The New Albany and Salem railway, to which we have alluded, is already finished to near Orleans. At that point, or near it, there will be an intersection with the Cincinnati and St. Louis line; and the railway route from St. Louis to Louisville, through Orleans, will be nearly as direct as can be made. Thus there will be a continuous railway line through St. Louis, Louisville and Cincinnati, uniting the three great cities of the West.

We have thus seen that there are neither obstructions, nor causes of delay in this great work; that a large part of it will soon be commenced, and that the magnitude of its interests and connections increase with every new examination.

Part of the Mobile railway is already finished, and 300 miles of the Illinois Central are advertised for contract. There is a strong probability that that great line, gigantic in its magnitude and results—which will make a highway through the Southwestern and Northwestern States—may be finished as soon as the one between Cincinnati and St. Louis. The latter is, therefore, not a line of 800 miles only, but 1000 miles in length, and in the whole distance passes through a country to which Cincinnati sends her products, and with which her trade will be increased tenfold by these works.—The enterprize is neither local in extent, nor partial in results. Taken in its ultimate bearing, it will embrace the Valley of the Mississippi, and unite the whole by iron bonds with the metropolis of Ohio.—*Cincinnati Gazette.*

Important Railroad Decision.

An important railroad decision has recently been made in Chancery, by Chancellor Bennett, of the third circuit of the state of Vermont. In the year 1845, the legislature of Vermont granted a charter to a company to build a railroad from Burlington, on Lake Champlain, to some point on the Connecticut river; the corporate name being the Champlain and Connecticut river railroad company.—This name was afterwards changed to the Rutland and Burlington railroad. In 1850 the Vermont legislature authorized the company to extend their road from Burlington to Swanton, Vermont—a distance of about forty miles—and to apply the capital stock of the original company to its construction. This provision was accepted by a large majority of the stockholders, and adopted as a part of their charter; and a vote was passed, directing the construction of this extension. One of the original stockholders, not satisfied with this application of the funds of the company, filed his bill in equity for an injunction restraining the company from proceeding with the extension. The Chancellor, after a full hearing, granted the injunction on the ground that the company had no authority, without the assent *of all* the stockholders, to apply the capital stock of the company to any different purpose than that for which the company was organized, or which was within the scope of its powers when the plain-

tiff became a shareholder. The extension is therefore for the present abandoned.

Pennsylvania.

Pennsylvania Railroad.— Below we give the recent address of the President of this company to the stockholders, on the subject of the proposed loan to complete their road. Although the stockholders have decided to make the loan by a vote of 134,680 shares to 754, we copy the above address, for the purpose of showing the reasons of the company, in departing from the policy prescribed to themselves in the commencement of their great work.

To the Stockholders of the Pennsylvania Railroad Company:

The Board of Directors of the Pennsylvania railroad company have deemed it expedient, in view of the question to be submitted to the decision of the stockholders on the 30th instant, to present to them the following brief statement of the prospects, condition and progress of your road, that they may appreciate the importance of preparing your great work at once to receive and transport to the seaboard the immense increase of freights that will be drawn to it the coming year. These will be greatly augmented by the reduced rates which the competition that will grow up between the steamboat interests on the Ohio river and the net work of continuous railroads that will then be opened, connecting us with Cleveland, Sandusky, Chicago, Cincinnati, Louisville, and Terre Haute, through Indianapolis—which line is now in progress towards St. Louis, and will be completed in 1854.

Your road from its position, shorter distance and superior gradients, must, if *it is prepared to receive it*, command this transportation and pour it into the lap of Philadelphia, giving to her a prosperity, the realization of which it would at this time be deemed visionary to predict. The capacity of a single track road throughout is insufficient to accommodate the vast accumulation of business that will be commanded as soon as it is completed, and it will become necessary, if larger facilities are not afforded to turn freights from the natural course by the *interposition of charges* that will divide the transportation *with other* routes.

It is absurd to promise low fares and freights with a business pressing at your gates that you have not the means to transport. If low rates are desirable—and no one will assume an adverse position—it becomes our duty, as it is the true policy of the company, to use all the means within our control to obtain the facilities necessary to afford them. To secure these, a double track, covering at least that portion of the road between Huntingdon and Johnstown, is essentially necessary at once.

The amount required, in addition to the present means of the company, to complete and stock a single track road, is estimated at about $2,750,000. This sum will be required to meet the engagements of the company falling due within the next sixteen months. To double the road as proposed, for a distance of 73 miles, and add the additional stock which its increased capacity will then demand, will require the additional sum of $1,500,000. To this should be added $250,000, proposed to be subscribed to the Ohio and Pennsylvania railroad, under an obligation which the board believe should be scrupulously regarded, and which they are gratified to state has been sanctioned by the stockholders with great unanimity—making the whole amount required to carry out this object within the next 20 months $4,500,000.

To raise this sum, it is proposed to borrow $3,000,000, which will be sufficient to meet the demands upon the company until the profits of the road have satisfied the most skeptical capitalist that its stock will be a safe and desirable investment of his funds. Of this the result of our present year's business will afford the most convincing proof. There will then be no difficulty in raising the additional stock required to complete the road, at par, if not at a premium.

The means heretofore obtained by individual subscriptions to this work have nearly all been drawn from the business men of this city, who have already been taxed for this object $300,000 during the present year. The amount that could be raised by similar appeals, will fall so far short of the demands of the company, that it is not deemed expedient to resort again to this method of raising funds. The corporate authorities, from whom aid has been obtained, have already subscribed to the extent allowed by law, or that they have deemed it expedient to go.

Under this state of things, and the urgent necessity there is to raise at an early period, the means required to meet our obligations, there seems to be no resort but to borrow the amount desired, which we have assurances in consequence of the broad basis which a large capital offers to found a credit on, can be obtained at a low rate of interest.

The work has been pressed forward faster than a strict adherence to the policy with which we set out, justified. But a departure from it was necessary to counteract the effort making by the Baltimore and Ohio, and the New York and Erie railroads, to grasp the trade of the west; which, if this company had looked supinely on, would have been wrested from Philadelphia. Under existing circumstances, we shall have to contend for the travel and transportation of the west for the first eight months of next year, under disadvantages, which an earlier commencement of the Mountain division would have relieved us from. With the Inclined planes of the Portage road to pass, an equal competition with other routes is impossible.

By pursuing the line of policy we have marked for our guidance, we shall be able to complete the whole road with a single track in September, 1853, double the line between Johnstown and Huntingdon the same year, and the remainder of the road as fast as it shall be required.

With this expression of our views, we commit the whole subject to your consideration, with a full confidence that your judgment will be in accordance with that which your board have unanimously deemed most expedient under the circumstances in which they find the affairs of the corporation.

J. Edgar Thomson, President.

Philadelphia, April 26, 1852.

Evansville and Illinois Railroad.

Six months ago, in a general notice of the railroads of Indiana, we mentioned the character and progress of this road, and stated the intention to connect it at Terre Haute with the great Central railroad. Since then, by the efforts made by the company in the advancement of this enterprise, which is worthy of all commendation, *twenty-seven* miles of the road to Princeton have been completed, and for some months a daily train of cars has been passing over it, and doing a brisk business. An excellent passenger car, from the Dayton manufactory, has been in use, and comparatively a large amount of travel has been done upon it. The people of the Pocket talk of a connecting link with Indianapolis, and will doubtless have it by some means, at no distant day, for they are determined not to be behind the spirit of the age in energy and public spirit.

The safe and well known President of the road, Samuel Hall, Esq., of Princeton, has spent a portion of the past two summers in New York city, and been very successful in his negotiations, and in purchasing iron and materials for the road.—The remaining three miles to Princeton is ready for the iron, and workmen are busily engaged in grading the road between that town and Vincennes, on the Wabash, at which place there is plenty of gravel with which to ballast the whole road. From that point the destination is Indianapolis, whether by the company's own line, which we believe is a direct one between the Wabash and west fork of White river, so as not to come in competition with either these or the canal—or whether by connection with the Wabash road to Terre Haute, and the Terre Haute and Indianapolis road, is not determined. Both of these routes have their advantages. The direct route passes through the largest portion of the mineral region of the State, and would be the means of developing the great coal, iron, and agricultural wealth of the State. But by coming directly to Terre Haute, a shorter line is had, and a full share of the efforts of Terre Haute and Vigo county is promised to aid in constructing the Wabash road, now that the Central road is completed. Chauncey Rose, Esq., President of the latter work, has said that the Wabash road would be of immense benefit, and of first rate paying stock; and that as the charter of the Terre Haute and Indianapolis road authorized the construction of branches thereto of twenty miles in length, the company would very probably construct that amount of the Wabash road, towards Vincennes. They would do well to do so, for there is not a broader or richer field on earth than the valley of the Wabash, to invite the outlay of capital, with the certainty of a returning reward. As for the river its navigation can never be depended on. The counties of Vigo, Sullivan and Knox would do well to use every effort in the early grading of that road; richer lands than they possess are not to be found. Those rich prairies, through which the work must pass, teem with abundance and inexhaustible fertility.

We hope, before two years, that the same strong link that will bind the cold shores of Lake Michigan and the State Capital to three different cities of the Wabash, to Lake Erie, and to Lawrenceburg and Madison, will also bind us to the more southern and sunny banks of the beautiful Ohio, at the Pocket City of Evansville.—*Indiana State Journal.*

Defrauding Railroads.

A very important verdict was recently rendered in Jefferson country, N. Y., in a case reported under our legal head. The defendant was on board the cars of the Hudson River railroad company during a recent serious collision, and professed to have been very badly hurt by it; on the strength of which claim, the company allowed and paid $250 damages. Learning afterwards that his pretense of injury was grossly exaggerated if not wholly fraudulent, they traced him out and sued him, and have just recovered a verdict for the am't paid him, with costs. In their action in the premises, the company have subserved the cause of justice, and deserved especially well of all railroads. It would not surprise us to learn that the game of fabricating or grossly magnifying personal injuries by railroad collisions is an old one, and that statistics of railroad disaster have been considerably swelled by it. Railroad officers have generally other business on hand directly after a collision than scrutinizing narrowly the alleged injuries of passengers.

Michigan.

Central Railroad.—The iron has been laid on the Illinois Central road, from its junction with the New Albany and Salem railroad to within ten miles of Chicago. The piling which commences here and extends three miles west, is driving ahead most vigorously, at the rate of 600 feet per day. There is now every prospect that the cars of the Michigan Central company will run into Chicago by the 15th of May.—*Michigan City News*

Influence of Railroads on the Value of Land.

The experience of Massachusetts, New York and Ohio, affords abundant illustrations of the great addition imparted to the value of land and other real property by the construction of railroads. In Massachusetts for example, railroads have more than doubled the value of property, as exhibited in the Auditor's reports, and have reduced the average rate of taxation in the State more than one half.—The increase of value is not confined to the immediate vicinity of lines, though of course greatest in those localities; in proof of which we may cite the fact that in 1849 the value of property in those counties of Massachusetts through which no railway passes exhibited an increase, compared with the value in 1840, of $156,000,000, as the effect of the indirect power of such improvements. In Ohio, where the works are of more recent growth, and where as yet, no complete system is in operation, corresponding results have been announced from time to time, less general, perhaps, in their operation, but serving sufficiently to foreshadow the advantages soon to be diffused over the State. In Georgia, lands that were in the market in 1846, at from ten to fifty cents per acre, commanded in 1849—when the Chatanooga railroad was in operation—from ten to twenty dollars. The same road, in its extension from Chatanooga to Nashville, Tennessee, passed through the counties of Franklin, Bedford, Rutherford, and Davidson; and the Audi-

tor's books for these counties show an advance in the value of their property of $2,554,639 in one year. So of the Mobile and Ohio railroad: lands that had been in the market without a purchaser for thirty years, have since the laying out of that road advanced to three, and in many instances as high as eight dollars per acre. In South Carolina, again, Col. Gadsden, State Superintendent of railroads, affirms "that the immense increased value imparted to lands is from 500 to 5,000 per cent."

American Railroad Journal.

Saturday, May 8, 1852.

Are we Expending too much Money on our Railroads?

This is an inquiry often asked, and which is often answered in the affirmative by the timid and conservative, and by those who know nothing of the subject of the construction of railroads, nor their uses. To a person residing in New York, for instance, the west, which is at present, the great theatre of railroad construction, is a mere point in space. He sees a statement of the great number of miles of railroad in progress in that section, but he cannot be made to realize its vast area, nor the great distance by which most of the lines, both in operation and in progress, are separated from each other. The amount required to be drawn from the active capital of the country, to construct our roads in progress, is much over-estimated, while at the same time the influence they exert in the creation of wealth is almost entirely overlooked.

We have in this country got through with our most expensive roads. Taking out the Baltimore and Ohio and the Pennsylvania railroads, and the cost of our railroads in progress will not exceed $20,000 per mile. Of this sum, the amount borrowed will average, say, $7,000 per mile, leaving $13,000 per mile to be provided by those immediately interested in their construction. The amount to be borrowed becomes a direct charge upon the capital of the country. Not so with what is furnished by the stockholders. In the west particularly, the stockholders in the roads contrive to work into their construction a very large amount of the products of their farms, which never being turned into money, its loss would effect business but very slightly. There is no western farmer living within ten miles of a railroad, and owning 200 acres of land, who could not well afford to give outright $500 or $1000 to a railroad, and yet be all the better off, provided by doing so he could secure its construction. The demand upon the active capital of the country to carry on our railroad projects is very slight, when the extent of line is taken into consideration. The small sum required to construct a southern or western railroad is replaced in a year or two, by the amount saved over the old mode of transportation. As soon as this is done, the road has ceased to be a burden upon the monetary interests of the country, though the debts contracted for its construction may still remain. The amount required for our railroads in progress is not alarmingly large, nor probably equal to our annual accumulation of capital. As already stated, most of our roads replace their cost in a very short time so that their earnings to an equal extent become so much addition to the annual income of the country.

The railroad investments that we are making at the present time have *no tendency* to bring about a financial crisis, feared by so many; on the contrary, they constitute our greatest safeguards against excessive inflation of prices, and a consequent commercial revultion. No security can be safer than that created by a lien upon a railroad for a loan, say of $7000 to the mile. In no manner can an equal amount of money be so safely placed, or where it will yield an equal return. Seven thousand dollars per mile will not more than cover the rails and equipment. So that the lender possesses an available security to the amount of his loan. The eastern roads, on the contrary, have been compelled to borrow large sums for the purpose of preparing the track for the rails. The cost of the iron and equipment for the Erie and Hudson River roads did not exceed $10,000 per mile. It has cost the former over 40, and the latter over $60,000 per mile to prepare their tracks for the iron. On the score of cost, therefore, the western roads have an immense advantage over those that have been constructed in the eastern States. And although the latter may for the present have a larger amount of business, it is by no means in proportion to the respective cost of the two. On the contrary, we have every reason to believe that the average receipts of western roads will in a few years fully equal those of the east. As investments, therefore, the former must be vastly more productive, although it is probable that the rates of transportation will be much lower on western, than on eastern roads.

Another thing in favor of western roads, is the fact that their lines are so widely separated, they are not, and will not for years, be rivals for the same business. Massachusetts has now about one mile of railroad to every six miles of territory. The same ratio applied to Ohio, would give that State over 6000 miles of railroad, or more than one half of the whole number of miles in the United States. There are in progress and operation in Ohio about 2500 miles. The cost of these roads will not much, if any, exceed $40,000,000. The 1150 miles of railroad in Massachusetts have cost about $55,000,000. There can be no doubt that the aggregate receipts of the former will vastly exceed those of the latter, allowing the charges to be the same upon the roads of both States. The investment in the Ohio roads would probably yield double the income of those of Massachusetts.

It should also be borne in mind, that the liabilities of our new projects have from ten to thirty years to run before arriving at maturity. Our railroads, therefore, will be entirely unaffected by any financial crisis, or revulsion, that may take place. A net income of $500 per mile will be sufficient to pay the interest on their indebtedness. Were all the loans that have been contracted to mature in one year from this time, that period might well be looked forward to with concern. But many years will elapse before any considerable portion of the loans will fall due. The payment of these loans will be distributed over a series of years, during which many of our lines, by the saving they will have effected in the cost of transportation, and in the increased value of property to which they have given rise, will have paid for themselves many times over.

Without the large demand for permanent investment in railroads, there can be no doubt that the immense receipts of gold from California would have been productive of some very injurious results. Had we not permanently invested a large part of our means as fast as earned, the large surplus that would have been accumulated would have inflated prices to such an extent as to have inevitably produced a commercial revulsion, produdtive of the most disastrous consequences. As it is, our means, instead of being laid out upon paper cities, or wasted in speculations in fancy stocks, have been invested in legitimate enterprizes, which will not only yield a good return, but which tend to develop all our resources to an extraordinary degree.

Fairbanks' Railroad Scales.

We have had occasion of late to call the attention of our readers to these Scales, and although aware of the practical importance to the railroads and to the public, of having upon these thoroughfares the most perfect and reliable measures of weights, we have not until recently known anything of the great number furnished by these manufacturers.

We would refer our readers to our advertising columns for a catalogue of the different railroads, furnished exclusively, or nearly so, by the Messrs. Fairbanks & Co., who employ some 200 workmen in this important manufacture.

The quantity required by some of our most important railroads is large.

The Messrs. Fairbanks have constructed during the past year a large number of their 30 and 40 ton track scales for the New York and Erie, the Michigan Southern, and other great western lines, besides the ordinary Depot Scales and Portable Scales at the termini, and the way stations, along the lines.

While speaking of Railroad Scales, we may notice their still more massive Weigh Lock Scales, for weighing boats with cargoes as high as 400 tons.

The Messrs. Fairbanks have in operation at the two most important points on the Erie canal—Albany and West Troy—two of these mammoth weighing machines, which have given great satisfaction to the canal commissioners and other officers.

They have also in operation two nearly as large on the Delaware and Hudson canal, one on the Tide Water canal, one at Cleveland, Ohio, and three others in course of construction for the Ohio canals, one near Cincinnati, one at Toledo, and one at Carroll.

Tennessee.

Nashville and Northwestern Railroad.—This is one of the roads for which a charter was granted at the last session of the Legislature. It is by survey 170 miles long, and is intended to run through the counties of Dickson, Humphreys, Benton, Henry, Weakley, and Obion, terminating at the Mississippi river. The State has loaned $8,000 per mile to this road. It can be constructed as cheaply as any road in the State, according to the report of the engineers, more particularly from the Tennessee river to the Mississippi, which is about 100 miles of the road.

Stock and Money Market.

Money continues very abundant with active operations in the stock market. The prices of all kinds of securities continue to be well sustained.—There is an active demand for securities of new works, and those that meet the prescribed condition of the market command high rates. For the best securities, the supply is by no means equal to the demand, at the rates that were current a month or two since.

Railroad securities of all kinds steadily improve in public favor. The present appears to be a very favorable time in which to effect loans, which can be negotiated without difficulty by all projects entitled to credit. The general aspect of affairs is encouraging, and should nothing unforseen occur, the present bids fair to be a very prosperous year for our roads in progress.

The receipts of the New York and Erie railroad for April, were as follows:

From passengers and Mail	$133,325 08
" freight	187,493 87
Total	$320,822 95
Same month, 1852	189,149 51
Increase	$131,673 44

The aggregate receipts for the first four months, which is the poorest portion of the year, are $944,000. The estimates for the year are $4,000,000. The monthly earnings for the next 8 months must average $382,000 to come up to the estimate.

Madison and Indianapolis Railroad Company.—The receipts of this company for the month of

March, 1852, were	$39,426 58
During March, 1851	24,800 21
Increase	$15,626 37
The receipts during the first two weeks in April, 1852, were	$20,074 69
The receipts during the first two weeks in April, 1851, were	13,399 99
Increase	$6,674 70

The business of the Mint for the year thus far, is as follows:

	First quarter.	April.	Total.
Gold	$11,101,396 00	3,474,128 00	14,575,524 00
Silver	116,178 00	52,106 00	168,284 00
Copper	10,749 12	11,705 82	22,451 94
Total	$11,228,323 12	$3,537,939 82	$14,766,262 94
Deposites.			
Calif. Gold	10,742,000 00	2,980,000 00	13,722,000 00
Other gold	316,500 00	110,000 00	426,500 00
Silver	58,400 00	25,700 00	84,100 00
	$11,116,900 00	3,115,700 00	14,232,600 00

The business for the year thus far compares with the corresponding month of 1851 as follows:

	1852.	1851.	Increase	Decrease.
Gold	$14,575,524	$17,165,745	.....	$2,590,221
Silver	168,284	101,250	$67,034	.....
Copper	22,455	44,012	.....	21,551
Total	$14,766,263	$17,311,007	$67,034	$2,611,778

Showing a net decrease in the coinage for the four months of the present year, as compared with the same time in 1851, of $2,544,744.

Deposits	1852.	1851.	Increase.
California Gold	$13,722,000	$13,220,000	$502,000
Other Gold	426,500	312,000	114,500
Silver	84,100	33,900	50,200
Total	$14,232,600	$13,565,900	$666,700

COINAGE FOR APRIL 1852.

Gold.

124,677 Double Eagles	$2,493,540 00
18,700 Eagles	187,000 00
74,532 Half Eagles	372,660 00
117,862 Quarter Eagles	294,455 00
126,273 Dollars	126,273 00
462,044 pieces	$3,474,128 00

Silver.

98,000 Dimes	9,800 00
246,000 Half Dimes	12,300 00
1,000,000 Three Cents	30,006 00
1,806,244 pieces	$3,426,234 00

Copper.

1,170,582	11,705 82
2,976,826 pieces	$3,537,939 82

GOLD DEPOSITS IN APRIL.

From California	$2,980,000
Other sources	110,000
Total	$3,090,000
Silver deposits	25,700

GOLD DEPOSITS.

	1851.	1852.
January	$5,071,667	$4,161,680
February	3,004,970	3,010,222
March	2,880,271	3,892,156
April	2,878,353	3,090,000
Total	$13,835,261	$14,154,058

Pennsylvania Railroad.—The receipts for passengers on this road week ending April

10th	$31,207 17
Receipts for freight same period	18,829 07
Total	$50,036 24
Receipts for pass. week ending April 17	31,755 32
" freight " "	19,267 02
Total	$51,022 34
Receipts for pass. week ending April 24	23,095 13
" freight " "	13,150 71
Total	$36,245 84

Sale of the Baltimore and Ohio Railroad Stock.—The undoubted, or dividend stock, owned by the city of Baltimore in the Baltimore and Ohio railroad, was recently sold in that city, to Josiah Lee & Co., for $70 27 per share.

The receipts of the Madison and Indianapolis railroad, show a large gain over the corresponding period of last year. The last two weeks give:

1852	$14,300
1851	10,000
Increase, 43 per cent	$4,300

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 8, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¾
U. S. 6's, 1856	108¼
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	89
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	106½
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	106½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	106
Ohio 6's, 1856	106
Ohio 6's, 1860	108¾
Ohio 6's, 1870	112½
Ohio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	93
Pennsylvania 6's, 1847,-'53	101¾
Pennsylvania 6's, 1879	108
Tennessee 5's	87½
Tennessee 6's, 1880	106
Virginia 6's, 1886	110

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	107
Cincinnati 6's	98
St. Louis	94¾
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	103
New York 5's, 1890	103½
Fire loan 5's, 1886	101¼
Philadelphia 6's, 1876-'90	106
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	95¾
Hudson River 1st mort., 7's, 1869	106¼
Hudson River 2d mort., 7's, 1860	96
New York and New Haven 7's, 1861	104
Reading 6's, 1870	80½
Reading mortgage, 6's, 1860	87¼
Michigan Central, convertible, 8's, 1860	104¼
Michigan Southern, 7's, 1860	97
Cleveland, Col. and Cin. 7's, 1859	105½
Cleveland and Pittsburg 7's, 1860	98½
Ohio and Pennsylvania 7's, 1865	99¾
Ohio Central 7's, 1861	95½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	April 28.	May 5.
Albany and Schenectady	100	103½
Boston and Maine	105½	106½
Boston and Lowell	108½	107½
Boston and Worcester	101¾	102½
Boston and Providence	88	90½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson (canal)	112	117¾
Eastern	96¾	96½
Erie	88¾	89
Fall River	99¼	99¾
Fitchburgh	103½	101½
Georgia	—	—
Georgia Central	—	—
Harlem	74¾	74¾
" preferred	114¼	114½
Hartford and New Haven	128	123
Housatonic (preferred)	35	35
Hudson River	63	63
Little Miami	—	—
Long Island	21¾	21½
Mad River	—	—
Madison and Indianapolis	100	101¾
Michigan Central	98½	100
Michigan Southern	115	114¾
New York and New Haven	112	111½
New Jersey	132	132
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	58	58
Ogdensburgh	26½	27¼
Pennsylvania	43¾	43½
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	79¼	78½
Rochester and Syracuse	116½	116
Stonington	57	55
South Carolina	—	—
Syracuse and Utica	126½	128
Taunton Branch	115	115
Utica and Schenectady	131	132½
Vermont Central	19¼	19¼
Vermont and Massachusetts	20⅜	21¼
Virginia Central	40	40
Western	105½	104
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Providence and Bristol Railroad.

It has long been desirable to connect the city of Providence with Bristol, Warren and Newport, by a railroad along the east shore of Narragansett Bay. These towns have continued in their isolated position for want of a railroad communication with the rest of the world, longer than almost any other towns of their size in New England. Several unsuccessful attempts have heretofore been made to build this road, but at last the matter is in a sure way of being accomplished. With the encouragement and aid of the Boston and Providence railroad company, the citizens of Bristol employed the services of Mr. George S. Greene, late Engineer of the Kennebec and Augusta railroad, and he has just completed the survey of a route from Bristol through Warren to join the Boston and Providence road near Pawtucket, leaving Providence two or three miles to the west. The citizens of Providence seeing the probability of this road being constructed, called a meeting to consider the expediency of interesting themselves in the road, and bringing it directly to India Point, and thence through the city to the station of the roads already centering there. This meeting, appointed for Monday, 26th April, was attended by nearly all the principal business men of Providence. The large "Mechanics' Hall" was nearly filled. Alexander Duncan, Esq., was called to the chair, and several spirited addresses were made. It was resolved that "a direct railroad with Warren and Bristol should be made at as early a day as possible." A committee of eleven was appointed to co-operate with the committees of Bristol and Warren, and to open books of subscription for the construction of the road. Of this committee Mr. Amos D. Smith was chairman.

A new survey was forthwith commenced atong the shore of the Bay, from Warren to India Point, Mr. Greene taking charge of this also. The citizens of Bristol and Warren, encouraged by the unexpected interest taken by the capitalists of Providence, have also held meetings, and taken decided measures to unite with them in the construction of the road, by this somewhat more expensive, but shorter route to Providence. Their end of obtaining a direct route to Boston will also be accomplished by it, as the Boston and Providence road will give the use of their old track from India Point to Attleborough. The distance, then, from the wharves at Bristol to Boston will be 53¼ miles—12½ to India Point. The citizens of Newport have it in consideration to extend the road to their town, 12 miles further south, connecting with the road at Bristol by a steam ferry boat across the Bristol ferry.

The completion of this road, which may now be looked for within a year, will be followed by very important results to the region through which it passes, and especially to Bristol and Newport. These beautiful towns, with as fine harbors as can be found on the coast of the United States, have been of late years thrown very much in the shade by the superior facilities enjoyed by other ports, much inferior to them in other respects, of communication with the interior. Either of them possesses great advantages over Fall River, as a station for the New York and Boston line of steamers. Bristol is nearer both to New York and Boston, and its harbor is always more accessible and convenient. It could have been kept open all last winter by a steamboat, and can be entered in fogs that render dangerous the more intricate navigation up to Fall River. The harbor of Providence is notoriously bad, and in severe cold weather entirely closed, so that Bristol, with a railroad to Providence, must eventually come to be regarded as the head of navigation of Narragansett Bay. The importance of such a position on the south side of Cape Cod, and connecting directly with Boston by railroad, as also with Worcester, Springfield and Hartford, by the roads now terminating in Providence, can hardly be overrated. Its beauty of position renders it a most desirable residence, and when made accessible by a railroad, it must be, like Newport, a place of resort in the warm months, and selected by many, who thus become acquainted with it, as a permanent abode. It affords, in its abundant room along its excellent harbor, great convenience for manufacturing establishments, and steam power for these is furnished with great economy by the use of the Rhode Island anthracite, beds of which are opened directly on the line of the road, both on the Island and in Bristol to the north of it. This coal is mined very cheaply and on the Island in large quantity; the Portsmouth mine has recently turned out nearly one hundred tons per day, and this being sufficiently crushed and screened by the improved machinery lately erected, the fuel is rapidly coming into extensive use. It is afforded on the wharf ready for shipment at from $2 to $2 50 per ton. The fine farms and orchards along the shores of Narragansett Bay are proof of the excellent soil of this region, and the construction of this road must give to them a new value and importance. R.

Finances of Louisville, Ky.

We gather from the Louisville Journal the following abstract of the financial condition of this city from the recent Message of the Mayor to the General Council:

The aggregate debt of the city is $689,710. At the close of the last fiscal year the balance in the treasury was $55,649 34, and the resources of the city are ample to meet all its indebtedness as it shall fall due. A large portion of the debt is nominal only. The city gave her bonds to the Gas company for only $100,000, and received a certificate of stock for that amount; and now, without having paid anything more, her dividends have not only been sufficient to pay the interest on said bonds, but have increased her stock in said company to $130,427 78, and, as the city claims, to a larger amount. This, so far from being a debt of the city, is an investment from which she has received the handsome profit of $30,426 78. Three hundred thousand dollars of this debt consists in the bonds of the city held by the Louisville and Frankfort railroad company, and for which the city owns a like amount of stock in said company. The city likewise holds the guarantee of said company that they will punctually pay the interest on said bonds. This stock in the Louisville and Frankfort railroad is now worth 75 per cent, and there is little doubt but that, by the time the bonds of the city become due, the stock will be at par; if so, the stock will discharge the bonds, and certainly, in any event, the excess of stock in the Gas company will more than meet the deficiency. The actual debt of the city, then, is only $288,710, for which the Bank of Kentucky holds city bonds, maturing in 1855, for $186,710; the Bank of Louisville city bonds, maturing in 1855, for $65,000; and the Manhattan Bank city bonds, maturing in 1868, for $32,000. To secure these, the proceeds of all licenses granted by the city and the revenues derived from the wharves and market houses are pledged by law. These amount in the aggregate annually to about $100,000, and it is obvious that they will be sufficient to discharge the whole debt before it becomes due. And by an ordinance passed by the General Council about one month ago, which we have already published, the commissioners of the sinking fund are directed to apply these moneys to the payment of the interest on the debts as it accrues, and the surplus to the retiring of the city bonds at par. They are not allowed to apply the moneys to any other use or purpose until the whole debt of the city is paid. Thus is the payment of the city debt secured beyond all reasonable contingencies.

Hudson River Railroad.

The earnings of this road for April are reported at $63,000. By reference to the time table of the company, we find that the number of miles run by the company were 60,000. Allowing that it cost one dollar per mile to run the trains, which cannot be far from a correct estimate, and we have $3,000 as the net earnings for the month.

By the present time table the company are running 2,302 miles for each working day in the month, and 300 for each Sunday; making about 63,000 miles per month. With an average of the past month for the season of navigation, the recepts would just equal expenses. We presume, however, that the receipts for the summer months will be somewhat greater, say 75,000 for the best travelling months.

The result for April shows the necessity of a good freight business to a profitable road. The receipts for the winter months were nearly twice as large as those for the past. A very considerable portion of the winter business arises from freights. This business is limited to the period during which navigation is closed, say 3½ months on an average.—Unfortunately for the Hudson River road the equipment necessary to a winter's business, must lie idle for nearly three fourths of the year, a fact, materially interfering with the profits of the best part of the year.

New Jersey.

New Jersey Railroad.—We are informed that during the year 1852, about two millions of passengers have been carried over the New Jersey railroad without personal injury. An engineer and a fireman have each had a leg broken. We also learn that no material injury has ever been done to a passenger on this road, who retained his seat in the cars. This is a fact well worthy of notice, inasmuch as it shows the importance of attending to the company's rule relative to keeping off the platforms, and is an evidence of the comparative safety of remaining within the cars. A large freight business, we are told, has also been carried on by this road, during the winter and spring. While the navigable rivers were frozen, the railroad was the only line for transportation between New York and Newark, and the northern part of New Jersey, for eighty days.

Penobscot and Kennebec Railroad.

The citizens of Bangor are making vigorous efforts to get up the stock for this road. The amount required from that city is $200,000. A large portion of this is already subscribed. The road will be about 50 miles long, and will cost from $1,000,000 to $1,200,000. To secure the necessary amo., it is proposed that the two railroad corporations the Atlantic and St. Lawrence, and the Audroscoggin and Kennebec companies, shall subscribe $200,000 each. This added to the Bangor subscription will make an aggregate of $600,000, upon which basis,

it is presumed that the necessary balance could be borrowed.

European and North American Railway.

Below will be found the report of the joint select committee of the Massachusetts Legislature, in favor of extending the aid of that State to the above work.

The committee report, that the experience of the last few years has shown, or at any rate has tended to show, that the commercial superiority of New York is beginning to attract considerable portions of the trade of New England, which formerly relied upon New England as its market. Some of the railways in which Boston capital has been embarked, have contributed far more business to the city of New York than to our own metropolis; and many of our sagacious business men are beginning to feel that Massachusetts is hereafter to rely for a continuance of its growth and any enlargement of its business on the country lying on its north and east.

Boston is the natural market of the peninsula east of Lake Champlain, between the River St. Lawrence and the Atlantic ocean; but all that portion of this peninsula which lies within the influence of New York capital, is sending annually more and more of its business to that city.

The State of Maine, portions of New Hampshire and Vermont, the Lower British Provinces, and a part of Canada East, will always find Boston their natural market, and the policy of Boston will be most wisely directed to aid the growth of business and population in the regions above referred to, in preference to measures calculated to advance the growth of our great commercial rival. The trade of Maine is of vast importance to Massachusetts, and from her geographical position, Maine will naturally be our best customer. If Boston had extended her lines of railway east through Maine to the Lower British Provinces, and in connection therewith, to Montreal, instead of expending vast sums in building rival lines across the Connecticut river to Lake Champlain, the commercial position of all New England would have been materially enhanced. Our lines of railway extending from Boston across the Connecticut since the completion of the Western railroad, are now diverting from Boston to New York as much business, perhaps, as we have gained thereby; whereas an extension of railways into Maine adds directly to the business of Boston without encountering the competition of New York.

The true policy of Massachusetts, therefore, will be found in aiding in all possible ways the building of railways east of it, and increasing in every practicable manner the means of communication with Maine and the British Provinces.

No one familiar with the progress of railways in Maine during the last five or six years, can hesitate to concede to her people a spirit of enterprise that does credit to her sagacity. They have in that period expended over ten millions of dollars in railway enterprises. Their great line from Portland to Montreal is far advanced toward completion with the means already provided therefor, and their great line east has been extended to the Kennebec river, at Waterville—at which place a junction will be naturally formed of the two lines, extending toward Bangor, and one trunk line extended from the Kennebec river. To carry this line from Waterville to Bangor will require something over one million of dollars, which is yet to be raised; or the larger portion of which is still unprovided.

At Bangor commences the line of the European and North American railway, the charter for which is already granted, and the line ascertained to be but ninety-six miles to the New Brunswick frontier at Calais.

Maine asks our assistance toward building this line from Bangor to Calais. There seems to be now no reasonable doubt of its completion from Calais to St. John city and to Halifax, as soon as the line from Bangor to Calais can be secured.

This whole matter was fully discussed at the last session of the legislature before a most able committee, who reported in its favor. Action upon their report was not pressed at the time, in consequence of the uncertainty as to the course of affairs in the British Provinces. There is now satisfactory evidence that the means of securing their line to the frontier of Maine are certain to be forthcoming within the present year, and the committee therefore report the accompanying bill, providing for a loan of the public credit to the extent of five hundred thousand dollars, under such guarantees for the security thereof as will protect the commonwealth from all loss.

FRANCIS BRINLEY, Chairman.

In pursuance to the above report, a bill has been introduced into the Legislature to grant the above sum, and is now pending before that body.

Providence and Worcester Railroad.

The stock of this company was sold last week at 96, and is now held at 98. A dividend of three per cent is anticipated on the 1st of July. The dividends will commence in July with every prospect of their continuing regularly, and of the speedy extinguishment of the floating debt, already greatly reduced. The through business of the road is steadily increasing, and large quantities of freight for the great manufacturing establishments of New Hampshire are continually passing over it. This business will receive important accessions from the completion of the communication with the wharves.

Thus is this enterprise, which was accomplished with so much difficulty, and which has already conferred great advantages upon the city, vindicated itself as an investment, and it will soon take its place, above par, as one of the surest and most productive railroad stocks in the country.

Philadelphia and Oswego.

At a meeting of the Philadelphia board of Trade on Monday evening, a report was made by a committee previously appointed to examine the subject, in favor of establishing and completing a continuous line of railroad from that city to Oswego. The object is to procure a share of the Lake trade, as well as a portion of that of central and western New York. The intention is probably to connect at Binghamton or Syracuse. A portion of the road being built, it is proposed to contribute $200,000 in stock subscriptions for the completion of the remainder. By this line of communication to Oswego and the lake, the committee claim that it will bring Philadelphia nearer those commercial points than the city of New York is by the present route. A resolution approving of the project, was adopted by the board, and recommended to the favorable consideration of Philadelphians.

Travel West.

Under the new arrangements made on the central line of railroads in this State, last week, a train will leave Albany at 11, and connect with the Hudson River road, so that passengers leaving New York at 5, will be at Schenectady at 12, Utica at 3, Syracuse at 5, Auburn at 6, Rochester at 9, Buffalo at 12—if the Express time is put on—if the time for the mail train is the rule, the arrival at Buffalo will be several hours later. The time between Albany and Buffalo will be twelve and a half hours—to be shortened to ten hours, by the construction of the direct railway between Syracuse and Rochester. About eleven trains will run over the Utica and Schenectady road every day.

Atlantic and St. Lawrence Railroad.

The contractor on the Atlantic and St. Lawrence railroad, commenced laying the rails on the road from Berlin Falls on Saturday. It is expected they will have them down to Northumberland by the latter part of next month—making a distance of about one hundred and twenty-two miles.

New York.

Rochester and Syracuse Railroad.—The straight line road, so called, shortening the distance some two hours—is rapidly going forward to completion. In continuation, the Rochester, Lockport and Niagara Falls road will be completed about the first of June.

The Rochester Democrat says:—A large force is now at work laying the track through the city; on Brown street opposite the Square, between Jones and Kent streets, an engine and car house and machine shops are in process of erection. The engine house is an immense structure, in the form of an octagon, with 16 sides, the outer walls of which have a circumference of 180 feet. The other buildings will also be on a large scale. For some distance along the canal, the track will be carried over low grounds upon piers of masonry, thirty-seven of which, each fourteen feet high, are now being built.

Kentucky.

Covington and Lexington Railroad.—The work on the Covington and Lexington railroad, says the Kentucky Statesman, is being prosecuted with much spirit. The heavy tunnel below Cynthiana, has been penetrated through its entire distance, and will be prosecuted to rapid completion. We learn that the work on this end of the line will soon be commenced. We also learn, from Mr. Cochran of this city, one of the directors in the Maysville company, on the authority of a letter from the President of the company, that as soon as some preliminary arrangements can be effected, work will be commenced on this end of the Maysville railroad. About 900 hands are now employed on the other end of this work.

Pennsylvania.

Sunbury and Erie Railroad.—The subscriptions to this improvement reported up to this time are:—

From Erie city		$350,000
"	Erie county	200,000
"	Warren county	150,000
"	Elk county	100,000
"	Clinton county	100,000
"	Lycoming county	200,000
"	Borough of Lock Haven	20,000
Individual subscriptions in	Warren	25,000
" "	Lycoming	28,000
" "	Philadelphia	459,500
Total		$1,609,500

Ohio and Pennsylvania Railroad.

The Pennsylvania railroad company have subscribed $400,000 to the stock of the Ohio and Pennsylvania railroad company.

This subscription embraces $250,000 for the general objects of the company in the completion of the Ohio and Pennsylvania railroad to its terminus at Crestline, and $150,000 applicable to the purpose of forming a complete and convenient connection between the two roads at Pittsburgh.

Tolls on the Welland and St. Lawrence Canal.

The tolls on the Welland canal and St. Lawrence canal, are reduced to 1s., up and down, on railroad iron, pig iron, Scrap iron, blown and broken castings, and to 1s. 6d. on Stove and other iron castings, nails, spikes, and all classes of iron not otherwise described.

Lake Freights.

The Chicago Tribune states that the rate of freight from that port to Buffalo has been settled at twelve cents per bushel of corn, and several propellers and sail vessels will proceed to take in cargoes.

New Orleans and Jackson Railroad.

Board of Directors.—The following gentlemen were elected on the 19th inst. as the first Board of directors of the New Orleans and Jackson railroad.

James Robb, A. D. Kelly, J. P. Benjamin, J. P. Harrison, Isadore Labutut, W. S. Campbell, John Slidell, W. P. Converse, E. W. Moise, Emile La Sere, H. S. Buckner, Charles Pride.

Mobile and Ohio Railroad.

The county court of Madison, Tennessee, has voted a subscription of $250,000, Gibson county, $150,000, Obion county $50,000, and McNairy county $50,000 toward the construction of the Mobile and Ohio railroad through Tennessee.

Providence, Hartford and Fishkill Road.

The agreements between the city and the Providence, Hartford and Fishkill railroad company, has been signed, and the contract is now completed.

Ohio.

Wilmington and Zanesville Railroad.—The Zanesville Courier states that Mr. Corwin, the President of the Wilmington and Zanesville company, has contracted in New York on favorable terms, for a sufficient quantity of rails to lay the track from Morrow eastward to Lancaster, say 9,000 tons.

Sandusky and Indiana Railroad.

The line of this road is being surveyed preparatory to the commencement of the work of construction.

Cincinnati and Marietta Railroad.

The work on the Cincinnati and Marietta railroad, from its intersection with the Hillsborough and Little Miami roads to a point nineteen miles east of Chillicothe, is under contract, and progressing rapidly. The remainder of the line, extending east to Marietta, will be placed under contract during the present month.

Buffalo and Brantford Railroad.

The city of Buffalo has almost unanimously voted to loan its credit to the Buffalo and Brantford railroad to the amount of $150,000.

Canada West Railroad.

The continuation of the Rochester and Niagara Falls railroad, having its eastern terminus at the Niagara Suspension bridge, and its western, opposite Detroit, and the connecting link between the New York and the Michigan Central line of railroad is going ahead at a rate which ensures its completion by October, 1853.

New-York.

Buffalo, Corning and New York Railroad.—This road is in operation for 24 miles, and we learn that the earnings from passengers alone for this distance, is equal to 7 per cent. upon the entire cost of the road.

Susquehanna Railroad.

The county of Union, Pennsylvania, has subscribed $200,000 to the stock in this road. The borough of New Berlin subscribes $50,000. Individual subscriptions will amount to $50,000 more, making $300,000 for the county. We presume that there can be no doubt of the speedy construction of this road.

Massachusetts.

Norfolk County Railroad.—The following gentlemen were unanimously chosen directors of the corporation for the ensuing year:—Edward Crane, (President) Welcome Farnum, Geo. R. Sampson, Philo Sanford, J. C. Hurd, Timothy Farrar, Oliver Deane, Horatio Bigelow.

Virginia and Tennessee Railroad.

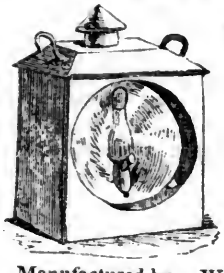
The receipts of the past fortnight of this road which has been opened from Lynchburgh to Liberty, a distance of 25 miles is as follows:

During the first fortnight of the operations the receipts were

From passengers	$1,130 76
From freight	682 00
	$1,812 76

Allowing one half for expenses the above rate would give a dividend of 4½ per cent upon the cost of the road.

LANTERNS.



RAILROAD,
LOCOMOTIVE,
CAR, HAND,
SIGNAL,
and other
LANTERNS,



Manufactured by WILLIAM PORTER,
258 Water street,
(Cor. of Peck Slip,) New York.
W. W. TAULMAN, Agent,

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor* Iron, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

To Contractors.

Central Ohio Railroad.

SEALED PROPOSALS will be received at the Office of the Company in Zanesville until the 10th day of May next, for the Grading, Masonry and Bridging of so much of the line of the road as lies east of Zanesville, and extending into Guernsey county to a point about four miles east of Cambridge.

The work to be let will comprise some thirty sections—embracing some tunnelling, and a fair share of heavy work.

Bids proposing to receive a certain portion of pay in the stock of the road would be preferred; but such preference will not exclude the consideration of bids for cash payments entirely.

Proposals may be made for the whole line, or for distinct sections.

Where parties bid for the whole line it is desired that their proposals should contemplate taking a certain proportion of pay in stock and bonds of the road.

The line will be open for examination by the 25th inst.

Plans and specifications will be furnished at the Engineer's Office, Zanesville.

ROBERT MAC LEOD,
Chief Engineer.

N. B.—The line of the road extending east from the above work to the Ohio is expected to be ready for examination shortly. R. M. L.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fillings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

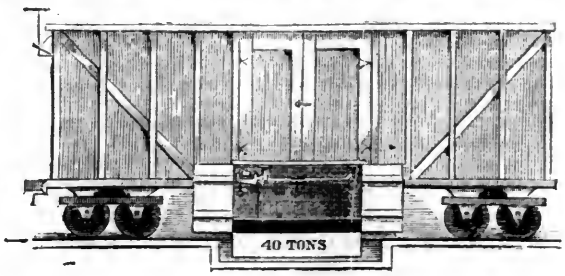
The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALL.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

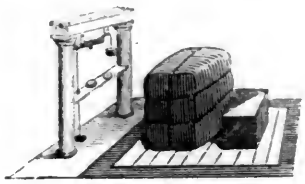
FAIRBANKS' RAILROAD SCALES.



DEPOT SCALE, 12,000 LBS.



TRACK SCALE.



DEPOT SCALE.

ONE reason why these Scales, in long use, prove so much more durable and reliable than any others, is the fact that they are made stronger and more massive, being capable of sustaining an amount much greater than their rated capacity.

The Track Scales which have been constructed for the New York and Erie Road, and other Western Roads, being ample for sustaining Fifty Tons and the thrust of the cars while passing over them.

Every variety and description of Scales required for Railroads and Forwarding Houses, furnished at short notice, on application to the subscribers or their agents. E. & T. FAIRBANKS & CO.,
St. Johnsbury, Vt.

FAIRBANKS & CO,
89 Water st., New York.

The following Railroads have been furnished exclusively, or nearly so, with Fairbank's Scales:

Androscoggin & Kennebec, Aurora Branch, Ill., New York and Erie, Conn. and Passumpsic R., Salem and Lowell,
New Haven and North- Baltimore and Susq., N. York and N. Haven, Contoocook Valley, Sangamon and Morgan,
Ashuelot. Baltimore and Ohio, Norfolk County, Eastern, Shelbyv. and Knightst'n,
ampton, or Canal, Bath Branch, Me., Northern, N. H., Essex, Shelbyville and Rushv'le,
Atlantic & St. Lawrence, Bost., Concord & Mont'l, " N.Y., or Ogdensb., Galena and Chicago, South Reading Branch,
N. Hampshire Central, Boston and Lowell, Norwich and Worcester, Georgia, South Western, Ga.,
Boston and Maine, Old Colony, Greenville and Columbia, Stony Brook,
Boston and Providence, Oswego and Syracuse, Hart., Prov. and Fishkill, St. Charles Branch,
Brattleboro' Branch, Peterboro and Shirley, Housatonic, Sullivan,
Buckfield Branch, Petersburg, Va., Hudson River, St. Lawr'ce and Atlantic,
Buffalo and N. Y. City, Philad. and Reading, Hudson and Berkshire, Syracuse and Utica,
Canandaigua and Elmira, Pittsfield and N. Adams, Macon and Western, Troy and Greenbush,
Central, Georgia, Port., Saco and Ports'th, Manchester and Lawrence, Vermont Central,
Central, Virginia, Portland and Kennebec, Michigan Southern, Vermont and Canada,
Charlotte and S. Carolina, Providence and Worc'tr, Milwaukee & Mississippi, Vermont and Mass.,
Cheshire, Rensselaer and Saratoga, Nashua and Lowell, Western,
Cincinnati, Clev'd & Col., Richmond and Danville, Naugatuck, Worcester and Nashua,
Cocheco, Richmond and Petersb'g, Newburyport, Utica and Schenectady.
Concord, Rome and Watertown,
Concord and Claremont, Rutland and Washingt'n,
Connecticut River, Rutland and Burlington,

Many other Railroads are supplied with Fairbanks' Scales in part.

May 1, 1852.

Railroad Spikes.

THE Subscribers are prepared to take contracts for Railroad Spikes of any pattern desired.

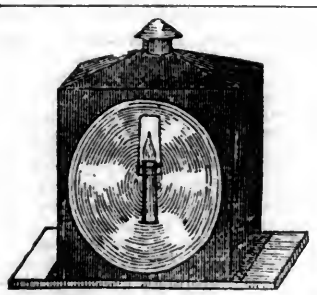
These Spikes are of our own manufacture, and have been extensively used and approved by various Railroad Companies.

They are manufactured from the best quality refined iron, and are considered superior to any in the market.

We have constantly on hand a large assortment of the different sizes: and all orders addressed to us will meet with ready and prompt attention.

THACHER & SEARS.

Boston, April 20, 1852.



Olcott & Brother,

INVENTORS and Manufacturers of the celebrated Locomotive Lamps, to whom was awarded the FIRST premiums by the American Institute, and also at the State Fair held at Rochester, N.Y., in 1851. These Lamps are in general use throughout the United States. We are now prepared to furnish Lamps of every description used on Railroads, and a better article than any other establishment in the United States. A. R. GILLMORE, Agent,
35 Canal st., New York.

OLCOTT & BROTHER, Rochester, N. Y.

Railroad Iron.

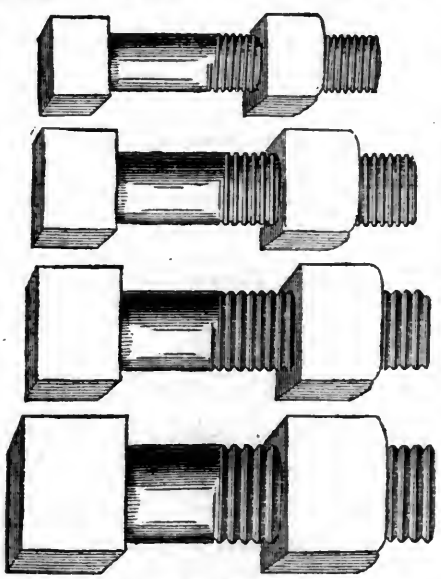
1650 Tons, weighing about 61 lbs. per yard, 40 tons, weighing about 52 lbs. per yard, and 825 tons, weighing about 53½ lbs. per yard, of the latest and most approved patterns of T rail, for sale by

BOORMAN, JOHNSTON & CO.,
119 Greenwich street.

New York, Aug. 26, 1850.

N.B.—B J. & Co are also prepared to take contracts for English rails, delivered in any of the Atlantic ports o the United States.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery. Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc., etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Side Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

W. A. BARRETT, Agent,
75 State Street, Bosto .

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS

HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	" of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR

Of every description and quality.

New York, 1850. 1y16

SALE OF MORTGAGE BONDS.
OF THE
Lawrenceburgh and Upper Mississippi Railroad Co.

THIS COMPANY OFFERS FOR SALE FIVE HUNDRED THOUSAND DOLLARS of their seven per cent. First Mortgage Bonds, with Interest Coupons annexed.

These bonds are in sums of $1000 each, payable 1st March, 1866, with interest on the 1st days of March and September, at the office of the Ohio Insurance Life and Trust Company in the city of New York, where the principal is always payable. They are convertible into the stock of the Company at par, at any time within five years from their date, and are secured by a first mortgage on the entire road, its franchises and equipments, by deed of trust to George S. Coe, of the city of New York.—This being the first and only lien upon the road, and this being the entire sum authorized to be issued by the mortgage.

The road extends from the road to run from Cincinnati to St. Louis, at Lawrenceburgh to Indianapolis, the Capitol of the State of Indiana, a distance of 90¾ miles, and will, when completed, with the twenty miles of the road aforesaid, between Lawrenceburgh and Cincinnati, form the nearest and most direct line from Indianapolis to Cincinnati.

It passes through several important towns and over a most fertile and well improved country, and by means of railroad connections made and making at Shelbyville and Indianapolis, this line will be placed in communication with fully one half of Indiana, forming the best, and for much of the country, the only avenue of travel and trade to Cincinnati.

Seven railroads are made or making to Indianapolis, the most of which will be important feeders to this Cincinnati road—three railroads are made to Shelbyville, the business of which must naturally seek an outlet over this road.

The entire line is under contract, about 20 miles is now ready for the iron—the grade will be prepared to receive the superstructure as far as Shelbyville, 63 miles, this fall, which place is already connected by railroad with Indianapolis, and the contracts for the road complete to Indianapolis expire on the 1st October, 1853.

The rails for the entire line, 9,200 tons, are purchased, 1200 tons are on the line, and are now being laid down; 1000 tons will be forwarded from this port immediately; 4,200 tons are ready for shipment in Wales, and the residue is to be delivered in New Orleans next winter.

The total cost, with rolling stock and equipments, ready for business, is $1,250,000; $800,000 of stock has been subscribed and the largest portion of it paid in and expended. This mortgage provides for only $500,000, and is the only one intended to be given, as with it the means of the Company are ample for the entire work, and the lien thus created only amounts to $5,500 per mile.

Indiana is now the fifth State in the Union, and is fast advancing in wealth and population. Indianapolis, her seat of government, is likely to be the largest inland city in the west. There is being concentrated at it a net work of railroads, which, with connections, will penetrate every part of the State. It must be evident that the road which shall form the nearest and best connection with this system of public works, and Cincinnati, the great Emporium of the West, must become an important trunk line, and amply repay the expenditure upon its construction.

In addition to the mortgage the directors and principal stockholders of this road have deposited with the Trustee their personal guarantee to the holders of these bonds for the punctual payment of the interest thereon until the road is completed. Proper certificates and references are given, showing the entire ability of those parties to fulfil their engagements.

Sealed Proposals for any amount of these bonds, not less than $1,000, will be received until Saturday, the 22d of May next, at 3 o'clock P. M. Proposals to be directed to Messrs. DE LAUNAY, ISELIN & CLARKE, No. 63 Wall street, and endorsed "Proposals for Lawrenceburgh and Upper Mississippi Railroad Bonds."

Fifteen per cent of the purchase money to be paid on accepting the bids, the remainder in equal monthly instalments of 15 per cent each. The takers of the bonds to be at liberty to pay at any time in full. Interest on the bonds to run from date of payments.

The above $500,000 bonds will be sold absolutely to the highest bidder.

Pamphlets and Maps, and any further information relating to these securities, can be had by application to

DE LAUNAY, ISELIN & CLARKE,
63 Wall st.

Great Western Railroad,
CANADA WEST.

SEALED TENDERS, endorsed "TENDERS FOR CARS," will be received until Nine o'clock A. M., WEDNESDAY, May 26th, for furnishing the following CARS for the Great Western Railroad Company, to wit:—

25 Eight Wheel Passenger Cars,
4 Eight Wheel Express and Mail Cars,
8 Eight Wheel Baggage Cars,
20 Eight Wheel Emigrant Cars,
100 Eight Wheel Platform Cars,
150 Eight Wheel House Freight Cars,
100 Four Wheel Gravel Cars,
25 Four Wheel Repair Cars,
15 Hand Cars.

The above Cars are to be manufactured in the City of Hamilton, in buildings erected for the purpose, by the Railroad Company, and are to be completed on or before the First day of July, 1853. A portion of the same are to be completed by the First day of October, 1852.

Plans and Specifications will be ready for examination on and after the Eighteenth day of May next. Plans of the buildings can be seen at the Office of the Engineer.

The Contractor will be required to rent the buildings of the Company, and to furnish all of the requisite machinery, except the Engine and main line of shafting, which will be provided and put up by the company.

Information will be furnished by mail to parties wishing to tender.

The gauge of the road will be five feet six inches.

The Directors reserve the right to accept or reject tenders, as they may consider for the interest of the company.

R. G. BENEDICT,
Chief Engineer, G. W. R. R.

Office of the Great Western R. R.,
Hamilton, April 20th, 1852.

FILES.

THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make.

WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G I. Rails on the most advantageous terms.

RICHARD MAKIN,
April 22, 1852. 4 New st., New York.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch.

WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

To Contractors.

PROPOSALS for the construction of the Syracuse and Binghamton Railroad complete, in conformity to a plan and specification which may be seen at the Office of the Engineer, in Syracuse, on and after May 5th, will be received at the Office of the Secretary, in Syracuse, until the 15th day of May next. Payment for the work to be made in cash, and the stock and bonds of the Company.—Proposals to specify the proportion of each, and may be made for the whole or a portion of the work.

A. H. HOVEY, Secretary.
Syracuse, April 15, 1852.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

S. DRAPER, AUCTIONEER.

PEREMPTORY SALE OF

FIRST MORTGAGE BONDS

OF THE

Buffalo, Corning and New York Railroad Co.

This company will offer for sale through Simcon Draper, on the 13th day of May next, at 12 o'clock, at the Merchants' Exchange, in the city of New York, $400,000 of their first mortgage bonds, payable in 1867, with seven per cent. interest payable semi-annually, at the "Bank of Commerce in New York."

These bonds are a part of one million, authorised to be issued for the purpose ot completing their road, and are secured by a first mortgage on the entire road and its franchises, by deed of trust to John A. Stevens, James S. T. Stranahan, and John A. C. Gray, as trustees, and are convertible into the stock of the company at par at any time within five years from their date.

The road extends from Corning on the New York and Erie railroad, to the city of Buffalo, a distance of 134 29-100 miles, and will, when completed, form, in connection with the New York and Erie railroad, one of the most important and direct thoroughfares between the cities of New York and Buffalo and the far West, and will connect at Corning with the Corning and Blosburgh railroad, now being relaid with T rail, which extends to the rich iron, coal and lumber regions of Pennsylvania.

On diverging from the New York and Erie railroad, this road passes up the rich and fertile valley of the Conhocton river to near its source, at the northerly line of Steuben county, a distance of about forty-five miles, passing through the village of Cooper's Plains, Campbell, Savona, Bath, Kennedyville, Avoca, Liberty Corners, Conhocton and Wayland, thence through Springwater, Conesus, Livonia, Avon, [where it crosses the Genesee river;] and Caledonia, in Livingston county, and through Le Roy and Stafford to Batavia, in Genesee county. This part of the line, for nearly its whole length, passes through one of the richest and most productive portions of our state.

From Batavia the line of the road passes westerly in nearly a straight line, to the city of Buffalo.

The cars are now running on 25 miles of the road west from Corning, and it is expected to have the rails laid by the 30th instant for twenty miles further, when the cars will run 45 miles. The road is under contract to Batavia, and it is designed that the cars will be running over the whole road in all of the present year.

The mortgage provides that only $400,000 of bonds can now be issued, and the balance as consecutive portions of the road are completed. When the whole of said bonds shall be issued, the amount of incumbrance on said road will be something less than $7,500 per mile. The amount of the first issue, $405,000, will constitute an incumbrance equal to $7,150 per mile, upon the fifty-six miles of the road which are *now nearly completed*, being less than the value of the iron and land.

By this arrangement it is believed that the bondholders will be made secure beyond a possibility of doubt, the property of the company being at all times amply sufficient to indemnify them against any loss.

The following gentlemen compose the board of directors of the company:—

JOHN MAGEE, Bath.	JAMES S. WADSWORTH,
CONSTANT COOK, Bath.	Geneseo.
ORSON PHELPS, Buffalo.	O. COMSTOCK, Avon.
THOS. J. DUDLEY, "	J. A. C. GRAY, N. York.
WM. J. MILLER, "	D. CURTISS, Campbell.
M. P. LAMSON, Le Roy.	T. BROWN, Caledonia.
	T. CARY, Batavia.

ANDREW B. DICKINSON, Hornby.

Pamphlets, with a map showing the route of the road, and containing full particulars, with a copy of the mortgage and bonds, may be had on application to either of the directors, or of

S. DRAPER, corner of Pine and William sts.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River.....	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian...	53 "
Sixth	"	"	Bloomington to the Illinois River....	60 "
Eighth	"	"	from Freeport to Dubuque.....	67 "
Ninth	"	"	Chicago to Kankakee river.....	55 "
Tenth	"	"	Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company, in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, JR.,
Chief Engineer.

Steubenville, April 26, 1852.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston.

Lithographic Printing,

169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction - India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agen

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steam ships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper,

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

TO MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

—

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

—

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 20] SATURDAY, MAY 15, 1852. [WHOLE No. 839. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Are we Building too many Railroads.....305
New Caloric Engine.....306
On Railway Axles.....307
Terre Haute and Alton Railroad.....308
Statistics of Massachusetts Railroads.....308
Pennsylvania Coal Trade.....309
Pennsylvania Railroad.....310
Act to refund State Debt of Pennsylvania.....311
Akron Branch Railroad.....311
Erie Railroad.....312
Fairbanks' Scales.....313
Buffalo and Corning Railroad.....313
Stock and Money Market.....313
Madison and Indianapolis Railroad.....314
Hempfield Railroad.....314
Montgomery and West Point Railroad.....334
Alton and Sangamon Railroad.....314
Allegheny Valley Railroad.....314
Western Railroad Connections.....314
Jeffersonville Railroad.....316

American Railroad Journal.

Saturday, May 15, 1852.

Are We Building too many Railroads?

We briefly alluded to this subject in our last; but as our investments in railroads are attracting much attention, and some fears are expressed that we may go beyond the bounds of prudence, we think we cannot do better than to refer to this matter again.

In the first place, are we building railroads beyond the wants of our people? There is no difficulty in answering this in the negative. Some portions of the country are well supplied, and others equally rich and populous, and equally in need of such works, are entirely without them. The State of Georgia has a thousand miles of railroad, and has become rich and populous through their influence. She is looked upon at the South as the model *railroad State;* as having set the example worthy to be copied by all her neighbors. Her roads have been built by her own means. She has borrowed little or nothing from abroad. Her works have been economically built and well managed, and pay large dividends. No one pretends that Georgia has gone too far with her roads, nor that her people have been impoverished or embarrassed by building them; on the contrary, it is universally admitted that not only those who have built and own the roads, but the whole community are vastly better off for them. The prosperity of Georgia is a bye word with all her Sister States.

Now the States of North Carolina, Alabama, Mississippi, Louisiana, Tennessee and Kentucky. will all compare favorably with Georgia in population, in wealth, and in natural resources. Railroads are just as much needed by the former as by the latter. They would cost no more per mile.—They would pay equally well, and would accomplish as much in improving the condition of their people. But the aggregate length of line of all these States is not equal to the extent of railroad which we find in Georgia. Here then is a field where at least five thousand miles of railroad are admitted to be needed by the most conservative, for no one can doubt that railroads in the States named will be equally as useful and productive as those of Georgia.

But even Georgia is very poorly supplied with railroad facilities. Not one half of her territory, and hardly one half of her population are within reach of them. A very large proportion of her products are wagoned, or sent down her rivers at great expense, to inconvenient markets. Her area is at least 8 times greater than that of Massachusetts. The latter State has one mile of railroad to every 7 square miles of territory. The same ratio would give to Georgia 9,000 miles of railroad, nearly equal to the whole extent of lines in the United States, and to the States named including Georgia, (embracing an area of 390,000 square miles) more than 55,000 miles of railroad!! Now although there are a few unproductive railroads in Massachusetts, the whole investment has proved to be a good one, yielding a net income of over 6 per cent, and is constantly improving. There can be no doubt, that in the State named, ten thousand miles of railroad are needed to meet the commercial wants of the people, and that this extent of road would find lucrative employment. It is equally true that this extent of line can mainly be built with their domestic means, and not only those, whose money would go into the roads. but the whole community, would be vastly better off for the outlay.

Let us look at the Western States. Take Ohio, for example, here are from 2500 to 3000 miles of rail-road in progress in operation in a state having an area of 40,000 square miles. Yet with all this extent of line the most captious person can hardly put his finger upon a road that should not be built *if* the money can be had, that is, that could not pay, if built. The bonds of *all* the roads, recently constructed in that state, and of those nearly completed, are regarded by our shrewdest and best informed capitalists as the very best securities in the market. Bonds that a year or two since only netted companies from 80 to 85 cents on the dollar, cannot now be purchased at par. This fact is the rule, not the exception. The high estimate placed upon their value is based upon the results that have followed the opening of the roads. With their low cost, and with the rates charged upon Eastern roads, their is not a road in the west that will not pay 10 per cent dividend and leave a handsome surplus besides. As an illustration of their superior productiveness, we will compare the cost and expenses of the Hudson River with those of the Columbus and Cleveland, for the month just ended.

	Cost.	Earnings for April.
Hudson River.....	11,000 000	63,000
Cleveland & Columbus	3,000,000	52,000

Showing a result of some 300 per cent in favor of the western road. In the face of these facts a paper in this city, which is the greatest croaker, and sees nothing but disaster upon our investment in railroads, finds nothing to censure, but every thing to commend, in the Hudson River railroad project.

There is certainly no capitalist any the worse off for having invested in any of the recently constructed railroads in Ohio, for we presume that there is no one, who could not sell out his investments at a large advance. The bonds which he bought at 85 are now quick at par. Capitalists have not suffered in consequence of the Ohio roads. That the people of the state are vastly better off, does not require argument to prove. The farmer realize from a quarter to a third more for his produce. He effects an equal saving upon all the heavy staples that he is compelled to import. Every kind of property has risen in value, and there can be no doubt that every railroad in the state has increased the market value of the property of the district through which it runs, to twice the amount of the cost of the road.

Such are the *practical* results that have been already achieved by the roads in progress. But these are by no means the strongest lines in that State. We doubt whether the 800 miles already in progress in Ohio possess business capacities greater

than the average of the whole 2,000 miles which are now in progress. Precisely the same reason exists for completing all these lines that did for the construction of the first mile in the State.

If what we have said of the roads of Ohio are correct, the same view will apply with equal force to the roads of Indiana, Illinois, and in fact of all the western States. It 3,000 miles of railroad can safely be built in Ohio, then 2,500 can in Indiana, and 4,500 in Illinois, and a like proportion in other States. The States of Ohio, Indiana, Michigan, Illinois, Iowa, Wisconsin and Missouri, embrace an area of more than 400,000 square miles. The same relative number of miles that we find in Massachusetts, would give for the above over 57,000 miles of railroad.

We do not pretend that at present, such an extent of railroad would find profitable employment in the States named. We give the statistics for the purpose of calling attention to the vast extent of the field in which railroad operations are carried on. We do say, however, that the west is much better adapted to railroads than Massachusetts, that a much greater necessity exists for their construction, and that an equal area of western territory will yield a much larger amount of business.—Railroads are exactly adapted to the wants of a country like the west, which is one vast plain of inexhaustible fertility of soil, and capable of unlimited productiveness, but without domestic markets. For these reasons, there can be no doubt that the construction of railroads will be carried on in all the States named, till the extent of line compared with their area will equal that in Massachusetts. A long series of years will of course be necessary to such a result. At present, however, there can be no doubt that in the States of Ohio, Indiana and Illinois, at least 10,000 miles of railroad would at once find remunerative employment. Not more than one half of this extent of line is yet even projected. As far then as the *business* wants of the country are concerned, we are not overdoing the work of railroad construction. Three times our present extent of line, or 30,000 miles, would find *profitable* employment *to-day*, if built, and precisely the same necessity exists for their construction that did for the first mile. These facts most satisfactorily account for the immense number of lines in progress, and indicate in some degree the extent to which railroads will be carried. The contemplated routes are through districts equally as rich, fertile and well settled, as those now in operation. The only difference between the two, is that one line has been fortunate in raising means for its construction, while the other has not. If we must stop building railroads, it must be from *necessity* and not from *principle*.

The question resolves itself, then, into this: not whether our investments are good; not whether we are building lines that will not pay: but whether we are investing beyond our means. Now we contend that we are not investing beyond our yearly accumulations; and that if this be so, we are not over-investing, having demonstrated, we think, that railroads are legitimate projects, and are certain to yield a good income.

The annual nett earnings of the country cannot be less than $100,000,000, (they are probably a great deal more,) all of which is seeking investment. But we find the business of all the great industrial interests, excepting railroad construction, overdone. There has been never a period in the history of this country when there was found so large a surplus of every variety of products. Most of the great agricultural products, have been, and still are, a drug in the market. So with the products of our manufacturing establishments. We witness the singular coincidence of great abundance of money, and remarkably low prices. This state of things proves that there are no symptoms of a commercial revulsion, so much apprehended.—These apprehensions, we believe, are founded upon past experience, and not upon any existing causes at work. The present condition of things presents a striking contrast to the years of 1835-6, which proved so disastrous to the credit and prosperity of the whole country. So great was the mania that then seized our people, so occupied were they in every kind of speculation, that almost every useful employment was abandoned, and in 1836 and '7 we found ourselves importing our potatoes from Ireland, and our wheat from the Baltic and Black seas. The country was then in fact reduced to poverty. The enormous debts we contracted abroad drew from us all our currency; while at the same time, from the scarcity of all kinds of provisions, we were compelled to pay an enormous price for all the necessities of life. How striking a contrast does the present condition of things present. Instead of a scarcity, we have, in fact, too great an abundance. Hardly any kind of labor is remunerative, from the extreme low price of every kind of produce and merchandize. We are not therefore in a condition to fear changes, for almost any change must be for the better.

If we have a surplus of capital it is not wanted in the ordinary pursuits of business. In what then can it be so well used as in the construction of railroads? In no way can it be so profitably employed, as far as its *income* is concerned, or in its influence in the appreciation of the value of all kinds of property. Experience shows that our money is not needed in commerce, nor in manufacture, nor in agriculture. If we have a surplus why not put it into railroads?

Again: investments have but little tendency to create a stringency in the money market, so long as they yield a fair return. An *undoubted* 6 per ct. security will command par in any state of the money market. A man who has $100,000, and invests in such a security is never embarrassed by the operation, because he can convert it into money at any moment. Such a security, to a certain extent, takes the place of money, paper money we mean, which of itself is only a *credit*, and which passes for money by virtue of the *credit* attached to it. United States stock will perform the same office; so will any *undoubted* security. The great danger from investments is, that they will be unproductive. So long as they shall continue to pay well, neither individuals nor the community are the worse off for having made them. The railroads that we are building are safe investments, and so long as they shall continue to be such, there can be no danger of over investing in them. That they are and will continue to be needed, and will pay a handsome return upon their cost for many years to come, we think we have fully shown.

The money required for our roads is very slight when the extent of theselines are taken into consideration. As stated in our last, the average amount borrowed by our road in progress will not much exceed $7,000 per mile. To be on the safe side we will put it at 10,000 per mile. We showed that the balance required, was furnished by the *labor*, and not the accumulated capittal of the country. Allowing that we are building 3,000 miles of railroad per year, this would require 30,000,000 to be annually drawn from our accumulated earnings, for our railroad enterprizes. These enterprizes are divided among 30 States and are spread over an area of more than 1,000,000 of square miles of territory. We believe the above amount can be spared from the yearly earnings of the country without being felt. It should be borne in mind that our roads in progress yeild anually a net income of at least $20,000,000, almost the whole of which is reinvested, and that the saving effected by them, over the old mode of trausportatiou must amount to a much greater sum. We therefore can foresee no lack of capital with which to carry forward our railroad, nor do we see how an eqnal amount could be so well employed.

We are building a vast number of railroads but at a very low cost. The most timmid among us have expressed no distrust in reference to those projects from which real danger is to be apprehended. These are eastern roads involving an immense cost, upon very doubtful results. The Hudson River road will cost some $12,000,000, enough to construct 1,000 miles of road in some other portions of the country. It is from roads like these, projected and constructed by our great conservative capitalists, who have no faith in western projects, and who see certain ruin involved in the construction of a few hundred miles of railroad in the west. The result will prove the depth of their sagacity.

Erricsson's Caloric Engine.

Below we give a notice furnished to the Boston Transcript, of an engine constructed by Mr. Erricsson of this city, the motive power of which is heated air. Though somewhat incredulous as to the result, it would, in this age of discovery, savor more of presumption to deny what is claimed for the above invention, than to affirm its impracticability. Nothing is *impossible*, in science, which we can comprehend. Realization is simply a question of *time*.

The idea of substituting a new and superior motive power for steam will no doubt strike many minds as extravagant if not chimerical. We have been so accustomed to regard steam power as the *ne plus ultra* of attainment in subjecting the modified forces of nature to the service of man, that a discovery which promises to supercede this agency, will have to contend with the most formidable preconceptions as well as with gigantic interests.—Nevertheless, it may now be predicted with confidence that we are on the eve of another great revolution; produced by the application of an agent more economical and incalculably safer than steam. A few years hence, we shall hear of the "wonders of caloric" instead of the "wonders of steam." To the question, "how did you cross the Atlantic?" the reply will be,—"By caloric, of course!"

On Saturday I visited the engine manufactory of Messrs. Hogg & Delameter of this city, and had the privilege of inspecting Ericsson's caloric engine of sixty horse power, while it was in operation.—It consists of two pair of cylinders, the working pistons of which are 72 inches in diameter. Its great peculiarities consist in its very large cylinders and pistons, working with very low pressure; and in the absence of boilers or heaters—there being no other fires employed than those in small grates under the bottoms of the working cylinders.

During the eight months that this test-engine has been in operation not a cent has been expended for repairs or accidents. It is a beautiful and imposing object, and conveys the idea of power, and symmetry, much more impressively than the largest steam engine that I have ever seen.

The leading principle of the caloric engine consists in producing motive power by the employment of the expansive force of atmospheric air instead of

that of steam; the force being produced by compression of the air in one part of the machine and by its dilatation by the application of heat in another part. This dilatation, however, is not effected by a continuous application of combustibles, but by a peculiar process of transfer, by which the caloric is made to operate over and over again, viz: the heat of the air escaping from the working cylinder at each successive stroke of the engine is transferred to the cold compressed air entering the same, so that in fact a continued application of fuel is only necessary in order to make good the losses of heat occasioned by the unavoidable radiation of the heated parts of the machine.

The obvious advantages of this great impovement are the great saving of fuel and of labor in the management of the engine, and its perfect safety. A ship carrying the amount of coal that the Atlantic steamers now take for a single trip could cross and re-cross the Atlantic twice without taking in coal; and the voyage to China, or to California could be easily accomplished by a caloric ship without the necessity of stopping at any port to take in fuel. Anthracite coal being far the best fuel for this new engine, we shall no longer have to purchase bituminous coal in England for return trips. On the contrary England will find it advantageous to come to us for our anthracite. A slow radiating fire without flame is what is required, and this is best supplied by our anthracite. There being no smoke, a short pipe to carry off the carbonic oxyde gas and other products of combustion is all that is needed.

But the great advantage of this important improvement, and that which, in the absence of other advantages, would commend it to adoption, is the entire safety of the engine; an explosion being impossible. In steam engines, if the water gets low, or if there is an excess of pressure, or any defect in the materials of which the boiler is composed, or an over heating of the furnace tops occasioned by incrustation formed by salt, in marine boilers, &c., an explosion is inevitable. But in the caloric engine, the result from neglect will be—*the stoppage of the engine.* The present test-engine shows that there must be neglect to put in fuel for the space of three hours before the speed is even slackened. Thus you have nothing to fear from a sleepy engineer or an ambitious captain; and all the while not one quarter the amount of attendance and labor required to keep a steam engine in motion will be needed. When we consider the amount of human mutilation, suffering and loss, which will be prevented for a century to come, when this invention shall have passed into general use—surely every philanthropist will bid God speed to this new motive engine.

A caloric ship of 2200 tons, to be called THE ERICSSON, is now in process of construction by Messrs. Perrine, Patterson & Stack, and is in such a state of forwardness, that she will be in frames by the end of next week. She is a very beautiful model, and is the admiration of all shipbuilders for her remarkable strength—being admitted to have the strongest bottom of any ship built in New York. The machinery in more than half completed; and through the kindness of Messrs. Hogg & Delamater, I had an opportunity on Saturday, of inspecting it. I saw three, out of the four working cylinders, the paddle-wheels, all the valves and valve chests, the main links and connecting rods, the bed plates, and main pillar blocks—and various other parts of the engines—all of them massive forms of metal, cast with the utmost precision and smoothness, and the castings pronounced by competent judges to be superior to the best in the British steamers. The cylinders are 168 inches in diameter—72 inches larger than those in the Collins steamers. The fact of succeeding at the first trial in casting such stupendous cylinders in so perfect a manner is certainly highly creditable to the manufacturers, Messrs. Hogg & Delamater, and is a feat, which will be appreciated by all, who are aware of the difficulties to be overcome in casting cylinders of such unexampled magnitude.

The Ericsson will be ready for sea by October next; and her owners intend to take passengers at a reduced price in consequence of the reduced expenses under the new principle. The ship belongs to Mr. John B. Kitching and a few other wealthy men—Mr. Kitching being the energetic leader of the whole enterprise. The Ericsson will be commanded by Captain Lowber.

From the Journal of Commerce.

On Railway Curves, Axles and Wheels.

If a cylindrical body be placed upon a plane, it can roll upon it in no other than straight lines; or, if it be a conical body, in no other than circular ones. In either case if the plane is inclined beyond the angle of repose, there will be a sliding tendency also, arising from gravitation; but the further consideration of this point has no practical bearing on the subject, inasmuch as the limits are never approached on a railway curve.

In England, but few railway curves are of less radius than half a mile, which is judicious, and the coning of the wheels, one-sixteenth of an inch to a play of one inch, is conformable thereto; but, to increase the diameters of the driving wheels, without at the same time increasing the radius of the curves, is a questionable policy as far as safety is considered; and the coupling of the wheels is decidedly wrong in principle.

All curves being considered as portions of an imaginary cone, whose apex is just level with the axis of the largest wheels, it necessarily follows that that wheel regulates the elevation of the inner, and depression of the outer rail, as well as the coning of the wheels, within the limits allowed for play, which, as before stated, is usually one inch. Consequently, with large wheels the coning should be increased, and that causes an outward pressure upon the rails, tending to separate or spread them, which is of course an evil. A wheel whose diameter is 66 inches, is not calculated to go round a curve of less than half a mile radius, but one of 48 inches in diameter will go equally well round one of somewhat more than one third of a mile radius. An English train, therefore, could never get round our railway corners, and with their large coupled wheels, it is rather in defiance of mathematical principles that they succeed so well in getting round their own. Our American trucks would run on the English railways at a very high speed, with great safety; the truck system is indeed an admirable one, and with little alteration may be made perfect.

If two wheels are required to run upon a railway curve, under similar circumstances to those herein before stated, the one of 66 and the other of 48 inches diameter, coned one-sixteenth of an inch, to a play of one inch, the inner rail should be raised and the outer one be depressed one-sixteenth of an inch, making a difference of one-eighth of an inch in the level of the cross section of the two rails: we shall then have the axles of each wheel level, if the inner wheel is running upon a part of its diameter, which is one-eighth of an inch less than that part of the opposite wheel which is running upon the outer rail. Reducing these diameters therefore to eighths of an inch, we have the proportions of 528 to 527 in the one case, and 384 to 383 in the other; and these proportions, in units of the distance from centre to centre of the rails, give also the distance to the apex of the cones which the wheels are respectively calculated to travel round, or in other words, the radius of the curves; which, in the case of the large wheel, is 2464 feet, and in the lesser one 1792 feet, from the centres of the outer rails. These wheels will run together equally well, notwithstanding their difference in diameter, provided the curve be of not less than the greater radius; the axle of each will keep its horizontal position; and this is indispensable, to avoid the rocking motion which any change from this position always produces, precedes, and is the fruitful cause of trains running off the rails on the curves.

But the axles cannot be preserved in a horizontal position by this means alone: it is also necessary that each axle be normal to the curve it is travelling upon at each and every point, and this requirement discloses another defect in arrangement (before alluded to) of coupling the wheels, and thereby preventing the axles from assuming their natural position.

When two pairs of wheels, such as we have taken for example, one running as nearly together as possible, (to avoid rubbing each other, when going round a curve,) the lateral play necessary to be allowed to each wheel is somewhat more than one sixteenth of an inch, and thus their axles will come nearer together, by a little more than one eighth of an inch over the inner rail, than they will do over the outer one; and each axle will point in the direction of the axis of the cone around which it is supposed to be travelling, which in the present case is of 2464 feet radius at the base; and the large wheels only point to its apex; but the lesser ones do not point so high. This, however, is no disadvantage, unless the two are very near to each other, in which case the axle must have play endways in the boxes, which indeed they have generally quite enough of before they have been long in use, as the wear on the flanges and cutting away of the inner portion of the rails sufficiently testify; for these things must happen together. The practice of running large and small wheels together is nevertheless a bad one, and should be avoided.

It may appear to be a small matter to cavil about the difference in the level of the cross section of a railway, and to prove that the inner rail should be higher than the outer one, an eighth of an inch; when it is well known, that it is no uncommon occurence for rails to be half an inch to an inch or more out of truth, even on the best railways. But when we are professedly laying the rails higher on the one side than on the other, it is assuredly an acknowledgment, at least in theory, that such a matter is worthy of attention, and therefore it cannot be unimportant to know which rail it is proper to elevate, or which to depress; for it is evident that, if the usual practice be erroneous in this respect, the amount of the error is at least doubled.

The evils which I have endeavored to point out, as more particularly affecting the safety of travel upon railways, may be summed up as follows:

Firstly, Elevating the outer rail instead of the inner one, upon the curved portions of the railways.

Secondly, Large driving wheels, which require much coning, to go round the curves, and therefore exert an injurious lateral pressure upon the rails.

Thirdly, Coupling the wheels, whereby the flanges are liable to abrade the rails, as each axle is prevented from assuming its natural position of normal to the curve.

Fourthly, Two engines, tugging first on one side and then on the other, like a man sculling instead of rowing in a boat, whereby the rocking motion is greatly increased; and if it operates simultaneously with that produced by the cross winding of the axles, is almost certain at least to throw the locomotive off the rails.

All these causes tend materially to produce those accidents which usually take place upon the curves; but the greatest evil is the want of proper attention to the maintenance of the permanent way more particularly upon the curves, and were these properly attended to, comparatively very few accidents would happen upon them, more than on the straight parts of the line; but that affords no just reason for neglecting the other evils complained of. But still, the great desideratum is the perfection of the permanent way.

Talk of a director walking over a railway to examine it? why, he may as well send a carrier pigeon over it. Take a level, Mr. Director, and try round the curves, and examine the charts and then "mend your ways," "mend your ways," for they are sure to require it; it is a simple mathematical proposition, but worked out with a pickaxe, in the open air, away from the quiet, snug and comfortable office of the directory, and the Engineer. The word of an ignoramus is generally taken that its "all right," but let any man who has common sense take a level, and put it across the rails, and he will no longer be in doubt as to the cause of many of the accidents which occur.

The foregoing remarks were in substance written in August 1847, and arose from a careful examination of the facts of the case, before a Jury, at Kings Norton, near Birmingham, in England, to determine the cause of an accident by which the Engineer lost his life, on the Midland railway near that place. Subsequent observations have but confirmed the impression then produced; and I shall indeed be amply repaid, if one life may but be saved in consequence of the attention of any one being turned to the subject. I hope S. A. P. will find a complete answer to his inquiries.

I remain most respectfully. T. A. R.

Terre Haute and Alton Railroad.

Address of the President to the Stockholders and Directors.

GENTLEMEN:

It has been the pleasure of the directory, elected by the stockholders at their recent meeting in Shelbyville, to confer upon me the appointment of President of "The Terre Haute and Alton railroad company." For this proof of your confidence, I beg leave to tender to you my sincere and heartfelt acknowledgments. I accept the trust thus confided to me, with unaffected diffidence, and with unfeigned distrust of my ability to meet your just expectations. But I derive no little encouragement from the fact, that I am to be sustained by a board so able, so willing, and so ready to lend me, at all times, their efficient aid and co-operation. Under such auspices I enter upon the work assigned to me, and pledge myself to devote all my energies to the speediest practicable consummation of the great enterprise in which we are engaged, and which is to connect the Mississippi with the Atlantic, by continuous railroads—and in carrying on its operations, I take pleasure in giving the assurance that I shall scrupulously adhere to the letter and spirit of the resolutions adopted at the meeting of stockholders, and subsequently sanctioned and ratified by the board of directors. It shall be my constant aim to guard, with jealous caution, the funds of the people and counties; and to prevent, in every way possible, the improvident expenditure of money.—Nor will it be less my aim to regard, with an equal eye, and to do equal justice to all parts of the line—to the centre as well as to the extremities.

And now, gentlemen, have we not the greatest possible stimulus to untiring perseverence, in view of the present condition and prospects of our road? We have cleared away every impediment, by a strict compliance with all the provisions of the general law. The Legislature has granted to our company a special charter, liberal in its provisions.—The Legislature of Indiana has also granted our company a charter, to extend its road to the Wabash river and the city of Terre Haute.

Under our charters, we have raised by city, county, and individual subscriptions, more than half a million of dollars. Books are now open in every county along the line of the road for further subscription to the stock; and I have every assurance that large additions will be made to the list; and I earnestly hope that the directors will not cease their exertions to arouse the people, through the entire line of road, to a lively interest in the work, and swell the subscriptions to the largest possible amount—for it is far better that the greatest portion of the stock should be owned at home. So soon as a sufficient amount is taken, I think I have reliable assurances from Eastern capitalists, that all the stock will be taken, and a contract entered into for the construction of the whole road, and the work commenced at an early day. Therefore, much depends upon instant, simultaneous and energetic action on your part.

Such, then, is the position of the Terre Haute and Alton railroad company. Will you, can you falter, under such encouraging circumstances? Look to the character of your road—consider its termini—the exceeding beauty and fertility of the country over which it passes—its connection at Indianapolis with the whole North, East and South—the facilities that will be afforded to the interior for ready access to the best of markets—with the vastly increased amount of agricultural products—the impulse that will be given to every branch of industry—the greatly enhanced value of your lands; etc., etc.

It is to be deeply regretted by all interested in this great work, that my worthy predecessor, the Hon. Cyrus Edwards, was compelled, from ill health, to resign his seat. Could he have been retained, it would have been much better. His untiring zeal for the work has not in the least abated, though retired from his office as President of the company.

And now I hope, by an untiring and energetic prosecution of the work, to merit your confidence and cordial support. Very respectfully,

Your obedient servant,

SIMEON RYDER,

President Terre Haute and Alton R. R. Co.

Alton, April 26, 1852.

Abstract of Massachusetts Railroad Reports.

	Capital.	Capital paid in	Cost.	Length.	Do. double tr'ck.	Do. br'nches.	Speed of trains pr hour. Passenger.	Freight.	Earnings.	Expense of working.	Net earnings	Dividends.	Debt.	Surplus.
*Berkshire	$600,000	$600,000 00	$600,000 00	21·20	.....	.....	25	12	$42,000 00	.....	$42,000 00	$42,000 00	.....	.....
Boston and Lowell	1,830,000	1,830,000 00	1,915,646 68	25·77	25·77	1·87	25	12	409,152 88	$268,029 67	141,123 21	146,400 00	.....	$156,713 99
Boston and Maine	4,155,700	4,061,299 52	4,090,452 48	74·26	27·79	8·79	24	11	633,095 16	305,068 40	328,026 75	290,699 30	$41,050 00	85,032 67
Boston and Providence	3,160,000	2,840,462 55	2,840,462 55	41·00	15·75	12·00	30	14	377,396 57	177,776 17	199,620 40	94,800 00	150,000 00	.....
Boston and Worcester	4,500,000	4,500,000 00	4,862,748 45	44·63	44·63	24·00	25	11	743,922 60	414,109 27	329,813 33	315,000 00	287,000 00	.....
Cape Cod Branch	300,000	421,950 00	633,676 61	27·06	.....	1·45	21½	14	50,736 71	30,998 27	25,738 44	.....	560,657 08	84,329 99
Charles River Branch	117,300	52,946 43	68,872 39	11·96	.....	.....	.....	.....	.....	.....	.....	.....	190,505 00	.....
Cheshire	2,250,000	1,511,154 50	2,777,843 89	53·64	.....	.....	25	10	222,295 57	159,322 49	62,973 08	.....	.....	112,186 51
Connecticut River	1,750,000	1,591,110 00	1,801,592 36	50·00	.....	2·35	25	10	199,894 83	115,147 85	84,746 98	24,600 00	1,131,520 15	78,701 29
†Dorchester and Milton Br.	130,000	73,340 00	136,372 77	3·25	.....	.....	.....	.....	7,530 00	.....	.....	.....	213,157 50	.....
Eastern	3,150,000	2,850,000 00	3,120,391 67	38·20	16·00	19·87	15	15	502,054 53	224,599 21	277,455 32	267,400 00	56,050 00	.....
Essex	700,000	295,177 31	602,135 75	19·86	2 00	1·36	25	15	39,960 19	32,439 19	7,521 00	.....	797,180 22	74,902 67
Fall River	1,200,000	1,050,000 00	1,050,000 00	42·24	.....	.....	22	13	232,322 26	132,527 40	99,794 86	78,750 00	315,371 96	.....
Fitchburg	3,540,000	3,540,000 00	3,612,486 97	50·93	50·93	16·85	24½	12½	516,012 76	310,376 96	205,635 80	140,000 00	2,748 20	29,590 62
Fitchburg and Worcester	500,000	205,674 52	305,469 94	13·99	.....	.....	22	10½	29,354 64	19,815 41	9,539 23	.....	116,508 00	141,965 38
Grand Junction	1,200,000	781,607 55	919,396 85	6·49	.....	.....	..	..	802 99	.....	.....	.....	92,653 91	9,539 23
Harvard Branch	40,000	20,580 00	25,701 38	3·10	.....	.....	20	..	5,863 00	6,830 89	.....	.....	398,477 88	.....
†Lexington and W. Cam.	200,000	121,000 00	240,367 84	6·63	.....	.....	..	..	.....	.....	.....	.....	1,200 00	.....
Lowell and Lawrence	300,000	200,000 00	343,467 08	12·35	.....	.....	25	12	36,311 50	28,152 19	8,159 31	.....	127,354 23	17,034 85
Nashua and Lowell	600,000	600,000 00	651,214 88	14·58	14·40	.....	28	14	117,017 25	55,445 19	61,573 06	54,000 00	149,675 48	11,821 74
New Bedford and Taunton	400,000	400,000 00	510,263 18	20·13	.....	0 95	26½	16	173,449 98	120,144 22	53,305 76	32,000 00	.....	115,713 45
Newburyport	300,000	118,110 00	.....	14·58	.....	.....	..	..	7,111 56	.....	.....	.....	77,974 19	.....
N. Lond., Wil. and Palm.	1,700,000	493,233 43	1,450,410 70	65·70	.....	.....	25	12	101,057 06	110,197 09	.....	.....	911,097 57	15,718 47
Norfolk County	1,200,000	455,015 00	1,213,451 70	25·97	.....	0·19	25	12	60,085 97	37,859 84	22,226 13	.....	788,242 93	.....
Norwich and Worcester	2,825,000	1,914,050 00	2,585,104 50	59 00	1·08	7·00	25	11	270,049 37	138,450 90	131,598 47	71,692 80	875,116 71	57,690 62
Old Colony	2,100,000	1,964,010 00	2,293,534 83	37·25	11·50	7·75	20	12½	318,075 93	240,924 46	77,151 47	.....	328,800 00	50,536 24
‡Peterboro' and Shirley	275,000	209,760 00	264,115 30	14·06	.....	.....	..	..	.....	.....	.....	18,250 00	50,637 16	.....
Pittsfield and N. Adams	500,000	448,677 68	448,677 68	18·65	0·70	.....	20	..	37,514 32	16,012 00	21,502 32	27,000 00	.....	.....
Providence and Worcester	1,457,500	1,457,500 00	1,820,064 63	43·41	5·17	.....	30	10	202,889 81	87,958 54	115,931 27	.....	306,000 00	115,931 27
Salem and Lowell	400,000	243,305 00	313,220 65	16 88	.....	.....	25	12	36,640 25	32,106 82	4,533 43	.....	106,693 25	6,903 40
South Reading Branch	300,000	209,532 73	293,759 65	8·15	.....	0 22	30	15	42,235 61	29,822 48	12,413 03	10,000 00	87,605 07	.....
†South Shore	600,000	259,685 00	427,689 25	11·05	.....	.....	..	..	15,318 00	.....	.....	7,500 00	151,522 20	.....
*Stockbridge and Pittsfield	448,700	448,700 00	448,700 00	21·93	.....	.....	22	11	31,409 00	.....	31,409 00	31,409 00	.....	.....
‡Pony Brook	275,000	266,900 00	265,762 17	13·16	.....	.....	28	12	16,236 01	.....	.....	16,014 00	.....	.....
Stoughton Branch	90,000	85,400 00	93,433 29	4·04	.....	.....	20	20	25,815 79	.....	.....	1,708 00	700 00	.....
Taunton Branch	250,000	250,000 00	307,136 29	11·10	.....	0 57	22	14	131,292 66	104,291 10	27,001 56	20,000 00	.....	7,468 24
Troy and Greenfield	354,900	56,592 21	.....	42·55	.....	.....	..	..	.....	.....	.....	.....	.....	38,976 46
Vermont and Mass.	3,300,000	2,250,353 31	3,450 004 53	69·00	.....	8 00	20	15	180,617 89	100,140 92	80,476 97	.....	1,142 525 23	.....
Western	6,500,000	5,150,000 00	9,953,538 84	155·40	53 14	.....	28	15	1,353,894 63	597,756 20	756,138 43	412,000 00	5,319,590 00	198,121 51
West Stockbridge	39,600	39,600 00	41,516 29	2·75	.....	.....	..	..	1,762 66	21 35	1,741 31	1,683 00	.....	195 03
Worcester and Nashua	1,800,000	1,039,891 67	1,309,564 01	45·69	.....	.....	23	10	153,791 68	98,511 32	55,280 36	56,330 87	262,945 78	2,903 78
Total	55,338,700	45,260,478 18	58,143,388 03	1,267·50	268 85	113·03	23·99	12·72	7,330,961 60	4,013,695 58	3,280 386 29	2,159,436 67	15,069,819 72	1,311,478 41

* Run by Housatonic R R. † Do. O. C. R.R. ‡ Do. Fitchburg R. R. § Do. Nashua and L. R.R.

The Pennsylvania Coal Trade.

It is now thirty-one years since the anthracite coal of Pensylvania became an article of commerce. The Lehigh Coal Company, the oldest by several years, of those gigantic corporations now engaged in the traffic, brought to market, in 1820, the amount of 365 tons. This marks the beginning of the anthracite coal trade. The Schuylkill Navigation Company commenced operations in 1825, in which year it brought to market 6,500 tons, the business of the Lehigh Company having, by that time, grown to 28,393 tons. In 1829, the coal from the Lackawanna region began to find an outlet from Carbondale, through the works of the Delaware and Hudson Canal Company, and in that yeav 7,000 tons of it were taken to market, the business of the Lehigh Company having then grown to over 30,000 tons, and that of the Schuylkill Navigation to nearly 80,000. The next material step was the opening of the Reading Rail Road, which commenced operations in 1841, by bringing to market 850 tons, the business of the Lehigh Company having then grown to 143,037 tons, that of the Schuylkill Navigation to 584,692 tons, and that of the Lackawanna region to 192,270 tons.

During this period, from 1820 to 1741, various smaller channels of trade were opened. But the four events, which have been named, mark the general outline of the history of the anthracite coal trade during the first twenty-one years. This period witnessed the formation of the four great companies—the Lehigh, the Schuylkill Navigation, and the Reading Rail Road, all connected with Philadelphia, and the Delaware and Hudson canal company, engaged in the Lackawanna trade, and centred in New York. Under the influence of these companies anthracite coal was brought into familiar use along the whole Alantic border, and the trade had grown from 365 tons to what then seemed the enormous amount of 942,312 tons.

During the last ten years, these companies have all been pushing their operations, increasing continually their investments, and their means of production. The investment of the Delaware and Hudson company [including its auxiliary and dependent, the Pennsylvania coal company] has gradually swelled to the enormous sum of $10,800,000: that of the Lehigh company to $7,900,000; that of the Schuylkill Navigation to $10,000,000; and that of the Reading railroad to $16,900,000. In addition to this, there is a State canal of sixty miles, from Easton to Bristol, occupied almost exclusively with the coal trade, besides a large number of small lateral roads in the mining regions, and an immense number of private operators engaged in the several coal fields, either in mining or transporting. Altogether, probably not less than $70,000,000 have been invested in the production and transportation of coal, and yet, thus far, those engaged in the business have been barely able to keep pace with the demand. There have been, indeed, occasional flunctuations in the market, consequent upon winters unusually mild, or unusually cold, upon disastrous floods, or some other special contingency. Yet taking into view any whole series of years, the trade has been found steadily increasing, and with a ratio so remarkable as to entitle it to a careful examination. It foreshadows a source of wealth to Pennsylvania far more reliable, as well as more wholesome in its influences, and ultimately far richer in material results, than the gold mines of California.

To make the matter more intelligible to those not practically conversant with the subject, perhaps it will be best to give first a seperate view of each of the great channels of trade, and afterwards to show the general movements of the whole in one combined view.

There are three principle coal regions, on which the great Atlantic cities, and particularly New York and Philadelphia, are now mainly dependent for fuel. These are the Lehigh, the Schuylkill, and the Lackawanna regions. To each of these a brief notice will be given.

The coal of the Lehigh region is brought by the Lehigh canal from Mauch Chunk, Penn Haven, and some other points, an average distance of fifty two miles to Easton. Thence a small portion of it proceeds by the Morris canal to Jersey city. The great bulk, however, comes down the Pennsylvania state canal, sixty miles, to Bristol, thence down the Delaware, twenty miles, to Philadelphia, or through the Delaware and Raritan canal, forty two miles, to New Brunswick, and thence by the Raritan river to New York. About one-half of the coal of this region is mined by the Lehigh company, who own a large body of coal lands; the rest is mined by various individuals and corporations. But all of it comes through the canal of the company, and is dependent upon that and the other canals that have been named, for the means of reaching a market. The gradual growth of the coal trade of this region, is exhibited to the eye in the following table, showing the number of tons brought to market each year, from 1820 to 1851:

	Tons.		Tons.
1820	365	1836	148,211
1821	1,073	1837	223 902
1822	2,240	1838	213,615
1823	5,823	1839	221,025
1824	9,541	1840	225,318
1825	28,393	1841	143,037
1826	31,280	1842	272,546
1827	32,074	1843	267,793
1828	30,232	1844	377,002
1829	25,110	1845	429,453
1830	41,750	1846	523,002
1831	40,966	1847	643,973
1832	70,000	1848	650,746
1833	123,000	1849	801,216
1834	106,244	1850	722 622
1835	131,250	1851	989,269

The coal of the Schuylkill region has two means of reaching a market, entirely independent of each other. The first of these is the Schuylkill canal. By this route the coal is brought from the mines in Schuylkill county to the terminus of that work at Fairmount, Philadelphia, a distance of one hundred and eight miles. That portion of it intended for the New York market, is towed in the same boats round to Bordentown; thence through the Delaware and Raritan canal, forty-two miles, to New Brunswick; thence by the Raritan river to New York. The coal that comes to market by this channel is mined chiefly by private operators, but all of it must come through the canal of the Schuylkill Navigation company, and hence is dependent upon them. The movement of the trade, so far as this route is concerned, is exhibited in the following table, showing the number of tons brought to market every year, from the commencement, in 1852, to 1851:

	Tons.		Tons.
1825	6,500	1839	442,608
1826	16,767	1840	452 291
1827	31,360	1841	584,692
1828	47,284	1842	491,602
1829	79,973	1843	447,058
1830	89,984	1844	398,887
1831	81,854	1845	263,587
1832	209,271	1846	3,440
1833	252,971	1847	222 693
1834	226,692	1848	436,602
1835	339,508	1849	489.208
1836	432,045	1850	288,030
1837	523,152	1851	579,156
1838	433,875		

The second, and now by far the greatest, outlet for the coal of the Schuylkill region, is the Reading railroad, reaching, by a continuous double track, ninety-three miles from the mines in Schuylkill county, either to the centre of Philadelphia, or to tide-water at Richmond, just above Philadelphia. The coal intended for New York is shipped at Richmond, and goes chiefly through the Delaware and Raritan canal, in the manner before described. That intended for Boston and the New England market, now including more than one-half of their foreign shipments, is put on sailing vessels and passes round by sea. The growth of the business, so far as the Reading railroad is concerned, is exhibited in the following table, showing the number of tons brought to market each year, from 1841, when the road commenced operations, to 1851.

	Tons.		Tons.
1841	850	1847	1,360,681
1842	49,902	1848	1,216,233
1843	230,254	1849	1,115,918
1844	441,491	1850	1,423,977
1845	820,237	1851	1,605,084
1846	1,233,142		

The coal of the Lackawanna region is mined chiefly at Carbondale. The Delaware and Hudson canal company own a large tract of coal lands in that region. To bring to market the coal which they mine, they have, first, a canal of their own, commencing on the Hudson at Rondout, one hundred miles above New York, and running across the country one hundred and ten miles, to Honesdale. Thence they have a railroad of their own, sixteen miles, from Honesdale to Carbondale.—Auxiliary to this company, and dependent upon it, is the Pennsylvania coal company, who work large collieries, partly their own, partly rented, in the neighborhood of Pittston, just at the mouth of the Lackawanna. The Pennsylvania company have constructed a railroad for the transportation of coal from Pittston, forty-four miles, to Hawley, a port on the Delaware and Hudson canal, eleven miles beyond Honesdale. The coal proceeds thence to Rondout, and so on down the Hudson to New York, in the same manner as that mined at Carbondale. Coal mined by private operators in the neighborhood of Pittston, has to pass the same route, subject to the charges and the regulations of both companies. All the coal of the Lackawanna region, therefore, whether mined by individuals, or by either of the two mammoth companies that have been named, finds a market only through the Delaware and Hudson canal, and is subject to the control of that company. The Pennsylvania company is understood, indeed, to belong substantially to the same parties that own the larger work. The general movement of the coal trade of the Lackawanna region, is exhibited in the following table, showing the amount brought to market every year, from 1829 to 1851:

	Tons.		Tons.
1829	7 000	1841	192.270
1830	43.000	1842	205,253
1831	54,000	1843	227.605
1832	84,600	1844	251,005
1833	111,777	1845	273,435
1834	43,700	1846	320,000
1835	90.000	1847	388.203
1836	103.861	1848	437 500
1837	115.387	1849	454,240
1838	78.207	1850	550,417
1839	122.300	1851	795,059
1840	148,470		

Besides the coal beds that have been mentioned, there is quite a large amount now mined in Wilkesbarre, and lower down, at Shamokin and Lykens' Valley, along the Susquehanna. This is sent down the river, and is consumed mainly in the interior towns of the State for domestic uses, and for furnace operations at Catawissa, Danville, and elsewhere. Some portions of it find a foreign market at Baltimore. The amount produced from these regions is exhibited in the following table:—

	Tons.		Tons.
1839	11,930	1846	205.075
1840	15,505	1847	299,302
1841	21,463	1848	256,627
1842	57,346	1849	304,055
1843	68 000	1850	300,934
1844	127,993	1851	415,099
1845	188,401		

Thus it appears that nearly nine-tenths of all the coal produced from the anthracite coal fields of Pennsylvania, and all of it which finds an Atlantic market, is centred at the head waters of the three small streams, the Lehigh, the Schuylkill, and the Lackawanna, and is under the control of four great companies; the Schuylkill Navigation and the Reading railroad, working the Schuylkill region; the Lehigh company, working the Lehigh region; and the Delaware and Hudson canal company, working the Lackawanna region. The first three of these companies are located in Philadelphia; the last is located in New York. The Delaware and Hudson company aim at the New York market almost exclusively. The Philadelphia companies first supply entirely their own city, and then send what remains, say three-fourths of the whole, to New York and elsewhere. All the companies send more or less to Boston, and coastwise through New England

By combining the operations of all these various regions into one view, we shall be able to see at a glance the entire growth of the anthracite coal trade

of Pennsylvania, and to form some rational conjectures as to its future developments. This growth is shown in the following table, which is a summary of all the preceding ones, and which exhibits the total amount of coal produced each year, from the beginning of the trade, in 1820, to the close of 1851:—

	Tons.		Tons.
1820	365	1836	681,117
1821	1,073	1837	862,441
1822	2,240	1838	725 697
1823	5,823	1839	797,863
1824	9,541	1840	841,584
1825	34,893	1841	942,312
1826	48,017	1842	1,076,649
1827	63,434	1843	1,210,710
1828	77 516	1844	1,596,378
1829	112,083	1845	1,975,113
1830	171 734	1846	2 284,655
1831	176,820	1847	2,914,852
1832	363,871	1848	3,027,708
1833	487,748	1849	3,164,667
1834	376,636	1850	3,285,980
1835	560,758	1851	4,383,730

In establishing a rate of increase for a trade like this, mistakes necessarily occur, if each year is taken by itself. Some seasons are peculiarly propitious, others equally unfavorable, for mining. The mildness or the severity of the winter operates with equal irregularity upon the consumption of coal. Various other causes operate in the same way. Hence the over-production or the over consumption of one year must be balanced by those of following and preceding years Thus, if the year 1838 in the above table be compared with 1837, it wil be seen that there was an actual decrease in the production of coal. Again, in 1848, there was an increase of only 112,856 tons, while in 1847 the increase was 630,196 tons. In establishing a rate of increase, therefore, we have divided the time into periods of five years. Such a period is sufficient to allow all mere tempory inequalities and fluctuations to be adjusted, and to show, by the combination of the whole, with much greater certainty, the general movement of the business. In making our calculations, we have gone no farther back than the year 1841, when, for the first time, all the large companies were in successful operation.

During the five years, from 1841 to 1846, the production increased from 942,312 to 2,284,656, or at the rate of 142 per cent.

During the five years, from 1846 to 1851, it increased from 2,284,656 to 4,383,730, or at the rate of 92 per cent.

Comoining the two periods, we have a rate of increase in the production and consumption of coal of 117 per cent. every five years.

Is there any reason why this rate should be diminished? We think not. In the first place, population is increasing at the same rapid rate as heretofore. Secondly, coal is only just beginning to be used throughout New England, where, ultimately, it must displace all other means of heat for domestic purposes, as well as of mechanical power for manufacturing purposes. New England, as the oldest settled, and already the most bare of wood, must become, and at no distant day, the greatest consumer of Pennsylvania anthracite. Baltimore will probably supply herself, and to some extent the coast below her; but the great cities of Philadelphia and New York, and the whole Atlantic coast north and east of Philadelphia, must become every year more and more dependant upon the coal fields of the Schuylkill, the Lehigh, and the Lackawanna. This whole north-eastern region of the United States, at once the coldest, the most populous, and the most mechanical, and therefore, by all three reasons, requiring the greatest amount of fuel for domestic and mechanical purposes, has, as yet, only begun to use our Pennsylvania coal. So far from any decrease in the rate of consumption, there are the strongest reasans for believeing that the rate will be increased.

But, supposeing it to remain stationary, it gives to the coal trade of Pennsylvania, in coming years, a magnititude and importance which it is difficult to over estimate. Instead of an increase of 117 per cent, every five years. let us suppose it to be only 100 per cent.; in other words, suppose the coal trade to double itself every five years. This would give a business in 1856 of 8,767,460 tons, and in 1861, of 17,534 920 tons. What it may be in 1871, it is, perhaps, not discreet to conjecture. Let it be remembered, however, that the annual consumption of coal in England and Wales is now over 30, 000,000 tons, and that according to the present rate of increase, the population of those regions, which Pennsylvania anthracite is ultimately to supply with heat and motive power, will, in 1871, be fully equal to the present population of England and Wales. The movement of the trade certainly indicates that the consumption of anthracite coal, in twenty years from this time, will not be less than twenty-five or thirty millions of tons; in other words, the annual coal crop of Pennsylvania will exceed in value, by more than one-third, the present entire annual cotton crop of the United States.

We shall resume this subject in a few days. We shall then offer some remarks upon the influence of this trade, on the interests of the consumer, as well as of those great corporations engaged in production;—we mean particularly the Lehigh, the Schuylkill Navigation, the Reading rail road, and the Delaware and Hudson Canal Companies.

Pennsylvania Railroad.

This great thoroughfare was commenced in July, 1847, and will be completed, with a single track and sidings in August or September, 1853. It will extend from Harrisburgh to Pittsburgh, connecting the Ohio river with the capital of the State, and, by means of the railroads already finished, on the east, with Philadelphia, the second city in point of population on the western continent, and first in the natural resources of the country tributary to it.

The length of the Pennsylvania railroad will be 248 miles, of which 191 miles are now in successful operation. The whole of the remaining distance is under contract and rapidly advancing towards completion: 18 miles more will be opened in July, and the remainder, except that portion crossing the Allegheny mountains, where the Portage railroad is temporarily used for 28 miles, in September next.

The route of this road, although it intersects in its course all of the mountain ranges of the State, is highly favorable. The Allegheny mountain is the only one not severed to its base by either the Susquehanna, Juniata or Conemaugh rivers, the valleys of which are followed by the railroad through the great gateways nature has opened for its accommodation.

The crest of the Allegheny mountain is passed by a tunnel of 3,570 feet long, and at an elevation of 2,161 feet above tidewater. No stationary power is required on any part of the road. The distance from Harrisburgh to Altoona, at the foot of the eastern slope of the mountains, is 131 miles, and the ascent overcome is 858 feet. The steepest ascending gradient on this part of the road, passing eastwardly, is 10½ feet per mile, and westwardly 21 feet per mile. From Altoona to Pittsburgh the steepest gradient is 52 8-10 feet per mile, with the exception of 9¾ miles of the eastern slope of the mountain, where a gradient of 95 feet per mile, upon straight lines—reduced upon curves according to their radii—is encountered, upon which extra locomotive power will be employed.

The Baltimore and Ohio railroad overcomes this mountain by a maximum gradient, 15 miles in length, of 116 feet per mile, and descends upon the west side at the same rate, for 8 miles. It also overcomes Laurel Hill, which is avoided on our route, by a tunnel 4,200 feet long, with gradients on each side of 105 feet per mile.

The Pennsylvania road is graded for a double track in all the tunnels and rock cuttings, and much of the earth work; the masonry, in all cases, is constructed for a double track; 39 miles of the mountain division, and 34 immediately east of it, it is proposed to lay with a double track at once; and on the rest of the line there will be sidings every five miles.

The superstructure is of the most substantial character. The cross ties of white oak, 8 by 8 inches, 8½ feet long, placed 2½ feet apart, are imbedded in ballast of broken stone, twenty inches in depth. The rails weigh 64 lbs. per yard, except on the steep grade of the Allegheny mountain, where 76 lb. rails are to be used. The buildings are commodious and substantial. From Altoona to Pittsburgh, 117 miles, there are only two wooden bridges, each of about 100 feet span; all the others being constructed of stone or iron.

It is believed that the road and its appurtenances throughout will compare favorably with any work of the kind in America. While very little has been expended in unnecessary ornament, no expense has been spared which was required to secure substantial excellence.

Bituminous coal abounds on the western part of the road from Pittsburgh to the summit of the Allegheny mountain, a distance of 105 miles, the road passing in this distance through numerous veins, varying from 10 to 18 feet in thickness. The extensive coal field at Broad Top Mountain, is within 15 miles of the road, at a point 155 miles east of Pittsburgh, and 90 west of Harrisburgh; while in the valley of the Susquehanna, the road is in the immediate vicinity of the Anthracite coal region.

At Harrisburg commences the Harrisburg and Lancaster railroad, 36 miles long, now leased and worked by the Pennsylvania railroad company.—This road intersects the Columbia railroad at Lancaster, completing the railroad communication to the city of Philadelphia. The distance from Harrisburgh to Philadelphia is 106 miles, but improvements are now in progress upon the Columbia road which will save about 4 miles, making the whole distance from Philadelphia to Pittsburgh 350 miles.

At Harrisburg the line of railroads leading to Baltimore and Washington also commences. The distance from Harrisburg to Baltimore is 85 miles, and from Pittsburgh to Baltimore, by this route, 333 miles.

The above Eastern and Southern connections are completed.

Pittsburgh, the western terminus of the Pennsylvania railroad, is a most important manufacturing city, and has been appropriately styled the "Birmingham of America." Its population including that of the suburban towns is about 100,000. The position of the city, on the Ohio, at the head of navigation for first class steamers, connects it, through the Mississippi and its tributaries, with the South and West by several thousand miles of continuous steamboat navigation, which alone will draw to it sufficient business for transportation to and from the seaboard to insure the success of the Pennsylvania railroad. But as this navigation is subject to interruptions from low water, regularity of intercourse, as well as a direct connection with the interior and the Lakes, seemed to demand railroad facilities to secure the control of the travel and carriage of valuable freights to this route.

The railroads and canals hitherto constructed to accommodate the population of Ohio and Indiana have generally a north and south direction, connecting the fertile central region with the Ohio river and Lake Erie. Within a few years the importance of a more direct eastern communication with the seaboard has been appreciated, and several great leading lines have been projected and commenced to secure this object. That which has made most progress is the Ohio and Pennsylvania railroad, commencing at Pittsburgh, and extending westwardly through the most fertile and populous part of Ohio, to the new town called Crestline, on the Columbus and Cleveland railroad, a distance of 180 miles. From Crestline a railroad is completed to the city of Cincinnati, on the Ohio river; another has been commenced to Fort Wayne, in Indiana, which will be extended to Chicago, on Lake Michigan; another will be completed in the coming twelve months from Crestline, through Bellefontaine and Indianapolis, to Terre Haute, on the western boundary of the State of Indiana, a distance of 275 miles. The extension of this to the city of St. Louis, on the Mississippi, 170 miles further, has been commenced. Of the completion of this entire direct continuous railroad from Philadelphia to St. Louis, a distance of 976 miles, within two years, there can be no doubt. The region traversed by this route is equal in fertility to any portion of the globe, and is inhabited by a people who have the sagacity and enterprise to improve and draw from it all that the bountiful hand of the Creator has designed for it.

The Ohio and Pennsylvania railroad is now completed to Massillon, 104 miles. At Alliance, 84 miles from Pittsburgh, it intersects the Cleve-

land and Pittsburgh railroad, which is completed from that point to Cleveland, making a direct railroad communication between Pittsburgh and Lake Erie, 140 miles long. From Cleveland to the city of New York, by way of the Pennsylvania railroad, the distance is now 40 miles shorter than by the New York and Erie railroad, and must consequently command the travel from the western States to that commercial emporium.

The Pittsburgh and Steubenville railroad will connect this line with the Steubenville and Indiana railroad, and accommodate the centre of Ohio; while the Hempfield railroad from Greenupsburg, 30 miles east of Pittsburgh, to Wheeling, will connect it with the southern portions of that State, through the Marietta, Chillicothe and Cincinnati road, upon which line an unbroken gauge of track may be secured to St. Louis. These form the leading eastern communications in Ohio, already alluded to; and to these, and especially the Ohio and Pennsylvania road, all north and south lines from Cleveland, Sandusky, Lexington, Louisville, Evansville, etc., will become tributaries, concentrating the trade and travel of the great Mississippi basin, and pouring it over the Pennsylvania railroad as the main trunk connecting the commercial and manufacturing interest of the east with the rich agricultural regions of the west.

Calculations of the amount of transportation and travel that will pass over this great highway, appear, in view of these facts, to be superfluous. All its rivals are inferior in character, more expensive to work, and encumbered by a disproportionate debt. It has therefore nothing to fear from rivalry, either on the north or the south; and its business will only be limited by the capacity of a first class double track railroad.

In its present incomplete condition, it yields a net revenue of more than eight per cent upon the capital expended in its construction, and has attained a tonnage, ere it has reached its western terminus, nearly as great as can be carried with regularity upon a single track road.—*Philadelphia North American.*

Pennsylvania.

Below we give the recent law passed by the Legislature of this State, providing for a new loan of $5,800,000; of which, $800,000 is to be applied to the construction of the North Branch canal, and $5,000,000 to refunding a portion of the present debt of the State.

An Act to provide for the immediate completion of the North Branch Extension of the Pennsylvania Railroad.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same, that the Governor of the Commonwealth be and he is hereby authorised to borrow on the faith of the Commonwealth, and of the revenue hereinafter mentioned, and which is hereby specifically pledged for the payment of the interest and repayment of the principal, the sum of eight hundred and fifty thousand dollars, and issue certificates of loan therefor, redeemable in 30 years from date, to be paid into the internal improvement fund, and appropriated to the expenditures under this act, the law loan to bear interest at a rate not exceeding six per cent per annum, payable half yearly in specie, on the first day of January and July, to be termed the North Branch canal Loan.

Sec. 2. That there shall be annually set apart by the commissioners of the internal improvement fund the revenue accruing on said canal, from and after the passage of this act, for the payment of the interest and final liquidation of the debt hereby authorized, and it shall be the duty of said commissioners, after paying the interest annually, to invest the surplus, together with its accumulation of interest, in the said loan, or in any other loan of the Commonwealth; if said loan cannot be purchased at its par value, the said investment to form a sinking fund for the redemption of the principal at maturity.

Sec. 3. That the Governor and State Treasurer be, and they are hereby, authorised and empowered to borrow on the faith of the Commonwealth, during the year 1852, at such times and in such amounts as they may deem best for the interest of the State, any sum not exceeding $5,000,000, and issue bonds of the Commonwealth for the same, bearing a rate of interest not exceeding five per cent per annum, payable semi-annually, which bonds shall not be subject to taxation for any purpose whatever, and shall be reimbursable in twenty-five years from their date; and the sum so borrowed shall be applied to the payment of the six per cent. loans that are payable at the option of the Commonwealth, after the years 1846 and 1847, to the cancellation of the certificates issued to domestic creditors and the outstanding and unclaimed interest certificates, in the manner hereinafter provided; and the balance of said five millions shall be applied to the extinguishment of any of the five per cent. bonds of the State now outstanding, and for no other purpose.

Sec. 4. That the bonds for said loan shall be issued in sums of either $1,000, $5,000 or $10,000, each with coupons or interest certificates attached in sums equal in amount to the semi-annual interest thereon, which certificates shall be redeemable in gold and silver or an equivalent, on the 1st days of February and August in each and every year, at such place as may be designated by the Governor and State Treasurer; and said officers shall procure the engravings for such bonds and certificates and cause the same to be signed and countersigned as hereinafter directed, and take such other steps as may be necessary to carry out the true intent and meaning of this act, and the Governor is hereby authorized to draw warrants on the State Treasurer for such sums as may be necessary to pay the proper expenses incident to the negotiation of such loan, and said warrants shall be paid out of any moneys in the Treasury.

Sec. 5. The State Treasurer shall advertise for at least two months in one newspaper in Boston, one in New York, and one in Philadelphia, and one paper, in London, and one in Amsterdam, and one in Paris, in Europe, inviting sealed proposals for the loan herein authorized, or any part thereof, which proposals shall state the price intended to be paid in gold and silver, or its equivalent, by the bidder of each thousand dollars of such loan, and at noon on the day appointed for that purpose, the State Treasurer and Auditor-General, in the presence of the Governor and Secretary of the Commonwealth, and of such other persons as may attend, shall proceed to open said proposals and allot the loan to the highest and best bidders; whereupon bonds shall be issued to the person or persons entitled to said loan as hereinbefore provided, which bonds or certificates of loan shall be signed by the Governor and countersigned by the State Treasurer and Auditor-General, and the State Treasurer shall sign or authorize said coupons or certificate of interest to be signed; provided that in making proposals for the loan authorized by this act, the holder or holders of any of the bonds of the Commonwealth, of certificates for interest and holders of domestic creditor certificate shall be authorized to bid for any part of said loan to the full amount of such certificate or certificates, together with the unpaid interest thereon, provided also that at the time of making proposals for the said loan, application may be made for any part thereof at an interest of four per cent, or a less rate. Upon condition that the loan shall be for a greater period, and not exceed five years, exempt from taxation with the interest thereon payable semi-annually, the Governor is hereby authorized and empowed to entertain and carry into effect such proposition, should he deem it advisable for the best interest of the Commonwealth, provided further, that the notice to be issued in Europe for proposals shall precede the notice in this country at least one month.

Sec. 6. That immediately after the negotation of the loans herein provided for, the State Treasurer shall give notice in one newspaper in Boston, one in New-York and one in Philadelphia, to the holders of all certificates of loan then due, and to the holders of certificates issued to domestic creditors, to present the same at his office at Harrisburg, or at such place as he may designate in Philadelphia, for final payment; and in case such holders shall refuse or neglect to surrender the certificates aforesaid, the interest thereon shall cease to be paid by the State within 60 days of the time of payment fixed to such notice; provided that it shall be lawful for the Governor and State Treasurer, in addition to gold and silver, to receive at par in payment for the loan herein authorized, any of the bonds of the State domestic creditor certificates, and the certificates issued for unpaid interest, the certificates of loan paid and cancelled under the provisions of this act, after having been copied into a book to be kept in the office of the State Treasurer for that purpose, shall be destroyed by the State Treasurer and Auditor-General in the presence of the Governor and Secretary of the Commonwealth.

Sec. 7. That when the loan provided in this act shall have been negotiated, and the indebtedness cancelled as aforesaid, it shall be the duty of the State Treasurer to ascertain as near as possible the aggregate amount of interest saved to the Commonwealth by the provisions of this act, as compared with the interest now paid, deducting all contingent expenses, and shall, at the time of making their next semi-annual payment of interest, and semi annualy thereafter, pay over to the Commissioner of the Sinking Fund a sum equal to the amount so saved, and all premiums which may be received under the provisions of this act, and all unclaimed balances, if any, shall be also paid over to the Commissioners of the Sinking fund, to be applied to the cancellation of the future debt in the same manner that all other receipts to that fund are applied.

Sec. 8. That the Governor and State Treasurer be, and they are hereby further authorized and empowered to issue certificates of loan in the manner and form provided for in the foregoing sections of this act reimbursable at a period not exceeding thirty-five years from their date to any and all such holders of the five per cent. loan of the Commonwealth as may signify their willingness to receive new certificates of loan, bearing an interest of four per cent. or a less rate per annum, exempted from taxation, with coupons or interest certificates attached, payable semi-annually in gold and silvr, and they shall further have the right to give the necessary notice and take such other steps as may be proper to accomplish the true intent and meaning of this section; and it shall be the duty of the State Treasurer to communicate to the next Legislature a detailed statement of the proceedings under this act, showing the bids received for the loan, the names of the parties making such bids, and such other matters as may be deemed interesting and useful, provided that the certificates of loan authorized by an act to provide for the immediate completion of the North Branch Extension of the Pennsylvania Canal, approved April 2, 1852, shall not be subject to taxation for any purpose whatever, and it shall be the duty of the Governor to cause coupons to be attached to said certificates in the same manner and form as those required to be attached to the bonds to be issued under the provisions of this act, and provided that no bonds below par shall be entertained for any of said loans; and provided further, that proposals for the loan to complete the North Branch Canal shall be forthwith published for at least thirty days in one newspaper in Philadelphia, one in New-York, and one in Boston.

F. W. HUGHES,
Secretary Commonwealth of Pennsylvania.

Ohio.

The Akron Branch Railroad has made an arrangement with the Cleveland and Pittsburgh railroad, by which as soon as the road is completed to this point, passengers will be carried through to Cleveland for $1. They have also made a satisfactory arrangement in regard to through freight. An arrangement has also been made between the Akron road and the canal Packet line of Chamberlin & Co. The latter now connect with the cars at C. Falls daily, and carry passengers through in one day to Massillon. The same connection will be continued, when the road is completed to this point, which will probably be about the first of July. The season has been an extremely unfavorable one for work on the railroad, or the cars would have been here by the 1st of June.

Iron has been secured for the road between Akron and the Ohio and Pennsylvania road, so that there will be no delay in the prosecution of the work southward; although further subscriptions of stock will be necessary to seure its completion to the junction.

The efforts of the president and directors of the Akron Branch have been indefatigable, to secure the early completion of the work alloted to them; and they deserve graat credit for the success that has attended them thus far.—*Summit Beacon.*

American Railroad Journal.

Saturday, May 15, 1852.

Double Track for the Erie Railroad.

We learn that contracts have been made for the construction of 125 miles of double track for the Erie railroad, viz: from Sufferns to Otisville, 45 miles; from Great Bend to Chemung railroad junction, 77 miles; and from Corning to Painted Post, 3 miles—making in all 125 miles. The iron is to be furnished by the company. The contracts embrace all other items of cost, for which the contractors take the stock of the company.

The above is the commencement of a very important movement, which contemplates a double track for the whole line of the road, or that portion of it between Piermont and Hornellsville, a distance of 318 miles. The portion already provided for will materially increase the capacity of the road for business, and will at the same time diminish its liability to accidents.

There is no road in the country in greater need of a double track than the Erie. As soon as the Susquehanna valley is reached, a large number of important collateral lines radiate from the main trunk, all of which will bring to it a large amount of business. On the north these lines are, the Syracuse and Binghamton, which is to be at once commenced, and which will be some 75 miles long; the Cayuga and Susquehanna railroad, in operation 35 miles to Ithaca, and which will probably be extended up the lake 40 miles further; the Canandaigua and Niagara Falls railroad, 160 miles, taking the whole distance from Elmira; the Buffalo, Corning and New York City railroad, 130 miles; and the Buffalo and New York City railroad, 90 miles—making in all 530 miles of branch lines running north: a greater extent of road than the main trunk. To this should also be added the Genesee Valley railroad, making 100 miles more, provided this road should be extended up the valley to the Erie road at Cuba.

On the south are, first the Lackawanna and Western railroad, 50 miles long, connecting with the Erie at Great Bend, and opening an outlet for the great northern coal field of Pennsylvania.—This road will prove a most important feeder for the Erie. The next is the road running to the Blossburgh coal mines, a distance of 40 miles.—The third branch in a southerly direction will be the proposed road down the Allegheny valley to Pittsburgh, a distance say of 180 miles. We regard the construction of this road as certain. When complete, it cannot fail to secure to the Erie road a large traffic between the west and New York These branches will add 270 miles to the above aggregate, making an extent of road tributary to the Erie of some 800 miles, or about double the length of the main trunk. All these branches traverse one of the richest and most productive portions of the Union. Those on the south all traverse the great anthracite and bituminous coal regions of the State of Pennsylvania.

The above statement conclusively proves the necessity of a double track on the Erie road to enable it to accommodate all the business offering, and to operate with regularity and economy. We are glad to see the initiatory steps taken to accomplish so desirable a result. The double track under contract will be completed, we presume, the present year.

Fairbanks' Patent Scales.

We have not until recently been made aware of the vast extent to which the manufacture of these Scales is carried on. By reference to our advertising columns it will be seen that nearly ninety railroads in the United States have these scales almost exclusively in use for the weighing of their freights.

The New York and Erie railroad alone has in use eight large Track Scales for cars, capable of weighing forty tons each—many Depot Scales of six tons capacity, and an almost unlimited number of smaller ones ranging from 5,000 lbs. to 600 lbs. each.

The Reading railroad at its terminus on the Delaware near Philadelphia, is supplied with twenty-six ten ton track scales, which have weighed one million two hundred thousand tons of coal annually, during the last six years, retaining their adjustment without expense for repairs.

Nearly all the other railroads in the United States are also supplied in a greater or less proportion.

There is also an establishment in Liverpool for the manufacture of these scales, a patent having been obtained by the Messrs Fairbanks' several years since, for the whole of Great Britain; and we learn that nearly all the great lines of railway in that kingdom are also furnished with "*Fairbanks'* Scales."

These gentlemen have within the last three years achieved a still greater triumph in the construction of the ponderous Weigh Lock Scale for the weighing of canal boats with their entire cargoes. There are in operation at the two most important points on the Erie canal—Albany and West Troy—two of these mammoth weighing machines of over 400 tons capacity, which have given great satisfaction to the canal commissioners and other officers.

They have also in operation two nearly as large in the Delaware and Hudson canal—one in the Tide Water canal—one at Cleveland, Ohio—and three others in course of construction for the Ohio canals—one near Cincinnati, one at Toledo, and one at Carroll.

When we take into view the countless number of these articles in use in every city and town and village in the United States, all the various modifications adapted to the business of railroads, canals, warehouses, foundries, stores, etc., and remember that they are scattered all over the commercial world—in the East and West Indies, China, the Sandwich Islands, South America, California, etc, and that they are graduated to the standards of various counties, we can call to mind no one instrument that can be regarded as so universal an arbiter between owner and carrier, or between buyer and seller, as this same Fairbanks' Scale. There can be no better testimony of the accuracy of these scales than their universal use.

We may justly feel proud that these are among our American manufactures.

New York.

Buffalo and Corning Railroad.—The cars have commenced running twenty-four miles of the Buffalo, Corning and New York railroad. The road is in good condition, and the Bath Courier says, the number of passengers and amount of freight which passes over it daily, are far beyond the expectations of the most sanguine.

To Mining and Civil Engineers, Surveyors, etc.

A YOUNG MAN, who has been engaged for the last six years with eminent Engineers in Scotland, is desirous of a situation. Has had considerable practice in the working of mines—being a good draughtsman, and in possession of engineering instruments.

Address ENGINEER, care D. H. ARNOT,
1m20* 50 Wall st., New York.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
3i Jay st., New York.

Kentucky.

Covington and Lexington Railroad;

Mr. A. L. GREER, Agent of the Covingron and Lexington railroad company, reached home, a few days since, from New York, whither he had been on business connected with the road. We learn that Mr. G. accomplished the objets of his mission in the most satisfactory manner. Between $100,000 and $200,000 of Covington bonds were sold at rates between 91 and 95, and $40,000 of the Fayette County bonds at a rate above 90.

Mr. GREER contracted with a responsible company for the transportation of 5000 tons of iron from Pittsburg, three hundred tons to be delivered a week, and the delivery to commence on the 10th of this month. In this contract and by procuring a reduction of tolls, Mr. G. saves to the R. R. Co. between $12,000 and $15,000 on the estimated cost of transportation.

Illinois.

Terre Haute and Alton Railroad.—We learn from the President of this company, that a contract has been closed with a party of wealthy and experienced eastern contractors, for the construction of the above road within three years from the present time. We are further assured that it is the intention of the contractors to complete the road in much less time; and as they are able to carry out whatever they may undertake, we may expect to see another line of railroad pushed through to the Mississippi river in all of 1854.

The distance between Terre Haute and Alton by the line of the above road will be about 173 miles. The route is a remarkably favorable one. The country traversed is of unsurpassed fertility, and is very well settled. The above is a very important project for the city of Alton, and cannot fail, in connection with other roads terminating there, to make it a large and flourishing town. It will also secure to the Indiana roads an outlet to the Mississippi river, a connection which is now felt to be absolutely essential to develop their business capacities to the highest extent.

Ohio Central Railroad.

The counties of Muskingum, Belmont and Guernsey, Ohio, have each subscribed $100,000 for the extension of the above road from Zanesville to Wheeling, and have issued their bonds for the above amounts, to the company.

The people of Marshall county, Virginia, are making an effort to induce the Ohio Central company to run their line to the mouth of Grave creek, on the Ohio, instead of Wheeling, and propose to subscribe $250,000 to the stock of the road upon the above condition.

New York.

Sodus Bay and Southern Railroad.—We learn that preparations are being made to place this road immediately under contract,

Stock and Money Market.

We continue to note a favorable state of the money market. Railroad securities are in request at advanced rates. The better known bonds have been mostly taken out of the market, leaving their place to be filled by others of more recent date.

Seven per cent. bonds of new roads in operation are held at par in this market. For some, even a higher price is asked, from the value attached to the convertible clause.

There is now no difficulty in negotiating at fair rates, bonds of new works entitled to credit. A good degree of confidence prevails in reference to railroad projects which is strengthened by the result of every new road going into operation.

During the present year a large extent of line will come into operation, which will at once render productive a large amount of capital which has been expended upon unfinished roads. The present favorable condition of the market will enable most of our lines in progress to secure the means for their completion should any financial crisis threaten. On the whole, the prospect for our railroads is very encouraging for the present year at least.

During the month of April, fifteen thousand four hundred and three passengers were carried over the Ohio and Pennsylvania Railroad.

Cash received from passengers	$13,400 40
Cash received from freight trains	4,341 11
Total	$17,745 51

The receipts of the Saratoga and Washington railroad company, from passengers and freight, for the first three months of the present year, are, $20,807 74
The same months last year 17,107 56

Increase over 1851 $ 3,700 18

The receipts of the Michigan Cenral railroad company, for the month of April in each of the past two years, were as annexed:

MICHIGAN CENTRAL RAILROAD.

	1851	1852.
Receipts for frieght	$39,849 94	$21,511 12
Receipts for passengers	63,046 95	35,783 24
Total receipts	$92,896 89	$57,294 36
Decrease	35,602 53	

The earnings of the Galena and Chicago railroad from May 1, 1851, to April 1, 1852, eleven months, amounted to $192 269 64
Expenses for said 11 months 78,859 00

Net earnings for 11 months $113,410 64
The gross earnings for the corresponding period to 1st April, 1851, on the average of length of road in operation, say 42 miles, were 116,082 19

Excess of gross revenue last year over net revenue this $3,671 55

The earnings per mile have increased from $2,764 to $3,258.

The receipts of the New York and New Haven railroad for April were $56,317 89
Do April, 1851 51,245 15

Increase, nearly 10 per cent 5,072 74

The shipments of specie for the week ending May 1, 1852, were $556,572
Previously reported 7 232,765

Total for 1852 7,789,333

The following statement will show the amount of tolls collected at the Collector's office in Albany from the commencement of canal navigation to, and including, the week ending May 7th. Also the amount collected during the same number of days from the commencement of canal navigation last year:

1851—April 15 to 25, inclusive		$23,713 26
	26	3,228 73
	28	3,552 28
	29	2,459 71
	30	3,111 08
May	1	2,286 67
	2	2,373 58
Total		$39,725 41
1852—April 20 to 30, inclusive		$19,269 08
May	1	1,815 19
	3	3,089 56
	4	1,678 91
	5	1,672 43
	6	954 83
	7	1,545 93
Total		$29,025 93

Excess of 1851, $9,699 48.

It is proper to state, says the Albany Argus, in explanation of the large decrease this year in tolls, that is is by no means a consequence of a decrease of the quantity of merchandise cleared from tide water, but the result of the large reduction this year of the rates of toll.

We are assured that the amount of merchandise cleared this year from the Collector's office in Albany, greatly exceeds the quantity cleared during the corresponding period last year, and that had the rates of toll remained as they were then, the tolls this year on merchandise would have exceeded in the like proportion the tolls for the same period last year.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 15, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¾
U. S. 6's, 1856	108¼
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120½
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	90
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	100½
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 18 0-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	95
Ohio 6's, 1856	106
Ohio 6's, 1860	108¾
Ohio 6's, 1870	112¾
Onio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	96
Pennsylvania 6's, 1847,-'53	101¼
Pennsylvania 6's, 1879	108
Tennessee 5's	87½
Tennessee 6's, 1880	106
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	107
Cincinnati 6's	99
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	104
New York 5's, 1890	103½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	107
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	107½
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	96½
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	96½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	82
Reading mortgage, 6's, 1860	87½
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	97
Cleveland, Col. and Cin. 7's, 1859	105½
Cleveland and Pittsburg 7's, 1860	98½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	95½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	May 12.	May 5.
Albany and Schenectady	104½	103½
Boston and Maine	107½	106½
Boston and Lowell	108½	107½
Boston and Worcester	103½	102½
Boston and Providence	91	90½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson Canal)	117	117½
Eastern	99½	96½
Erie	89½	89
Fall River	99½	99½
Fitchburgh	105	104½
Georgia	—	—
Georgia Central	103	—
Harlem	72½	74½
" preferred	114½	114½
Hartford and New Haven	128	123
Housatonic (preferred)	35	35
Hudson River	62	63
Little Miami	—	—
Long Island	21½	21½
Mad River	—	—
Madison and Indianapolis	101	101½
Michigan Central	100	100
Michigan Southern	116	114½
New York and New Haven	112	111½
New Jersey	134	132
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	58	58
Ogdensburgh	27½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	78½	78½
Rochester and Syracuse	116½	116
Stonington	55	55
South Carolina	—	—
Syracuse and Utica	128	128
Taunton Branch	115	115
Utica and Schenectady	132	132½
Vermont Central	17½	19½
Vermont and Massachusetts	20½	21½
Virginia Central	—	—
Western	106½	104
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Indiana.

A Profitable and Well Managed Road.—A meeting of the stockholders of this road was recently held in this city, to hear the report of its president. Mr. Brough, as to its condition, prospects, etc., Mr. Brough stated that the business of last year left a surplus of $40,000, after paying ten per cent dividends. The increase of three months of 1852 over same time in 1851 had been 26 per cent., with the Ohio river closed with ice for three weeks in January. During February and March the increase was 47 per cent., and for three first weeks in April 33 per cent. The current year's revenue, the president felt confident, would give a 10 per cent. dividend, with a surplus of $100,000. In order to show the rapidly increasing business of the country, the president gave some comparative statements of the articles of produce in 1851 and 1850. In several instances the increase of the latter over the former year more than equalled the entire transportation of the same article in any year prior to 1850. For instance, the increase of bushels of wheat was 203 804—being greater than the whole transportation in 1849. In corn, 366,127 bushels, being greater than any two years prior to 1850.—And this increase, he showed, was still going on, and with the developments of the trade of the country, and the position of the road, he did not fear the influence of any other roads now constructing.—The contingent interest of the State in the road, which, from January, 1853, was a reservation of one-third the net earnings of the road, has been purchased, under authority of an act of the General Assembly. The payment is $600,000 of 2½ per cent stocks of the State, or $300,000 in money, to be made in four instalments from 1st January, 1854, to 1st January, 1857; if made in money, to bear interest from 13th January, 1853. These payments the president said could be made from the surplus earnings of the road, without impairing its dividend; and he recommended that this course be adopted, leaving it competent for the stockholders to hereafter determine what course should be adopted to give them the proper credit for these payments.

The directors have recomended that a new termination be constructed, to avoid the inclined plane at Madison. This will be about nine miles in length, and the cost is estimated at $200,000 to $250,000. Mr. Brough enforced the recommendation of the directors, by exhibiting the great expense of working the inclined plane, apart from the danger to property and life. He recommended the issue of $200,000 of bonds under the existing mortgage, sale limited at par, and pledged his exertions, with this provision of the funds, to the early commencement and completion of the work. Resolutions sustaining both these recommendations were unanimously adopted, and also cordially approving the management of the road by the president and directors.

Hempfield Railroad.

Contracts, says the Wheeling Gazette, were made last week for 13 of the heavy sections of the Hempfield railroad. We understand that the bids allotted, were to the best and most energetic contractors, and that they will press forward the work with vigor to admit of the letting of the light sections to advantage. These lettings include sections one and two miles from Wheeling, and three miles beyond Washington. The road will doubtless be finished as far as the Monongahela in a year and a half.

Alabama.

Montgomery and West Point Railroad.—The annual meeting of this company was held at Montgomery on Monday, the 12th inst. From the report of the President submitted on the occasion, the Journal of that city extracts the following very flattering acount of the condition of the business of the road.

The receipts for the year ending 1st March, 1852, have been—

From passengers		$91,292 84
" freight		61,206 29
" transportation of the mails		21,106 32
Total		$173,542 43
The expenses of management and repairs have been	$97,463 19	
Interest paid on Loans	24,790 73	122,253 92
Leaving a nett increase of		$51,288 51

The receipts of the road for the last six years show as follows—to 1st March of each year:

1847	$55,787·97
1848	79,706·83
1849	95,665·90
1850	123,781·61
1851	140,057·09
1852	173,542

This shows a steady increase in the business of the road.

This company have passed over the road:

This year..35,527 passengers—52,158 bales cotton.
Last year..30,032 passengers—25,989 bales cotton.

Increase...5,495 7,169

Illinois.

Alton and Sangamon Railroad.—We are gratified to be able to state, says the Alton Telegraph, that the work on the Alton and Sangamon railroad continues to progress with increasing rapidity.—The track is now across Coup's creek—three miles and a half, having been laid in the course of last week—and there is material enough deposited at Springfield for eight miles more. The steamer Buena Vista went up to Naples on Tuesday, with a quantity of iron intended for the road; and the Newton Waggoner followed yesterday with 4,500 ties for the same destination. We hope to have, ere long, the gratification of announcing the completion of the whole line.

Illinois.

Savanna Branch Railroad.—The annual meeting of the Savanna Branch railroad company was held at Savanna on the 20th ult., the following gentlemen were elected directors for the ensuing year:

Porter Sargent, L. H. Bowen, N. Halderman, Dr. J. G. Sugg, N. D. French, Dr. E. Woodruff, Garner Moffatt, E. A. Wood, D. Emmert, L. Gross, M. Dupuis, M. P. Pierce, and J. B. Rhodes.

The company propose to connect with the Galena and Chicago road, at or near Freeport. The road will be about 30 miles long. It is estimated that $150,000 will prepare the road bed for the iron. About $50,000 have already been subscribed, and it is believed that the balance can be obtained without difficulty. Measures are to be immediately taken to get up the stock, and put the road under contract.

The Mobile and Ohio Railroad.

The county court of Madison county, Tennessee, has voted a subscription of $250,000; that of Gibson county $150,000; that of Obion county $50,000; and that of McNairy county $50,000, to the stock of the Mobile and Ohio railroad company to be expended in that State.

Indianapolis, Lake Erie and Pittsburgh

It is highly gratifying to learn, says the Indiana Sentinel that we have a certain prospect of a continuous line of railway this season, from our city to Lake Erie at Sandusky, and Cleveland, and to Philadelphia by Pittsburgh, Our readers of course know, that the roads from Sandusky and Cleveland to Cincinnati, have long been completed. The former running through Bellefontaine, and the latter through Gallion; and that the line from Pittsburgh to Union, where it connects with our Bellefontaine road, passes through Gallion and Bellefontaine. This Pittsburgh line, we learn, will be complete this year, which, with the construction of this end of the line, which will soon be done, gives us a direct and continuous railway to Sandusky, Cleveland and Pittsburg. When this line shall be opened, we shall soon see some at least of the crowds of passengers, from the East, that are now forced around our State on the Ohio river, and railways on the East, the Michigan lake and railroads on the North, and the Illinois roads on the West, for the want of a railway through our State. We shall become better acquainted with our northern and eastern brethren, and they will know more of the advantages of our beautiful country, for residences and business.

The Remington Bridge,

The following from an Alabama paper gives an account of this great humbug which we took care to expose when first brought into notice.

Remington's bridge, after standing for months in a very tottering and irregular condition, has now broken in two about the middle, and fallen into the ravine. Soon after its completion it was tilted to one side by the wind and its own weight and never righted—the slope being too great to allow the passage of vehicles. It stood unused, a monument of humbugery, for more than a year; and we presume that its destruction will convince even the most decided believers in Remington's theory, that his plan will not answer for long and heavy structures, which, as in the case of the bridge here will break with their own weight, after losing their original balance, by the action of the weather. The bridge, we believe, was never accepted by the Council, and the city therefore loses nothing by its unfitness and demolition. It was built under the supervision of Remington himself, and must have been a costly work.

Commerce of Virginia.

It may attract the attention of the people to the depressed condition of the commercial affairs of Virginia, by referring to the official reports in the matter. It is seen that the amount of foreign imports of the United States, for the last year, was one hundred and forty seven millions eight hundred and fifty-seven thousand, four hundred and thirty-nine dollars. Allowing about eight and a half dollars to each individual, according to the last census, the quota, therefore, for this State, should have been $10,538 376, whilst her *actual* imports were only $241,935. During the same period there came into the ports of the United States 20,200 vessels—of which 146 only entered Virginia—whilst her share should have been 1467. Let us imagine the vast difference in the thift and prosperity of our seaport towns, and of the whole State, that will ensue when the navigation and commerce that properly belongs to us, is sustained—when we see fifteen hundred vessels from foreign ports annually arriving at our towns is it not, thorefore highly important that the people should be awakened as to their true interests? and urged to take incipient steps to renovate their condition?

Should not the above fact, says the Richmond Republican, arouse the attention and excite the energies of our Legislature and our people?—We possess at this moment greater natural advantages for commerce than any other State of the Union. The geographical position of Virginia and her noble harbors and water courses, should make her the

first commercial State in the Union. Such she was once, and a house is still standing in the solitary and deserted streets of Yorktown to which the merchants of Ney York once repaired to obtain their goods from Europe. Nature has not changed since then. The same broad river rolls there still, and the same wide ocean spreads out its inviting arms. Shall we not seize again these advantages, and by pushing on railroads, and canals, lay the foundation of as great a trade as New York now enjoys ?

Allegheny Valley Railroad.

Below we give a portion of the address of the President of the road, Hon. W. T. Johnson, to the public. We have often spoken of the importance of the above project, both as a local work, and from its connections with the railroad system of the country. We believe it must be speedily built. We doubt whether there is a line of railroad in the United States, of equal length which will traverse a country possessing greater or more valued resources. Both in the excellence of its soil and in mineral wealth it is unsurpassed. It will prove a great convenience to the western New York roads in opening a new avenue to the Ohio River. It will prove a most useful feeder to the Erie road and will be likely to receive substantial aid from this city.

The country traversed by the Allegheny Vally railroad is deeply interesting from the vastness of its agricultural and mineral resources, and the great susceptibility of enlarged improvements and development. The extensive regions covered with pine and other timbers, of a superior quality—the immense deposits of iron ore and bituminous coal—now undeveloped and consequently useless, will furnish sources of industry, traffic and wealth, that may well astound those of our citizens whose attention has not been given to the subject. A long residence within the region under consideration, and association with its business operations, enables me to speak from personal observation of its resources and its capability of supplying and sustaining a heavy trade. It is hoped a few remarks, therefore, will not be deemed impertinent. The contemplated improvement will pass through or within convenient trading distance of the following counties, to wit: Allegheny, Westmoreland Butler, Armstrong, Indiana, Clarion, Jefferson, Venango, Elk, Warren, McKean, and Potter, and will afford an outlet for the travel and trade of the vallies of the Allegheny, Kiskiminitis, Buffalo, Crooked Creek, Cowanshanock, Pine Creek, Mahoning, Redbank, Sugarcreek, Clarrion, Tionesta, French Creek, Brokenstraw, Conewango, Kenzua, Tunuangwant, and other large navigable highways.

To estimate the value of this great work, it would seem sufficient, to give an expose of the local business it will reach and create. A brief reference to the business operations, and capacities for enlargement and augmentation, in the several counties lying within its influence is made from such data as are within my reach and control.

The aggregate population of the counties heretofore named (Westmoreland excepted) was, in 1840, 193, 487, in 1850, 308, 795: increase in ten years, one hundred and fifteen thousand, being equal to sixty-two per cent. This fact alone appeals strongly to the mind, in estimating the future value of the trade of these counties, and the necessity and usefulness of opening new avenues for its outlet to market. A detailed statement of the agricultural, manufacturing, and mechanical industry, and materials for commerce of this region of our country, I am unable, at present to furnish. I shall give such facts as I have been enabled to collect from reliable sources. In Pittsburgh and its vicinity there are in operation numerous institutions of industry, whose fabrics will find an additional outlet by the construction of the Valley railroad. I shall mention some of them. There are sixteen rolling mills; cavital invested—six millions, yearly product valued at four millions; consumption—about sixty thousand tons of pig metal per annum. There are several forges and 80 foundries of the largest class; capital invested, two and a half millions, annual products worth two millions, and annual consumption of pig metal thirty thousand tons. There are two extensive novelty or variety works, for the construction of the many articles composed of iron. There are eight large engine manufactories and many small foundries and smelting works.—These, with numerous other establishments for the fabrication of locks, latches, coffee mills, scales, safes, axes, edge tools, steel springs, axles, anvils, vices, mill, cross-cut and other saws, gun barrels, cannon and cannon balls, shovels, spades, iron railings, nails, tacks, brads, garden and farming utensels, including iron ploughs, show how varied and valuable are the operations in this locality connected with the iron trade. Add to these the establishments for making wire, machine cards, cast-steel and files deservedly reputed of superior quality, and we may form some idea of the extent of this branch of industry. In supply of raw material for this great consumption it is worthy of remark that the counties of Armstrong, Butler, Clarion, Venango and Westmoreland, all lying within the range of the contemplated improvement, had, in 1848, in successful operation upwards of sixty blast furnaces, with capacity to produce annually one hundred and twenty thousand tons of pig metal. In this vicinity are five or six large cotton factories, with an invested capital of one and a half millions, consuming annually fifteen thousand bales of cotton, and yielding a product worth from one to two millions per annum. Woollen factories are numerous not only in this, but also in the counties of Butler, Armstrong, and Clarion.

There are eight flint glass works, seven viol and eleven window glass manufactories; annual product valued at two millions. There are in operation many steam saw mills and planing machines, steam flouring mills of largest class, whose success warrants the assertion that Pittsburg is destined at no remote date to become the central market of the great wheat region of Ohio, western Pennsylvania and Virginia. There is a copper smelting furnace and rolling mill extensively engaged in the successful manufacture from the ore of copper sheets and plates; wagon an plough factories, soda factories, steamboat and ship building, (fifty of the former, I am told, are built annually) barrel and hogshead factories, together with numerous other branches of industry connected with saddlery and harness; tanneries, breweries, distilleries, white lead factories, cabinet ware, queens ware, and workings in tin, copper, brass and silver; hat and clothing manufactories, brush factories, gloves and hosiery factories, paper factories, rope walks, musical instrument factories; mill stones; book printing and binding establishments; all tending to exhibit the immense amount of the products of industry, to be beneficially assisted by each new avenue opened for outlet and sale. Situate at the head of navigation by steamboats, and commanding the whole extent of the valley of the Ohio and tributaries by business influence, it is impossible to conceive the prospective growth of these cities and county. Instead of the one thousand merchants, three thousand manufacturers, and five thousand artizans and mechanics, now residing within our limits, the completion of these works of internal communication will, in a few years, quadruple the number.

Butler county, containing most productive lands, and filled with extensive fields of minerals, requires only an outlet for its, natural resources, to place it among the most flourishing counties in the Commonwealth. Although the Valley road may not pass through any part of the county, it will bring much of the territory within convenient reach of a market. In the vallies of Buffalo, Sugar Creek, and Bear Creek, teeming with ores and agricultural riches, a new impulse will be given to industry and improvement, that cannot fail to bring a large amount of business upon our road, and increased wealth to that region and its market—Pittsburgh.

The Northern section of Westmoreland county will find in the Valley road, the cheapest and most reliable way to market. This portion, although less improved than other parts of the county, possesses the very best quality of soil, and is susceptible of more extensive and rapid improvement than the more cultivated and worn districts of the county. I am unable to estimate the value of its agricultural and mechanical industry. The Kiskiminitis valley, with its many salt wells, its minerals, its water powers, and the Pennsylvania canal to bring its riches to the point of intersection with this improvement, must be entitled to regard and attention in estimating the busines that may be thrown upon our road, from that section of country.

Portions of Indiana country will seek a market by the Valley road. Uncertain and expensive as are the present means of transportation for their products, large and valuable improvements in farming and in the developement of natural resources, have been made in this fine country within the few past years. Open to the citizens an outlet, and it will not be long before the fatness of that land and the wealth creating labor of her honest yeomanry, will be poured in an hundred fold increased trade into this market, and demand in return the various articles of our fabrication.

In Armstrong county there are large tracts of richest alluvial and limestone lands, surpassed in quality by none in the country. Coal, iron ore, and other minerals are found in abundance in every township. There are two largest class rolling mills, capital invested two millions. One of these mills is constantly and largely employed in the fabrication of railroad bars, with capacity to make from fifteen to twenty thousand tons per annum. There are many woollen factories and steam saw mills. Sixteen blast furnace stacks, producing an average yield of two thousand tons each per annum Numerous flouring mills of the first class, both in extent of their operations and in the quality of the manufactured articles. One of these mills I am told, has capacity to grind from one to two thousand bushels of wheat ber day. The salt wells are numerous and productive. The susceptibility of increase in the trade and business of this county, can be scarcely estimated. A very slight developement has been as yet made of her resources. An open pathway to market being constructed, and the sequent rewards thereby afforded to enterprise, would make the agricultural and manufacturing industry of this county a powerful auxilliary to the prosperity of this city and vicinity.

Clarion and Venango countries have been long known to this community as rich in mineral resources. In both counties are to be found large bodies of the very best lands. Within the last few years so great have been their improvement and success in agricultural pursuits, that the heavy population brought into their borders by the erection of iron manufactories, has not furnished a market for *all* of their products. A short time since there were in operation twenty eight blast furnaces in Clarion co. and eighteen in Venango, capable of producing from fifty to sixty thousand tons of pig metal per annum.

It is true, that the depression of the iron business has materially lessened the trade and active industry of these counties, and prevented that rapid advancement to prosperity which a few years ago surrounding events promished to their people. Still it is confidently believed that if new channels for articles of iron composition are opened, the increased demand and ready sale of the raw material consequent upon such results, will justify the expectation that a resusciation of the prostrated industry of that section of the State, may be secured. The wealth of these counties cannot lie dormant The road we propose to construct will bring to their agriculturalist a convenient market, and for the transmission of their natural wealth a cheap and reliable thoroughfare. The full *use* of the mineral and agricultural resources of these counties, must be favorably felt in the business operations of this country.

In Jefferson, Elk, and Warren Counties, for various agricultural purposes, the lands are of superior kind. The mineral deposites are extensive and exceedingly valuable, although at present from difficulty in reaching market, these remain useless in the hills and vallies. A coal vein of twelve feet thickness has been worked in Jefferson county, and it is said coal abounds in the entire region of Jefferson and Elk. It is well known that there

are large amounts of iron ore. Here we find in proxtmity, coal iron ore, timber and lime. Invite into action these sources of wealth by the construction of convenient highways, and the beneficial reresults to all parties, cannot be doubted. These counties, however, possess immense value, in their primeval forests. The timber of this region, particularly the pine, of the best quality, and in almost incalculable quantities, in transmission to a market, must be of high moment to this section of the State. Its importance may be estimated from the statement hereafter mentioned.

McKean and Potter counties, from position, will necessarily carry their trade along the eastern line of the Valley road. The immense pine forrests of these counties, and their inexhaustible fields of bituminous coal, will find an outlet to New York, and by connecting with the system of improvements in that State. be furnished, a market of boundless extent, The coal of McKean, lying nearer to New York and the Lakes than any other large body of coal yet discovered, will constitute on the eastern part of our road a trade, the magnitude of which cannot be readily conceived. In the rapid settlement of these last named counties, it is readily perceived that a new and undisputed market is opened for our wares.

In the event of the construction of the Valley road, will industry and interprise seize these natural advantages and turn them to profitable use? The history of our people in every portion of this wide-spread Republic, answers in the affirmative. Increase in travel and trade has uniform kept pace with, and generally in advance, of the facilities afforded them by the erection of public improvements, Pack horses. mud roads, turnpikes, canals and iron railways have each in turn proved the truth of this declaration. It is alleged that the river and its rtibutaries furnish an adequate outlet to market, and that it will compete with any improvement made along its borders. The *uncertainly* and *dangers* of that navigation will destroy it, as a competitor. The frosts of winter and the droughts of summer, with the artificial impediments to its use, even in high floods, are alone a sufficient answer to the objection.

These estimates being correct, a few figures will demonstrate the value of our railway as an investment. If to tonnage of iron, lumber and coal, be added other matters of local trade, the merchandize and ware to be transported in supplying the wants of the people engaged in producing and bringing this tonnage to market, and the amount of travel, we may form some slight estimate of the revenues likely to flow from the Allegheny Valley road.

In its foreign connections and proable business, our road presents still more astonishing evidences of its value. We have already alluded to the important position of its western terminus. In passing North-eastwardly, our road will cross the Sunbury and Erie railroad, by which it will form connections with Philadelphia and Lake Erie at the harbor of Erie. To those seeking a south-western or north-eastern point, this road affords a most eligible and desirable route. A few miles north of the State line, we will connect with the New York and Erie Railroad, and through in and its branches open to our manufactories the interior of New York, and by various channels, an eastern, western, and northern market. Improvements already made, or in progress, bring us in connection with the central railways of New York, and open to us an highway to the cities of Boston and New York, and the lower lakes. A glance at a map will demonstrate the truthfulness of these speculations,and convince the inquiring mind that the first link in the great chain is to be furnished by the construction of the Valley road.

That the improvement will pay a liberal interest on the cost of its construction, there cannot remain a doubt. Will it return a fair equivalent for the outlay they may make to the citizens of Allegheny county? Its influence on the value of real estate, each propertty holder can estimate for himself. To the merchant, our road promises, even should it never pay an interest on its cost, an ample return for the aid he may give it, in the great increase of business, it must produce, and in the choice of markets, it gives to him for his purchases. To the manufacturer and mechanic it opens a new region for the sale of his fabrications, and secures to him new facilities and certainties in obtaining supplies. To that most numerous and interesting class, the working men, it gives assurances of steady employment and remunerating wages, in the increased business of their city.

The Jeffersonville Railroad.

We saw a gentleman a day or two since who has been out to Shelbyville, Knightstown and Rushville, in Indiana, with which places we will be connected in about three months by the Jeffersonville, Railroad, and he gives us a gratifying account of the feeling among the people in those places, and their anxiety for the completion of the road, in order that they may transport their produce to this city. All along the road are immense quantities of corn, waiting to be brought to market. In one house alone, at Carthage, there are no less than one hundred car loads of corn, of 250 bushels each. It is selling there at 16 cents per bushel. There are also large quantities of excellent potatoes, which are selling at low prices.

As soon as the road is opened, at least 500 barrels of flour will be brought here per day, and the quantity will soon be increased to 1000 barrels per day. This market will also be the principal depot for the wheat and other products of that rich and fertile section of our sister State, and it will be impossible for any one to calculate the increased trade the opening of the Jeffersonville road will bring to Louisville.

Our readers may, perhaps, be interested in hearing something of the progress of work on the road. Last week two miles of iron were laid, and the cars are now crossing the Vernon fork of the Muscatatack, a distance of forty two miles from Jeffersonville, and ten miles this side of Rockford. Two or three days since the steamer *Jamestown*, with two barges in tow, having on board 1,400 tons of iron, arrived from New Orleans. This will be sufficient to lay the road to a point some four or five miles beyond Rockford, and within nine miles of Columbus. The *Hiram Powers*, with 300 tons of iron, and another boat with 500 tons, are now on their way from New Orleans, and will land their freight at Madison, from which place it will be taken to Columbus, where the work of laying it from that point in this direction will be commenced. It is confidently expected the cars will be running to Columbus by the 1st of August. From Columbus to Edinburg, eleven miles, a strong force is at work, and in a month or two after the completion of the road to the former place. the iron will be laid to Edinburg, and thus a direct connection be secured with that place, Shelbyville, Knightstown and Rushville, entirely independent of the Madison and Indianapolis road—a consumation most devoutly wished by all the people in those sections. The road will be well provided with locomotives, and passenger freight and stock cars, and we may all look and prepare for an active trade with the interior of Indiana this fall.—*Louisville Courier.*

Notice to Contractors.

SEALED proposals will be received at this office until sunset on Monday, the 30th inst., for the graduation and masonry required on 26 miles of the Pittsburgh and Steubenville Railroad, from Campbell's Run to the Virginia Line. Plans and profiles will be exhibited, and the necessary information respecting the work given by the Engineer at his office for five days prior to the letting.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer P. and S. R. R. Co.

Engineer's Office, Pittsburgh, }
May 6th, 1852, }

Lithographic Printing,

169 Chestnut St., Philadelphia,
A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style

M. B. Hewson, *Civil Engineer.*

(Open to a New Engagement,)
Memphis, Tenn.

ARTIFICIAL LIGHT
FOR RAILROADS.

LANTERNS FOR LOCOMOTIVE ENGINES with argand burners and Reflectors of a true parabola, were introduced by the subscribers in May, 1840, since which time we have supplied the following named Railroad Companies with them, viz:

Androscoggin & Kennebec,
Albany and Schenectady,
Auburn and Syracuse,
Boston and Providence,
Boston and Worcester,
Boston and Lowell,
Boston and Maine,
Buffalo and Rochester,
Columbia and Philad.,
Columbus and Xenia,
Cheshire,
Connecticut River,
Conn and Passumpsic,
Cocheco,
Cuba,
Eastern,
Erie,
Essex and Manchester,
Fitchburg,
Fall River,
Great Falls and Conway,
Hartford and New Haven,
Hart., Prov. and Fishkill,
Hudson River,
Kennebec and Portland,
Lowell and Lawrence,
Michigan Central,
Mad River and Lake Erie,
Manchester and Law'ce,
Mansfield and Sandusky,
Macon and Western,
Nashua and Lowell,
Newburyport,
N. Hampshire Central,
N. York and N. Haven,
Norfolk County,
Northern, N. Hampshire,
" New York,
Norwich and Worcester,
N. Orleans & Carrollton,
N. London, Willimantic and Palmer,
Old Colony,
Port., Saco and Ports'th,
Rutland and Burlington,
Richmond and Petersb'g,
Saratoga & Washington,
Stonington,
Syracuse and Utica,
South Reading Branch,
Vermont Central,
Vicksburg and Jackson.

In all cases our Lanterns have given satisfaction. The reflectors are made with great care, are heavily plated with pure silver, and every part of the work is strong and substantial.

The reflectors are similar to those used in the United States Lighthouses as now furnished by us. The United States Commissioners for running the North Easterly Boundary line, procured of us a small parabolic reflector with an argand burner of ¾ inch diameter, and Major Graham, in his report to Congress, says the light was distinctly seen thirty miles, and was used in establishing the lines.

Having heard complaints of the artificial lights used for lighting Railroad Passenger cars, we made experiments to obtain a superior light to any then in use. In November, 1847, we introduced a double parabolic reflector to an argand burner, which reflects the rays of light in a direct horizontal line parallel with the sides of the car and over the heads of the passengers, thus avoiding the inconvenience of a concentrated light. These lamps are esteemed the best in use, and are sold at moderate prices.

Samples of our Locomotive and Car Lamps may be seen at Messrs. Bridges & Brothers, 64 Courtlandt street, New York.

HENRY N. HOOPER & CO.,
No. 24 Commercial St. Boston.

May, 1852.

To Contractors.

OHIO AND MISSISSIPPI RAILROAD, EXTENDING FROM CINCINNATI TO ST. LOUIS.

SEALED proposals will be received at the offices of the undersigned in the cities of Cincinnati and St Louis, until the 15th day of June next, for the grading, masonry and bridging, of the following portions of the above road.

First—From Cincinnati, extending 72 miles westerly, to the intersection of the Madison and Indianapolis railroad.

Second—From Illinoistown, opposite St. Louis, extending 50 miles easterly, to a point near the town of Carlyle.

Maps and profiles of the line will be ready for exhibition and all the necessary information will be given at the above offices on and after the 24th inst.

For the remaining 213 miles, proposals will be received from such parties as desire to bid for the work upon their own examinations and such information as the Engineers will be able to give, the character of the country being uniform and preliminary surveys in progress.

Co-partnership firms bidding for the above work will please give the full name and Post-Office address of each member of the firm.

H. C. SEYMOUR & CO.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fittings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALE.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me. and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company, in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, Jr.,
Chief Engineer.

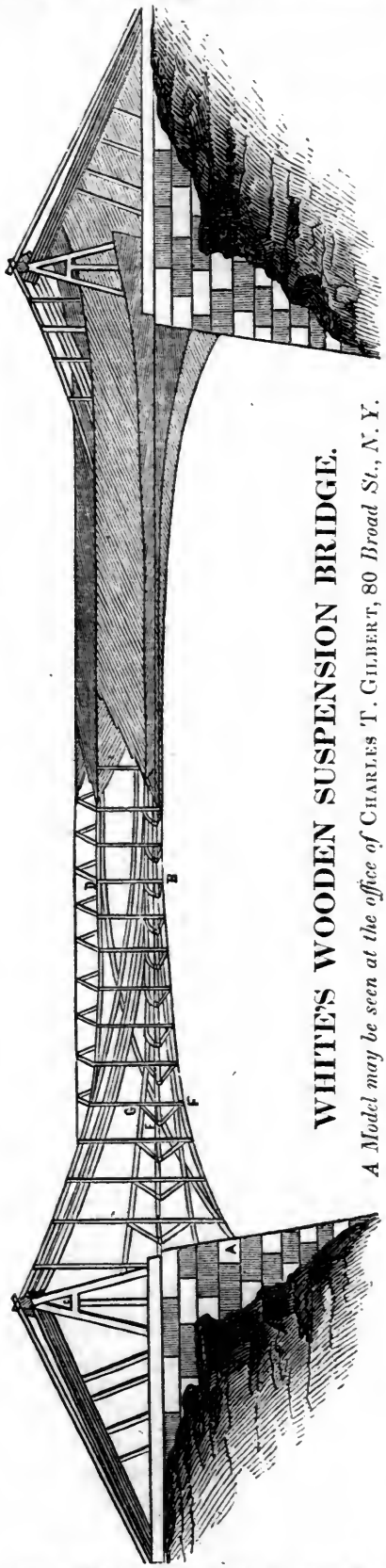
Steubenville, April 26, 1852.

GLENDON LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.



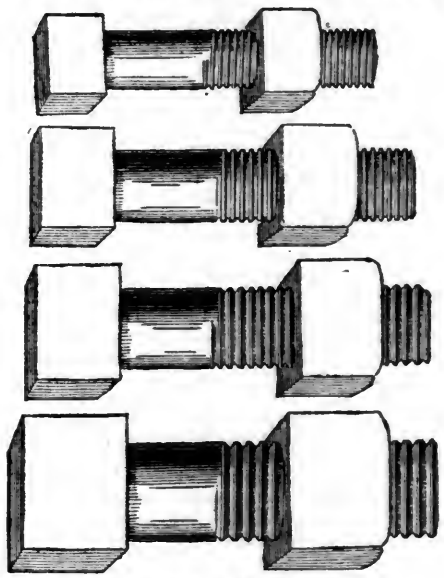
WHITE'S WOODEN SUSPENSION BRIDGE.

A Model may be seen at the office of CHARLES T. GILBERT, *80 Broad St., N. Y.*

Length of span, anything short of 1,500 feet, with perfect safety for every kind of travel. The above cut represents one with roof, which however is not essential. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, proprietors,

Cambridgeport, Mass.,
Office next door to the Athenæum.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Slide Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

N. A. BARRETT, Agent,
75 State Street, Boston.

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,
6m*14 75 Broad st., New York.

RAILROAD CAR AND COACH TRIMMINGS.

Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS

HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles. Gold and Maroon do.
Gold and Blue " " Brown "
Silk and Wool " of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR

Of every description and quality.

New York, 1850. 1y16

Railroad Spikes and Wrought Iron Fastenings.

THE TROY IRON AND NAIL FACTORY, exclusive owner of all Henry Burden's Patented Machinery *for making Spikes*, have facilities for manufacturing large quantities upon short notice, and of a quality unsurpassed.

Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad fastenings, also made to order. A full assortment of Ship and Boat Spikes always on hand.

All orders addressed to the Agent at the Factory will receive immediate attention.

P. A. BURDEN, *Agent*,
Troy Iron and Nail Factory, Troy, N. Y.

SALE OF MORTGAGE BONDS.
OF THE
Lawrenceburgh and Upper Mississippi Railroad Co.

THIS COMPANY OFFERS FOR SALE FIVE HUNDRED THOUSAND DOLLARS of their seven per cent. First Mortgage Bonds, with Interest Coupons annexed.

These bonds are in sums of $1000 each, payable 1st March, 1866, with interest on the 1st days of March and September, at the office of the Ohio Insurance Life and Trust Company in the city of New York, where the principal is always payable. They are convertible into the stock of the Company at par, at any time within five years from their date, and are secured by a first mortgage on the entire road, its franchises and equipments, by deed of trust to George S. Coe, of the city of New York.—This being the first and only lien upon the road, and this being the entire sum authorized to be issued by the mortgage.

The road extends from the road to run from Cincinnati to St. Louis, at Lawrenceburgh to Indianapolis, the Capitol of the State of Indiana, a distance of 90½ miles, and will, when completed, with the twenty miles of the road aforesaid, between Lawrenceburgh and Cincinnati, form the nearest and most direct line from Indianapolis to Cincinnati.

It passes through several important towns and over a most fertile and well improved country, and by means of railroad connections made and making at Shelbyville and Indianapolis, this line will be placed in communication with fully one half of Indiana, forming the best, and for much of the country, the only avenue of travel and trade to Cincinnati.

Seven railroads are made or making to Indianapolis, the most of which will be important feeders to this Cincinnati road—three railroads are made to Shelbyville, the business of which must naturally seek an outlet over this road.

The entire line is under contract, about 20 miles is now ready for the iron—the grade will be prepared to receive the superstructure as far as Shelbyville, 63 miles, this fall, which place is already connected by railroad with Indianapolis, and the contracts for the road complete to Indianapolis expire on the 1st October, 1853.

The rails for the entire line, 9,200 tons, are purchased, 1200 tons are on the line, and are now being laid down; 1000 tons will be forwarded from this port immediately; 4,200 tons are ready for shipment in Wales, and the residue is to be delivered in New Orleans next winter.

The total cost, with rolling stock and equipments, ready for business, is $1,250,000; $800,000 of stock has been subscribed and the largest portion of it paid in and expended. This mortgage provides for only $500,000, and is the only one intended to be given, as with it the means of the Company are ample for the entire work, and the lien thus created only amounts to $5,500 per mile.

Indiana is now the fifth State in the Union, and is fast advancing in wealth and population. Indianapolis, her seat of government, is likely to be the largest inland city in the west. There is being concentrated at it a net work of railroads, which, with connections, will penetrate every part of the State. It must be evident that the road which shall form the nearest and best connection with this system of public works, and Cincinnati, the great Emporium of the West, must become an important trunk line, and amply repay the expenditure upon its construction.

In addition to the mortgage the directors and principal stockholders of this road have deposited with the Trustee their personal guarantee to the holders of these bonds for the punctual payment of the interest thereon until the road is completed. Proper certificates and references are given, showing the entire ability of those parties to fulfil their engagements.

Sealed Proposals for any amount of these bonds, not less than $1,000, will be received until Saturday, the 22d of May next, at 3 o'clock P. M. Proposals to be directed to Messrs. DE LAUNAY, ISELIN & CLARKE. No. 63 Wall street, and endorsed "Proposals for Lawrenceburgh and Upper Mississippi Railroad Bonds."

Fifteen per cent of the purchase money to be paid on accepting the bids, the remainder in equal monthly instalments of 15 per cent each. The takers of the bonds to be at liberty to pay at any time in full. Interest on the bonds to run from date of payments.

The above $500,000 bonds will be sold absolutely to the highest bidder.

Pamphlets and Maps, and any further information relating to these securities, can be had by application to

DE LAUNAY, ISELIN & CLARKE,
63 Wall st.

Great Western Railroad,
CANADA WEST.

SEALED TENDERS, endorsed "TENDERS FOR CARS," will be received until Nine o'clock A. M., WEDNESDAY, May 26th, for furnishing the following CARS for the Great Western Railroad Company, to wit:—

25 Eight Wheel Passenger Cars,
4 Eight Wheel Express and Mail Cars,
8 Eight Wheel Baggage Cars,
20 Eight Wheel Emigrant Cars,
100 Eight Wheel Platform Cars,
150 Eight Wheel House Freight Cars,
100 Four Wheel Gravel Cars,
25 Four Wheel Repair Cars,
15 Hand Cars.

The above Cars are to be manufactured in the City of Hamilton, in buildings erected for the purpose, by the Railroad Company, and are to be completed on or before the First day of July, 1853. A portion of the same are to be completed by the First day of October, 1852.

Plans and Specifications will be ready for examination on and after the Eighteenth day of May next. Plans of the buildings can be seen at the Office of the Engineer.

The Contractor will be required to rent the buildings of the Company, and to furnish all of the requisite machinery, except the Engine and main line of shafting, which will be provided and put up by the company.

Information will be furnished by mail to parties wishing to tender.

The gauge of the road will be five feet six inches.

The Directors reserve the right to accept or reject tenders, as they may consider for the interest of the company.

R. G. BENEDICT,
Chief Engineer, G. W. R. R.

Office of the Great Western R. R.,
Hamilton, April 20th, 1852.

FILES.

THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make.

WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms.

RICHARD MAKIN,
April 22, 1852. 4 New st., New York.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch.

WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the nighly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

To Contractors.

PROPOSALS for the construction of the Syracuse and Binghamton Railroad complete, in conformity to a plan and specification which may be seen at the Office of the Engineer, in Syracuse, on and after May 5th, will be received at the Office of the Secretary, in Syracuse, until the 15th day of May next. Payment for the work to be made in cash, and the stock and bonds of the Company.—Proposals to specify the proportion of each, and may be made for the whole or a portion of the work.

A. H. HOVEY, Secretary.
Syracuse, April 15, 1852.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Ca: Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Obligo us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
29 Central Wharf.

Boston, June 1, 1851.

Bowling Tire Bars.

40 Best Flange Bars 5½x2 inches, 11 feet long.
40 " 5½x2 " 7 feet 8 in. long.
40 " Flat " 6x2 " 11 feet long.
40 " 6x2 " 7 feet 8 in. long.

Now in store and for sale by

RAYMOND & FULLERTON,
45 Cliff street.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River.....	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian...	53 "
Sixth	"	"	Bloomington to the Illinois River....	60 "
Eighth	"	"	from Freeport to Dubuque.....	67 "
Ninth	"	"	Chicago to Kankakee river.....	55 "
Tenth	"	"	Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

1852. 1852.

PEOPLE'S OSWEGO LINE, New York and Oswego,

ARE prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.
LEWIS & BEARDSLEY, Oswego.
JAMES W. CAMPBELL, New York.

AGENTS.
James W. Campbell, 111 Broad st., New York.
W. H. Clark, 60 Quay st.. Albany.
Lewis & Beardsley, Oswego.
Smith & Hunt, Toledo, Ohio.
C. W. Bissell, Detroit, Mich.
C. Walker & Son, Chicago, Ill.
H. H. Hurlbut, Western States.
May 15, 185

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852. 1m

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.

March 23 tf. GORDON McKAY, Agent

CHILLED RAILROAD WHEELS.—THE UNdersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the ubs of all kinds of wheels may be made whole—that l., without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St., below 13th,
Philadelphia, Pa.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

S. CULBERTSON & CO.,

12 BROADWAY, NEW YORK.

D. N. Pickering,

BOSTON, MASS,

PROPRIETORS AND MANUFACTURERS OF

DEVLAN'S PATENT LUBRICATING

OIL,

Equally applicable to light and heavy Bearings, Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no GUM upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent. in cost.

PRICE $1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

—

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent. compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

—

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steam ships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

SIRS,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

—

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

—

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, ahowing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,
President Phila. & Reading Railroad Co.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

—

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

—

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 21] SATURDAY, MAY 22, 1852. [WHOLE No. 840, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Georgia Railroad....321
Collins' Line of Steamers, Speech of Mr. Seward....322
Cincinnati, Hillsboro' and Parkersburgh Road.325
Junction Railroad....325
Indianapolis and Bellefontaine Railroad...326, 328
Railroad in Tennessee....326
Pennsylvania Coal Trade....327
Buffalo and Brantford Railroad....328
Great Western Railroad....328
Stock and Money Market....328
Cincinnati and Marietta Railroad....330
New Orleans and Jackson Railroad....330
Influence of Railroads upon the Value of Property....330
Railroad from Columbus to Opelika....331
Ogdensburgh Railroad....331
Railroads in Georgia....331
Importations of Iron for 1851....331
Lehigh Coal Company....331
Ohio and Pennsylvania Railroad....332

American Railroad Journal.

Saturday, May 22, 1852.

Georgia.

ANNUAL REPORT OF THE DIRECTORS OF THE GEORGIA RAILROAD AND BANKING COMPANY TO THE STOCKHOLDERS.

As appears by the accompanying official statements, the gross earnings of the road department, for the year ending 31st March last were. $795,811 18
And the expenses of same department. 355,507 54

Leaving net profits.... 440,303 64

The income of the company from all sources may be stated thus:

Gross income from road....	$795,811 18	
" " bank....	63,661 27	
Total income from road and bank....		859,472 45
Expenses of road management....	355,507 54	
Expenses of bank, including taxes, agents, com., etc...	20 185 43	
Interest on bonds....	52,691 55	
		428,384 52
Net profits from road and bank....		431,087 93
The usual dividends of $3 50 per share half yearly, in October and April, have been declared, say 7 per cent on capital stock		280,000 00
Leaving applicable to other purposes.		$151,087 93

It will be perceived that the expenses of the road have been high, compared with former years. This increase has been mainly owing to a concurrence of a heavy increase in the price of labor, materials and provisions—with an increased demand for them. The extension of the road beyond Madison having been made in 1845 and '46, the timber has been rapidly decaying for the last two years, and for the last year required a heavy force, and a large quantity of materials to keep the road in a safe condition, and in a proper state of adjustment. It will also be seen, by the report of the superintendent, that heavy losses have been sustained by fire, partly the work of an incendiary, and partly accidental. The loss occasioned, however, by the burning of the six cars and their contents beyond Stone Mountain, has not all been paid, and will mostly go into the expenses of the ensuing year.

The expenditures for objects properly chargeable to "road and outfit," (increasing the fixed capital of the company) have been large. Some of these might have been postponed for a short time, but most of them had become necessary, by the increase of business on the State road, and the extension of the Atlanta and Lagrange road, and others were pressing and indispensable. Of the former description of expenditures, may be classed the large addition to our outfit of cars, the improvement of the Cotton Yard, and renewal and increase of tracks at Augusta; and of the latter, the expensive culverts and embankments to replace wooden bridges at and beyond the Alcovy river. These bridges were, when constructed, a temporary expedient to expedite the work, and were not intended to be renewed, and the commencement of the work of filling them up could not longer be delayed with safety to the business of the road.

Although these expenditures have borne heavily upon the finances of the company, the stockholders will be pleased to learn, *that the outfit of the company is now complete for the first time since the road has been in operation.* No further expenditures need be charged to that account, and on the completion of the embankments to replace the temporary wooden bridges, the construction account may be forever closed. The road is now all laid with heavy iron, and is in fine order, and all its machinery and appliances are in excellent condition. The directors are also pleased to learn that the contracts for labor and materials for the ensuing year, at reduced rates, will insure a considerable reduction in the ordinary expenses of management. Under this condition of affairs, no reason is perceived why the surplus profits of the company, after the payment of dividends, may not be steadily applied to a reduction of its bonded debt.

A large balance is still due to this company by the Western and Atlantic railroad. This amount is due mainly for cash received for freight bills, and for work done in the machine shops and car factory. The State, until recently, having failed to make any appropriation for an outfit, or the reconstruction of the old bridges, these indulgences became absolutely necessary, or the operations of that road must have been stopped. The State has now made a handsome appropriation for that road and its debts, and the directors hope for an early liquidation of this debt. As that road is also rapidly improving, by the substitution of heavy iron for the old flat bar, and considerable additions having been made to the engine power and cars, and much greater additions ordered, it is hoped its business may hereafter be conducted with more satisfaction to the public, and the connecting routes. The directors regret to state, however, that our income has suffered much the present year, and is still suffering, from a deficiency of engine power on the State road, to do the business promptly that is offered. The distress of shippers forces them to take any route that is open to them.

In 1849, when an assessment of upwards of half a million was made upon the old stock, and the stock increased to $4 000,000, estimates were made to show that with that assistance, the bonded debt of the company could be extinguished as it would become due, and some surprise—perhaps dissatisfaction—has been expressed by stockholders, that the debt, since that time, has been somewhat increased. The directors respectfully suggest, that this disappointment is without a due consideration of the subject. *Every element in that calculation has been more than realized.* The net income has been uniformly beyond the estimate. The estimate however, was based *upon the ordinary operations* of the company. Extraordinary demands had to be met by extraordinary means. Though the amount was uncertain, the stockholders were not unadvised that extraordinary expenditures would be required. The re-laying the road with heavy iron, to Union Point, had already commenced, and about $650,000 beyond the then cost of the road, was left open in the amount of capital fixed, as the sum that would probably be required to complete the road, and furnish it with a suitable outfit.

Without going into details, the directors may refer to a few items, to indicate the principal uses made of the surplus profits, and the sums raised and appropriated since 1849:

For road and outfit, including heavy iron to Union Point....	$740.251 59
Atlanta and Lagrange railroad stock.	279,700 00
Nashville and Chattanooga railroad stock	210,000 00
Georgia and East Tennessee railroad stock	10.000 00
	$1,259,951 59

This amount, it will be seen, exceeds the entire bonded debt of the company.

The first item is a permanent addition to the capital of the company, and the others, it is hoped, will not prove an unprofitable investment, besides the advantages expected to our company from the construction of these important works.

It will be perceived, by reference to the superintendent's report, that no branch of our income has fallen off, as compared with last year, except that derived from 'through travel.' This decline may perhaps be attributed to several causes—partly to a change in the commercial prosperity of the country—partly to the large number of travellers taken direct by the steamers from New Orleans to New York, and *mainly* to the great improvement in the northern routes, which now connect Lake Erie with the Ohio below the most usual obstructions to the navigation. Some further diversions of this travel may be expected, from the completion of other routes in progress, particularly that through Virginia. But this loss, it is hoped, will be more than compensated by the increase of freight and business travel that will follow the completion of the Atlanta and Lagrange, and Nashville and Chattanooga roads. Both these roads are making satisfactory progress. The former is now completed about eight miles beyond Newnan, and will probably reach Lagrange early in the ensuing year; and the latter will shortly reach the tunnel, and, it is understood, will connect with the Tennessee river before December next.

Confidence in the future value of our stock has been somewhat weakened by the improvements of other routes competing with us for the trade of the west and southwest. It is true that we have some difficulties to contend with, and some dangers to apprehend. On the completion of the Virginia route, we shall have unobstructed communications with the seaboard both north and south of us.—With equal advantages, we should have but little to apprehend from the completion of these routes. Doubtless they would obtain fair portions of trade from the field of competition, but our location would still make our route the principal thoroughfare for the immense trade that will concentrate at Chattanooga, on the completion of the Nashville and Chattanooga, and Memphis and Charleston roads. Though the directors have no immediate expectation of a continuous track, they have strong hopes of a great improvement of our route by the location of the depot of the South Carolina road in Augusta. Though this measure would still leave us some disadvantages to contend with, in *through freights*, it is believed that it would give to Augusta such a commanding position, as an interior market, as to counterbalance these disadvantages to a very considerable extent.

The projected route through the Rabun Gap, connecting Charleston directly with Chattanooga, has also had its influence upon our stock. Should such a route be constructed, it would evidently divert a large trade from our Georgia improvements. Many, however, have doubted the construction of this road. It would evidently be an expensive work, and if satisfactory arrangements be made at Augusta, there can be no adequate inducement to build it. There can be no great saving of distance between Charleston and Chattanooga, even on the shortest contemplated route, and the Georgia route would doubtless be favored with lower grades, and possess important advantages in the transportation of freights. In no event do the directors apprehend any serious reduction of the receipts of the company below the revenue of the past year.

The trains, during the past year, have run with uncommon regularity and freedom from the more usual accidents. Not a single *run-off*, or other accident, has happened from any defect in the road, and but *one* of trifling consequence by the breaking of an axle. The effects of this good fortune are seen in the diminished cost of "repairs of engines," and "cars to replace others worn out," both of which are much below the same items for the last year.

All of which is respectfully submitted,

JOHN P. KING,
President.

May, 1852.

The Superintendent's Report states that the number of *through* passengers have been 6,861, against 7,028 for 1850. The increase of local travel has been equal to 24 per cent. The total number of miles run the past year have been 460,461. Cost per mile run, 72·2. Ratio of expenses to receipts, 44. Cost of repairs per mile the past year, 620.—Receipts per mile run, 1·73. Cost per passenger per mile, 1 922. Cost per ton of freight per mile, 1·676.

The capital stock of the company is $4,000,000. Bonded debt, $913,798 50. Of the debt, $864,885 91 have been for liabilities assumed for other companies, which are believed to be good investments.

The whole length of road and branches is 213 miles. The company have regularly declared an annual seven per cent dividend for a series of years past, and the road is one of the most successful and best managed concerns of the kind in the United States.

American Steam Navigation.

SPEECH OF HON. WILLIAM H. SEWARD, UPON THE COLLINS' STEAMER BILL, IN SENATE OF THE UNITED STATES, APRIL 27, 1852.

Mr. President:—What will Congress do—what has Congress done—for the Collins' steamers?—These are questions which meet every visitor returning from the Capital on his arrival at New York, and which every traveller from America encounters, on change in Liverpool and London, and in the Courts of Paris and St. Petersburg. There is reason enough for all this curiosity and interest among the merchants and statesmen of the two continents.

Mr. President, under a contract with the United States, made on the 19th of April, 1849, between E. K. Collins, James Brown, and Stewart Brown, merchants of New York, and the United States, those persons now prosecute, between the ports of New York and Liverpool, forty voyages across the ocean, or twenty outward and inward voyages, annually, in steamships, carrying freights and passengers on their own account, and also public mails on account of the United States, and receive from the Treasury, as a compensation for that service, three hundred and eighty-five thousand dollars a year, which is equivalent to somewhat more than $19,000 for each outward and return passage. The committee on Finance propose an amendment to the annual Deficiency Bill, the effect of which is to increase the number of mails and voyages from twenty to twenty-six, and the compensation from $19,000 to $33,000 for each voyage.

OUGHT THIS MEASURE TO BE ADOPTED.

I assume, for the present, that the existing enterprise is to be perseveringly sustained. In that view the question arises—

Whether the proposed increase of mail service is expedient.

When this line was established, the British Cunard steamers, consisting of seven vessels, were making semi-monthly voyages and carrying semi-monthly mails between the same ports during the eight temperate months, and monthly mails during the four other months; and thus they had a monopoly of steam ocean postage between the two countries. We authorized the Collins line to carry just the same number of mails, alternating with the Cunard steamers; and so we broke up the monopoly, and divided the postages of the route equally with Great Britain. So far, all was right and well. But recently the Cunard steamers have continued their semi-monthly mails throughout the whole year, while ours were limited to the eight temperate months; and so the equality of postage revenues has been subverted, and the early British monopoly has been partially restored. By the proposed increase of mails we shall exactly alternate again; and on every day that an American or European mail steam vessel shall leave New York, one of the other line will leave the opposite port; and so the monopoly will again be broken, and the complete equality of postage revenues will be re-established. We must do just this, or relinquish in an important degree the great postal object of the enterprise. The Postmaster General and the Secretary of the Navy, and the Senate's committees on the Post Office, on Naval affairs, and on Finance, agree that the service must be thus increased, if it is to be at all continued. The increase, then, is not merely expedient, but even necessary and indispensable.

Assuming now that the service is to be increased, the question comes up—

Is the increase of compensation from $19,000 *to* $33,000 *per voyage just and reasonable?*

It is just and reasonable, if *necessary*. It is clear that some increase is necessary. The proprietors decline to make the six new voyages for nothing, and even to make them for $19,000 a voyage. We cannot oblige the contractors to make them for that compensation, nor even to make them for any compensation, for they are beyond the contract. No one else offers to make them on those terms, or, indeed, on any terms. We must therefore apply to Mr. Collins and his associates to enlarge the contract. But opening the contract for enlargement opens it for revision. They consent to enlarge, but they equally appeal to us to remodel it; and they show for reasons, that while the average cost of each voyage is..... $65,216 64
The average receipts are only..... 48,286·85

And that they incur an average loss of.. 16,928·79

And an aggregate loss annually of....$338,574·40

They further show that a capital of three millions invested has paid no dividends, and been reduced by inevitable losses to a little more than two and a half millions; that their stock is sold in Wall street at fifty cents on a dollar; and that, even if they would, yet they cannot dispatch another ship or mail after the 15th of May next. Something must be allowed, if not for profits, at least for renovation; and so the actual loss on each voyage being in round numbers $17,000, it is quite certain that an increase of not less than $19,000 is necessary to keep the steamers in vigorous and sure operation.

All questions of the fairness of this showing are precluded by the offer of the contractors to relinquish the enterprise to the United States, or to any assignee indicated by them, after the contract shall have been remodelled, and by the neglect of any other party to propose for a new contract, even on the terms thus recommended.

So, the increase of compensation solicited is just and reasonable, and is, moreover, like the increase of the mail service, necessary and indispensable.

Now, sir, we have arrived at the very question of the whole question. We must do just what is thus proposed, or relinquish the contract altogether.

* * * * * * * *

While we cannot, without wounding the national sensibilities and impairing the national character, abandon any great enterprise, it is equally true that indecision is among the worst vices of the statesman, and that vacillation in the conduct of public affairs is fruitful of national demoralization, and indicative of certain national decline. Persistence, when practicable, invigorates national energies, discourages foreign rivalry, and prevents foreign insult and aggression. Compare France—enlightened, vigorous, and energetic, but unstable as water—with England, cautious, constant, and persevering, or even with Russia, unimpassioned and cold as her climate, yet with her eyes unswervingly and forever fixed on Stamboul, and you have an apt illustration of my moral. Nevertheless, these general observations are inconclusive, and I grapple therefore cheerfully with this great question.

If this enterprise must be abandoned, it must be for one of two reasons, namely; either because—

1. *It was erroneously conceived; or because.* 2. *It has been rendered unnecessary, unwise, or impracticable, by subsequent events and circumstances.*

1. *Was it erroneously conceived?* To determine this question, we need to ascend some high eminence of time, from which we can look back along the past, and pierce, as far as is allowed to human vision, through the clouds and darkness that rest upon the future. Come, then, Senators, and suppose that you stand with me in the galleries of St. Stephen's Chapel, on a day so long gone by as the 22d of March, 1775. A mighty debate has been going on here in this august Legislature of the British Empire. Insurrection against commercial restriction has broken out in the distant American colonies; a seditious assembly in Philadelphia has organized it; and a brave, patient, unimpassioned, and not untried, soldier of Virginia, lies, with hastily-gathered and irregular levies, on the heights of Dorchester, waiting the coming out of the Brit-

ish army from Boston. The question whether Great Britain shall strike, or concede and conciliate, has just been debated and decided. Concession has been denied. A silence, brief but intense, is broken by the often fierce and violent, but now measured and solemn, utterance of Burke: "My counsel has been rejected. You have determined to trample upon and extinguish a people who have, in the course of a single life, added to England as much as she had acquired by a progressive increase of improvement, brought on, by varieties of civilizing conquests and civilizing settlements, in a series of seventeen hundred years. A vision has passed before my eyes; the spirit of prophecy is upon me. Listen, now, to a revelation of the consequences which shall follow your maudened decision. Henceforth there shall be division, separation, and eternal conflict in alternating war and peace between you and the child you have oppressed, which has inherited all your indomitable love of liberty and all your insatiable passion for power. Though still in the gristle, and not yet hardened into the bone of manhood, America will, within the short period of sixteen months, cast off your dominion and defy your utmost persecution. Perfecting the institutions you have not yet suffered to ripen, she will establish a republic, the first confederate representative commonwealth, which shall in time become the admiration and envy of the world. France, the heridetary rival whom, only twenty years ago, with the aid of your own colonies, you despoiled of her North American possessions, though they had been strengthened by the genius of Richelieu, will take sweet revenge in aiding the emancipating of those very colonies, and thus dismembering your empire. You will strike her in vain with one hand, while you stretch forth the other to reduce your colonies with equal discomfiure. And you, even you, most infatuated yet most loyal Prince, will within eight years sign a treaty of peace with the royal Bourbon, and of independance with republican America! With fraud, corruption, fire and sword, you will compensate England with conquests in the East, and within half a century they will surrouud the world, and the British flag shall wave over provinces covering five millions of square miles, and containing one-sixth of the inhabitants of the globe. Nor shall you lose your retaliation upon your ancient enemy; for she, in the mean time, imbibing and intoxicated by the spirit of revolution in her American affiliation, shall overthrow all authority, human and divine, and exhausting herself by twenty-five years of carnage and desolation throughout continental Europe, shall at last succumb to your victorious arms, and relapse, after ineffectual struggles, into the embraces of an inglorious military despotism. Yet, notwithstanding all these unsurpassed conquests and triumphs, shall you enjoy no certain or complete dominion. For, on the other hand, wild beasts and savage men and uncouth manners shall all disappear on the American continent; and the three millions whom you now despise, gathering to themselves increase from every European nation and island, will, within seventy-five years, spread themselves over field and forest, prairie and mountain, until, in your way to your provinces in the Bahamas, they shall meet you on the shores of the Gulf of Mexico, and on your return from the Eastern Indies they will salute you from the Eastern coast of the Pacific ocean. In the mean time, with genius developed by the influence of freedom, and with vigor called forth and disciplined in the subjugation of the forest and trained and perfected in the mysteries of ship-building and navigation, by the hardy exercise of the whale fisheries under either pole, they will, in all European conflicts, with keen sagacity, assume the relation of neutrals, and thus grasp the prize of Atlantic commerce dropped into their hands by fierce belligerents. In the midst of your studies and experiments in hydraulics, steam, and electricity, they will seize the unpracticed and even incomplete inventions, and cover their rivers with steamboats, and connect and bind together their widely-separated Territories with canals, railroads, and telegraphs. When a long interval of peace shall have come, your merchants, combining a vast capital, will regain and hold for a time the carrying trade, by substituting capacious, boyant, and fleet packet-ships, departing and arriving with exact punctuality; but the Americans, quickly borrowing the device, and improving on your skill, will reconquer their commerce. You will then rouse all the enterprise of your merchants, and all the spirit of your Government, and wresting the new and mighty power of steam from the hands of your inveterate rival, will apply it to ocean navigation, and laying hold of the commercial and social correspondence between the two continents, increasing as the nations rise to higher civilization and come into more close and intimate relations, as the basis of postal revenue, you will thus restore your lost monopoly on the Atlantic, and enjoy it unmolested through a period of ten years. During that season of triumph, you will mature and perfect all the arrangements for extending this mighty device of power and revenue, so as to connect every island of the seas and every part of every continent with your capital. But just at this moment your emulous rival will appear with steamships still more capacious, boyant, and fleet, than your own, in your harbors, and at once subverting your Atlantic monopoly, will give earnest of her vigorous renewal of the endless contest for supremacy of all the seas. When you think her expelled from the ocean, her flag will be seen in your ports, covering her charities contributed to relieve your population, stricken by famine; and while you stand hesitating whether to declare between republicanism and absolute power in continental Europe, her ambassadors will be seen waiting on every battle-field to salute the triumphs of liberty; and when that cause shall be overthrown, the same constant flag shall be seen even in the Straits of the Dardanelles, receiving with ovations due to conquerors the temporarily overthrown champions of freedom. Look towards Africa, there you see American colonies lifting her up from her long night of barbarism into the broad light of liberty and civilization. Look to the East, you see American missionaries bringing the people of the Sandwich Islands into the family of nations, and American armaments peacefully seeking yet firmly demanding the rights of humanity in Japan. Look to the Equator, there are American engineers opening passages by canals and railroads across the isthmus which divides the two oceans. And last of all, look Northward, and you behold American sailors penetrating the continent of ice in search of your own daring and lost navigators."

Sir, this stupendous vision has become real. All this momentous prophecy has come to pass. The man yet lives who has seen both the end and the beginning of its fulfilment. It is History. And that history shows that this enterprise of American Atlantic steam navigation was wisely and even necessarily undertaken, to maintain our present commercial independence, and the contest for the ultimate empire of the ocean. Only a word shall express the importance of these objects. International postal communication and foreign commerce are as important as domestic mails and traffic. Equality with other nations in respect to those interests is as important as freedom from restriction upon them ourselves. Except Rome—which substituted conquests and spoilation for commerce—no nation was ever highly prosperous, really great, or even truly independent, whose foreign communications and traffic were conducted by other States; while Tyre, and Egypt, and Venice, and the Netherlands, and Great Britaon, successively becoming the merchants, became thereby the masters of the world.

But the learned and honorable Chairman of the Committee on Finance raises a question on a warlike feature of the enterprise, which has not yet come under our notice, Departing, after the most profound consideration, from the ancient naval policy which separated the National Mercantile Marine, Great Briain constructs all the steamships employed in her postal service; so that they are "good, substantial, and efficient—of such model and strength as to be fit and able to carry guns of the largest caliber used on board of her Majesty's steam-vessels of war," and they are subject to be taken in emergences by the Government, at cost, for the public naval service. And in this way Great Britain is rapidly and steadily building up a new and peculiar naval force, which will always be in complete condition and ready for effective use. The same principle was adopted in the contract with Collins and his associates; and the evidence is complete that it has been faithfully and fully carried out. The honorable Senator now disputes the soundness of the principle itself, and insists that merchant steam-vessels cannot be constructed so as to be practically useful for warlike purposes. I reply, first, that having, on such careful examination and with such weighty example, adopted the principle, we could not now wisely abandon it, without proof, by practical trial, long I hope to be delayed, that it is erroneous. Secondly; No ship of war, however constructed, is adopted to all the exigencies of naval service, while these steamships are certainly adapted to some of them. Commodore Perry, on the 15th of February, 1852, reports to the Secretary of the Navy that "these steamships (of the Collins line) may be converted, at an expense of $20,000 each, into war-steamers of the first class; and that each of them could carry four 10-inch Paixhan guns on pivots, fore and aft, of the weight of those in the model ship Mississippi, and ten 8-inch Paixhan guns on the sides, and that this armament would not incommode the vessel; and that, in the general operations of a maritime war, they would render good service; and especially that, from their great speed, they would be useful as despatch vessels, and for the transportation of troops, being always capable of attack and defense, and of overhauling and escaping from an enemy."

The Secretary of War reports to the Senate, on the 20th of March, 1852, that "the readiness of the steamers to be used at the shortest notice, their capacity of being used as transports for goods and munitions of war, and their celerity of motion, enabling them to overhaul merchantmen, and at the same time escape cruisers, would render them terrible as guerrillas of the ocean."

Thirdly, Great Britain has already more than two hundred and fifty steamers, armed and capable of armament. What would be our situation, in the emergency of a war, if we were unprovided with a similar force for defense and aggression?

But, fourthly. The warlike adaptation of the steamers is a collateral and contingent feature of the enterprise, which will stand safely on the accomplishment of its postal and mercantile ends, even if that feature should prove valueless. These steamers, at least, are built and in use, and accomplish their important civic purposes. We may correct our system, not in this, but in future operations.

Thus, Mr. President it appears that the enterprise was wisely adopted. And now I pray you take notice that *it has not been rendered unwise or impracticable by any change of circumstances or of public interests.* Every thing in these respects remains as it was, except that we have increased ability and increased need to put it forth in the struggle for the freedom of commerce and the command of the seas.

Nor does the expense complained of affect the question of perseverence. The excess of expense above the estimates results from the wise policy of building larger and better ships than were at first contemplated, whereby in achievement we have not merely equalled but surpassed Great Britain.

Nor is the expense of the American steamers disproportionate to that of the British. Although we all know that for a time it might well be so, because the rate of interest, and the cost of labor and of skill, are higher on this side of the Atlantic than on the other, and because higher insurance must be paid on more valuable vessels. Nevertheless, the Cunard steamers, seven in number, have an aggregate capacity of 12,252 tons, averaging 1,750 tons for each, and they cross the Atlantic eighty-five times annually; thus the whole tonnage worked by them across the Atlantic is 148, 750 tons.

The Collins steamers have an aggregate tonnage of 13,700, averaging 3,425 tons for each; and the aggregate tonnage worked by them across the ocean is 178,100 tons: the cost to the Government is $850,000, not exceeding, in proportion to their work, the expense of the Cunard line. At the same time, they excel the Cunard steamers in speed. The shortest westward passage of the Cunard steamers was ten days and twenty-two hours, and the shortest eastward passage ten days and twelve hours; while the quickest westward pas-

sage of the Collins steamers was nine days and twelve hours, and the quickest eastward passage was nine days and eight hours.

Nor is the expense disproportioned to the benefits received. The first effect of the enterprise was a postal treaty with Great Britain; and under that treaty, in lieu of receiving no steam ocean postages, as before, we now receive postages amounting in round numbers to $400,000; and this revenue must swell, and is actually swelling at the rate of $200,000 annually. Thus, in the first place, it is clear that in two years the postal revenue alone will defray the expense; and, secondly, there lies very near to us in the future, the great boon of cheap ocean postage.

And now, while we maintain postal communication to every part of our country, at no matter how great expense, provided that the revenue of the whole system shall equal the cost of all its parts, I desire to know why we should depart from a principle so enlightened in foreign postal conventions, which are auxillary to commerce, to immigration, and to political influence and power. But if we change the terms of the question, it will be more easily solved. What, then, shall we lose by arresting the enterprise? We shall lose all the postages on steam mails, and all the hopes of cheap postage, and all the profits on passengers and freight transported by steam. It is not easy to estimate these losses; but we have some knowledge of the profits of Great Britain, arising from the monopoly she enjoyed before our competition. The duties received into the Treasury from the Cunard steamers rose in six years from $73,809 to $1,054,731. She paid the steamers for carrying the mails six years $2,550,000, and received postages in return amounting at $7,836,800; giving her a clear profit, on the postal revenue, of $5,286,800, or little less than a million a year. We have gained at least one-half of what benefits Great Britain has lost by reason of our enterprise. Let that monopoly be restored and re-established, we shall then lose all that gain, and with it we shall see the postages, and freights, and rates of passage, raised to their ancient standards, and adjusted equally to injure our prosperity and promote the interests and gratify the caprice of Great Britain. What shall we then look for but decline of trade and industry, with a long train of commercial embarrassments and national humiliations?

At most, we can save by abandoning this enterprise only about $300,000 in two years. Could we not now easily retrench to that extent in some other quarter? We can save as much, and more, by laying up one of our frigates in ordinary during the same time, and twice as much by burning it down to the water's edge. No one would advise this, and yet it would be far less disastrous than the retrenchment now proposed.

* * * * * * * *

It is said that the enterprise is a departure from the principle of free trade. Sir, it is a departure from that principle, but not a divergence from the fixed and ancient policy of the country. Widely, and I think unwisely, as we have differed among ourselves about the policy of protecting agriculture and manufactures, to the hindrance of the growth of commerce itself, yet we have, from first to last, uncompromisingly and unwaveringly adhered to the policy of protecting navigation. We inherited it from England, whose navigation act passed by the Long Parliament, and co-operating with her encouragement of manufactures, broke the monopoly of Holland, and secured to the British islands the commerce of the world and the command of the ocean. If this measure enhances protection of our navigation, it is because British largesses enhance the protection of her navigation. Let her revert to her old measure of protection, and we can at once safely return to ours.

The honorable Senator from Virginia tells us that it is wise to give up now, because, the system being unprofitable, we shall be obliged to give up at last. But this is only a temporary contest, not yet fully decided, and growing in success. Collin's contract has eight years to run. Long before that time, Atlantic steam navigation will prove itself to be either self-sustaining or not self-sustaining. In either case, Great Britain will withdraw her patronage from her line, and we can then safely discontinue our contributions to our line.

The honorable Senator from Virginia seeks to divide us on this question, by presenting the claims of what he calls the poorer cities for a share in the benefits of this policy, now concentrated upon New York. I learn that a bill is near its third reading in the Legislature of the Old Dominion, having for its object to establish a line of first class steamships between Norfolk and Antwerp. Sir, I assure the honorable Senator that when a proposition shall come before us for material aid to the trade of any of our Atlantic cities, which shall at the same time be beneficent to the whole Union—whether that city be Boston, or Philadelphia, or Baltimore, or Norfolk, or Charleston, or New Orleans—I shall greet it with no reluctant hearing. But in the mean time the field of battle is chosen, not by us, but by the enemy; it is not a provincial contest for provincial objects, but it is a national one. We must meet our adversary on that field, not elsewhere; and we must meet him or surrender the whole nation's cause without a blow.

And now I pray honorable Senators to consider what it is that we are invited to surrender, It is no less than the proud commercial and political position we have gained by two wars with Great Britain, and by the vigorous and well-directed enterprise of our countrymen through a period now reaching to three-quarters of a century.

Next, I pray you to consider what position we must take after that surrender—the position of Mexico, of the Canadas, and of the South American States. Surely there is nothing attractive in such a change, in such a descent.

I conjure you to consider, moreover, that England, without waiting for, and, I am sure, without expecting, so inglorious a retreat on our part, is completing a vast web of ocean steam navigation, based on postage and commerce, that will connect all the European ports, all our own ports, all the South American ports, all the ports in the West Indies, all the ports of Asia and Oceanica, with her great commercial capital. Thus the world is to become a great commercial system, ramified by a thousand nerves projecting from the one head at London.—Yet, stupendous as the scheme is, our own merchants, conscious of equal capacity and equal resources, and relying on experience for success, stand here beseeching us to allow them to counteract its fulfilment, and ask of us facilities and aid equal to those yielded by the British Government to its citizens. While our commercial history is full of presages of a successful competition, Great Britain is sunk deep in debt. We are free from debt.—Great Britain is oppressed with armies and costly aristocratic institutions; industry among us is unfettered and free. But it is a contest depending not on armies, nor even on wealth, but chiefly on invention and industry. And how stands the national account in those respects? The cotton gin, the planing-machine, steam navigation, and electrical communication—these are old achievements.—England only a year ago invited the nations to bring their inventions and compare them together in a palace of iron and glass. In all the devices for the increase of luxury and indulgence, America was surpassed, not only by refined England and by chivalrous France, but even by semi-barbarian Russia. Not until after all the mortification which such a result necessarily produced, did the comparison of utilitarian inventions begin. Then our countrymen exhibited Dick's Anti-friction Press—a machine that moved a power greater by 240 tons than could be raised by the Brama Hydraulic Press, which, having been used by Sir John Stevenson in erecting the tubular bridge over the Straits of Menai, had been brought forward by the British artisans as a contrivance of unrivalled merit for the generation of direct power.

Next was submitted, on our behalf, the two inventions of St. John, the Variation Compass, which indicates the deflection of its own needle at any place, resulting from local causes; and the Velocimeter, which tells, at any time, the actual speed of the vessel bearing it, and its distance from the port of departure—inventions adopted at once by the Admiralty of Great Britain. Then, to say nothing of the ingeniously-constructed locks exhibited by Hobbs, which defied the skill of the British artisans, while he opened all theirs at pleasure, there was Bigelow's Power-loom, which has brought down ingrain and Brussels carpets within the reach of the British mechanic and farmer. While the American Plows took precedence of all others, McCormick's Reaper was acknowledged to be a contribution to the agriculture of England, surpassing in value the cost of the Crystal Palace. Nor were we dishonored in the Fine Arts, for a well-deserved meed was awarded to Hughes for his successful incorporation in marble of the ideal Oliver Twist; and the palm was conferred on Powers for his immortal statue of the Greek Slave. When these successes had turned away the tide of derision from our country, the yacht America entered the Thames. Skilful architects saw that she combined, in before unknown proportions, the elements of grace and motion, and her modest challenge was reluctantly accepted, and even then only for a tenth part of the prize she proposed. The trial was graced by the presence of the Queen and her Court, and watched with an interest created by national pride and ambition, and yet the triumph was complete.

In the very hour of this, of itself, conclusive demonstration of American superiority in utilitarian inventions, and in the art "that leads to nautical dominion," a further and irresistable confirmation was given by the arrival of American clippers from India, freighted at advanced rates with shipments, consigned by the agents of the East India company at Calcutta to their own warehouses in London.—Such and so recent are the proofs, that in the capital element of invention we are equal to the contest for the supremacy of the seas. When I consider them, and consider our resources, of which those of Pennsylvania, or of the valley of the Mississippi, or of California, alone exceed the entire native wealth of Great Britain; when I consider, moreover, our yet unelicited manufacturing capacity—our great population, already nearly equal to that of the British islands, and multiplying at a rate unknown in human progress by accessions from both of the old continents; when I consider the advantages of our geographical position, midway between them; and when I consider, above all, the expanding and elevating influence of freedom upon the genius of our people, I feel quite assured that their enterprise will be adequate to the glorious conflict, if it be only sustained by constancy and perseverence on the part of their Government. I do not know that we shall prevail in that conflict; but for myself, like the modest hero who was instructed to charge on the artillery at Niagara, I can say that we "will try;" and that when a difficulty occurs no greater than that which meets us now, my motto shall be the words of the dying commander of the Chesapeake—"Don't give up the ship."

Cincinnati, Hillsborough and Parkersburg Railway.

The surveys of the important link in the great chain of railway—laid down in the last Annual Report of the Baltimore and Ohio railroad company—and rapidly progressing under the personal supervision of Col. Ellwood Morris, the Chief Engineer.

The western party, under the direction of Samuel Linton, Esq., has advanced 20 or 25 miles west of this place; and the eastern party, under Nathaniel F. Jones, Esq., is now beyond Jackson, Ohio, coming east.

These gentleman (late of the Hempfield railroad) are both accomplished Engineers, and will unite their first line through Wilkesville, in Vinton county, Ohio, about the first of May.

The confidence of the Chief Engineer strengthens—as his acquaintance with the topography of the country becomes more minute—in the opinion that this line can be put through from here to Cincinnati, in about one hundred and seventy-five miles.

We are glad to announce the probability of this extremely favorable result, without exceeding the limits of grade and curvature, prescribed by Mr. Latrobe for the North Western Virginia railway, of which this important line is the legitimate continuation.

These examinations are daily confirming our long standing opinion, that Parkersburg is the only true point upon the Ohio, for the passage of the grand line from St. Louis to Baltimore.

The efforts of our enemies on both sides of the Ohio having failed to impart vitality to the Middle Island scheme, or even to alarm the friends of our

own line, we have only to continue our efforts in favor of this great through route to crown them with the most triumphant success.

In evidence of this we submit the following statement of the distances, from St. Louis to the sea coast at Baltimore, as now determined, or rendered probable by survey.

St. Louis to Cincinnati, (survey made) 325 miles.

Cincinnati to the Sea Coast.

Cincinati via Hillsboro' to Parkersburg, [surveys in progress]	175
Parkersburg to Three Forks, [surveys made,]	105
Three Forks to Baltimore, via the Knobly cut-off, [Railroad made, except the cut-off,]	270
	550
From St. Louis to the sea coast	875

We would like to see the line that beats this, from St. Louis to the sea.—*Parkersburgh Gazette*

Ohio.

Exhibit of the Junction Rail Road Company.—The most important railway communication in the United States, next to those which lie between the Atlantic cities, is that which connects New York with "the Great West.' The natural line for this immense buisness lies on the south shore of Lake Erie; passing through the town of Erie to Cleveland. From Cleveland, the line westward will pass through the cities of Sandusky, Toledo, and Chicago, to the Mississippi at Rock Island. At each important point extensions will be made to the south and southwest, all which will increase the operations of the main line; and it is not unreasonable to expect, that more than half the business of the Western States, which will come to New York by railway, will fall upon some portion of this channel of communication.

This whole line between New York and the Mississippi, a distance of 1131 miles, is now in the rapid course of construction by different corporations. The railway between the city of New York and the town of Erie is already finished. That portion between Toledo and Chicago will be fully opened for use within a few days. Between Erie and Cleveland, it is already half done, and will be finished in August. The parts least advanced are those between Cleveland and Toledo, and between Chicago and the Mississippi. Some judgement of the probable value of this series of railways may be formed, from the facts that the stock of the half finished road between Cleveland and Erie is already above par, and that of the Southern Michigan has recently been sold for $115.

As tributaries to this main branch may be enumerated the Cleveland, Columbus and Cincinati railroad, 260, miles long; the Mansfield, Newark, and Zanesville road, 140 miles long; the Mad River and Lake Erie road, and its connections with Cincinnati, 218 miles long; all which are finished and in productive use; and the connection of the latter with Indianapolis, which are far advanced towards completion. In Indiana and Illinois several similar connections already exist, and more are contemplated.

But the most important tributary to the main line, and perhaps the best unoccupied ground in the United States for railroad operations, is a diagonal route southwestward from Toledo to the valley of the Wabash by the towns of Maumee, Fort Wayne, Lafayette, Logansport, Peru, to Springfield in Illinois, passing through the most populous parts of Indiana and Illinois, and through a larger tract of land of the highest fertility, than can be found elsewhere in the United States. From thence, one branch will lead to Quincy, another to Alton and St. Louis. The Illinois portion of this road is already in progress; every legal obstacle has been removed and every legal facility given by the General Railroad Law, which the Legislature of Indiana has just passed, and local resources will be found upon the line, sufficient for all purposes, except the purchase of iron.

It is the intention of the directors of the Junction Railroad Company to place itself in the line, and to become a part of both these great channels of communication. This company received a perpetual charter from the Legislature of Ohio, in 1846, and was organized in 1850. By the charter, and by subsequent amendments, it was authorized to construct a railway from the city of Cleveland to the west line of the State of Ohio, with the power of constructing branches to any points within the counties through which the main line may pass It is privileged to put in operation any part of its line, or any branch, and no restrictions or forfeitures are imposed, except to organize within five years, and to construct twenty miles of its road within ten years afterward.

The Junction railroad received its name because it was intended to connect and form into a continuous line the terminating station of six different railways, viz.: three at Cleveland, (the Cleveland, Painsville, and Ashtabula R. R. Co., the Cleveland and Pittsburg R. R. Co., and the Cleveland, Columbus, and Cincinnati R. R. Co.,) two at Sandusky, [the Mad River and Lake Erie R. R. Co., and the Mansfield and Sandusky City R. R. Co.,] and one at Toledo, (the Southern Michigan R. R. Co.) A railroad connecting the principal stations of so many important Routes, would seem to leave no room to distrust the productive character of the stock. But larger views have opened upon the company; and without neglecting local facilities, it is seeking to make itself a necessary link in the great channel of communication between the east and the west.

The road is in the course of construction under the superintendance of George Morton, Esq., an experienced and competent engineer. It has been located from Cleveland, by Ohio City, Olmstead, Elyria, Amherstville, Vermilion, Huron, and Sandusky to Port Clinton; following the lake shore closely, except where necessary to find a convenient pass for crossing the deep ravine of Rocky River. From Port Clinton it will connect with Toledo, and will extend by Perrysburg and Maumee city, and at a convenient distance from the canal, away from the broken ground near the river, amid the denser population of Williams county towards Fort Wayne.

A reference to a map will show that a large source of business will be found upon the diagonal route along the Wabash. Two-thirds of the freight and passage business of Illinois, one half of that of Indiana, and a fair share of what will arise in St. Louis and the Missouri River will find its easiest and best eastern communication through this channel. An equal and perhaps a larger number of passengers will adopt the accommodation of the Michigan Southern railroad, especially when the contemplated changes are made. The Directors of the Junction railroad expect to obtain the business of this road, because it offers the advantages of lower grades and shorter distances than any other possible route, and an easier access to the stations of the Eastern railroad at Cleveland.

These considerations relate to the long business, and are deemed sufficient to justify these expectations of the Directors. But they reply for adequate returns with equal confidence upon the local business within the State of Ohio.

The city of Cleveland and Ohio City—which adjoins, and is almost identical with it—contain nearly 30,000 inhabitants. It owes its prosperity to its position, its port. its canal, which extends to the Ohio River, and principally to its railroads. It is one of the most beautiful towns, and one of the most desirable places of residence in the United States. Its ratio of increase was never more rapid than at present; and containing as it does, all the external and internal elements of growth, it is difficult to set any limits to its future enlargement.

Toledo contains about 5,000 inhabitants. It lies at the southwestern angle of Lake Erie, at one termination of the southern Michigan railroad. The Miami and the Wabash canals unite in a common trunk, about sixty miles above the city, and it is thus the port of shipment of a canal to Cincinnati, a canal to the Wabash, and a railroad to Chicago. Its commerce is already very large; its export of corn larger than from any other part of Lake Erie, and, although kept back, in some degree, by temporary and local causes, the future of Toledo cannot fail to make it one of our large inland cities.

Sandusky city lies nearly midway betwen Toledo and Cleveland. Its harbor is the best on the Lake coast, but has been obstructed by a bar, which last year has been cut through by dredging, and rendered easily accessible, in all weather, with sufficient water for all Lake navigation.

The advance of this city, within a few years, both in population and business, has been as great as that of any western town.

The number of inhabitants in 1840	2,000
Jnne, 1850	5,400
Nov., 1851	7,901
Present number	8,300

The official returns of the Collector of the district of Sandusky, show the following amount of commerce, at the Custom House.

Value of exports and imports of	1841	$2,737,586
" "	1845	5,943,127
" "	1847	10,585,791
" "	1850	14,907,788
" "	1851	22,511,510

The value of dutiable articles, on the foreign commerce of the port.

1847	$2,522
1848	5,831
1849	39,088
1851	272,894

The export of wheat.	1850	1851.
Bushels	1,552,699	1,922,069
147,951 bbls. flour reduced to bushels		739,755
Total wheat of 1851 bushels		2,661,824

Corn, 1850—288,742 bushels 1851—712,121 bush.

As the Junction railroad, when finished, between Sandusky and Cleveland, will open a travelling route from Cincinnati, by Dayton and Sandusky, only fourteen miles longer than by way of Columbus, it may expect to share the travel. When the Junction railway shall connect with Toledo, it will form a part of a continuous line between Cincinnati and Chicago, and will be the route usually adopted until new railroads shall be constructed in Indiana: and the connected line by Zanesville, Mansfield, Sandusky, and the Junction railroad will be the most convenient, and the usual avenue for passengers between Wheeling and perhaps Pittsburgh and the northwest, for many years to come.

The length of the Junction railroad from Cleveland to the west line of the State of Ohio, including branches in Williams county, is about 203 miles. The engineer has divided it, for the purposes of construction, into three sections. The first extends from Cleveland, 60 miles, to a point a little west of Sandusky; the second, 53 miles in length, will reach beyond the Maumee river; the remainder of the line constitutes the third section.

The first section passes through a fertile and well settled country, and over a very level surface; following the Lake shore, as nearly as practicable, except the bend south, to the lower rapid of Rocky river. This is by far the most expensive part of the road, by reason of crossing the streams. The villages of Olmstead, Elyria, Amhertville, Vermilion, and Huron lie upon its route. The engineer's estimate of cost is $14,600 per mile. The whole is under contract, at prices within the estimate. This section will come at once into use, as an extension of the Mad river and Lake Erie railroad to Cleveland, that company have engaged to provide the necessary machinery, until the Junction railroad company is better able to obtain it, and the work on this section has been first contracted and pressed forward.. A large force has been employed since November; twelve miles are ready for the superstructure, ties for more than half the distance have been delivered on the ground; the work at all the heavy sections has been commenced, 5,600 tons of heavy iron have been purchased, the masonry of all the important bridges is commenced, and some are completed, and the contractors entertain no fears that this section of the road will not be ready for running by the first day of January next

The second section, fifty-three miles, will extend from Sandusky to a point a little beyond the Maumee river, and will include the stations at Toledo and Maumee. This part of the line is nearly upon a dead level of heavy timbered territory. No streams of consequence are crossed except Portage river, 200 feet wide, and Sandusky Bay, a body of water 1¼ mile long, with an extreme depth of 10 6-10 feet' and of an average depth of 8 3-10 feet. This will be crossed by a bridge on piles, secured by cribs of

timber and stone, the materials for which are abundant, and the cost will not exceed $20 000. The engineer's estimate of this section of 53¼ miles, for all expenditures except the cost of iron, is $245,000, or the whole cost, without equipment will be $9592 per mile. The subscriptions applicable to this division exceed $175,000 and more are expected. An offer has been received from a responsible contractor, to execute this work, and receive payment from means now within the power of the company; the acceptance of this offer is suspended, in the hope that better terms can be obtained.

The bridge over the Maumee river at Maumee city will cost $62,000, and will be built by the local subscription.

The Western division, including a branch in Williams county, is ninety miles in length. No survey has been made, but the engineer has made examinations sufficient to enable him to make up a professional opinion of the maximum cost. The country is of the same level character, crossing no large streams, and even more favorable than the middle division, because the soil is dry and affords good ballasting; the entire cost of this division except iron will not exceed $3,000 per mile. A subscription of $100,000 has already been obtained, and a similar or larger additional sum is confidently expected.

The company now offer $450,000, in bonds of $1,000 each, payable to George S. Coe, Esq., or bearer, in fifteen years, at the Ohio Life Insurance and Trust company's office in New York, with semi-annual coupons attached.

They are secured by a first mortgage of the eastern sixty miles of the road, a section which extends from Cleveland to a point a little west of Sandusky, including the station accommodations at both places. The trustees of this mortgage are George S. Coe, Daniel S. Miller, and Ebenezer Lane, and it contains all the usual provisions for the security of the bond holders.

Estimated cost of the Eastern section.....	$875,000
Stock subscribed.....	$325,000
Do. paid to contractors.....	100,000
Bonds now issuing.....	450,000
	$875,000

E. LANE.

President of the Junction railroad company.

NEW YORK, May 1, 1852.

Indiana.

FOURTH ANNUAL REPORT OF THE INDIANAPOLIS AND BELLEFONTAINE RAILROAD COMPANY.

GENTLEMEN: I embrace the occasion to congratulate you upon the certain prospect of the completion of our road within the present season. This fact must be heart-cheering to those who have stood by this great enterprise, through evil as well as good report, under clouds, as well as sunshine; and it is rendered doubly so to me, by the highly satisfactory and important arrangements that we have made with the three great leading lines of Ohio, for direct through business connections, at Union, the eastern terminus of our road, giving to us eastern outlets, by continuous railways, to the Lake at Sandusky and Cleveland, and to the Atlantic cities of Boston, New York, Philadelphia, and Baltimore, as well as to Columbus and Cincinnati. These facts would seem to be enough to secure the triumphant business success of our line; but when we look to our western terminus at Indianapolis, where we will meet on the Union track, in direct connection, the Madison, Terre Haute, Lafayette, Central, Lawrenceburgh, Jeffersonville, New Albany, Evansville, and Peru railroads, radiating from the Capital to every part of the State, and, with their connections, to *every part* of the West and South, our road rises in importance and prospects, as a *through* line, to the highest point of our fondest anticipations; while its local business must prove very satisfactory.

The grade of the road is so low, the lines so straight, and the curves so few and so easy, the construction so permanent, the rails so heavy and so durable (will last at least thirty years,) the bridges so short and so few, the drainage so perfect, the danger of injury from high water so remote, the required repairs so light, the speed of express trains may be so high, the motive power so light, the through connections so extensive, the country through which it runs so good and so well provided with hydraulic power, that, after looking at other lines, without disparaging any, I have no hesitation in placing it among the first class roads of the United States, in point of location, construction, and business; and, as I am now able to add that the entire cost of the road will not exceed $10,000 to the mile, up to the rolling machinery, it requires no stretch of the imagination to foresee that its stocks and dividends must stand high, in comparison with other roads costing much more, if the road shall be properly managed, as I trust it ever may be.

Our contracts made last January for rails and spikes, for the section of 25 miles, between Smithfield and Union, were at a large saving, over the cost of these articles for any other section; that material will be on the ground in time to complete our road without delay by 1st December next at furthest.

The business of our road has been entirely satisfactory, considering it is merely local. It presents the gratifying result of an increase of local business, for the last few months, of near one hundred and fifty per cent., over the local business of the corresponding months of last year, with only one-third more track, while we have been carrying over the finished section the iron and other material, for the extension of the road. A report will be laid before the board, showing the business of the road since its opening, for future reference.

We have fourteen business stations on the line, located on turn-outs, with connecting switches, leaving the main track free for express trains. We now have five buildings 40 by 80 feet each, erected on the line at Pendleton, Anderson, Chesterfield, Yorktown, and Muncie; contracts have been made for buildings at Smithfield, Farmland, and Winchester, which will be ready for use by the time we reach those points. Our main depot building at Indianapolis, 376 by 60 feet, is ready for the roof, and will be completed, and the local freight business transferred there, by the coming Fall. Under our recent arrangements with the Ohio companies for direct connections at Union, it will be necessary to erect at that place a joint suitable building, for the reception of the passenger trains of the several lines, and a separate freight building, engine house, and repair shop for our line—plans and estimates of which will be laid before the board.

It affords me much pleasure to be able to state that, of the 20,000 passengers that have been carried over our road, since we opened, not one has received the slightest injury; this I attribute, in part, to the permanent character of our road, but still more to the character and self-possession of the men who have charge of the engines and cars, —the use of spiritous liquors being entirely prohibited on the line.

Our land system works well; and at the low cash prices at which they are taken for stock, and with the rapid improvement of the country, in which they are located, I have no doubt but that they will sell for cost, interest, and charges. To the original policy of taking these lands on subscription, as a basis for our first issue of bonds, I attribute in part the success of our financial operations; we have however, attained to the position when the reason of the policy has ceased. Of the $183,615 subscribed, we have sold $70,615, and have received $34,591 of the purchase money; the balance is secured on the lands, on interest.

A report will be made to the Board, giving a statement of the machinery to be provided, to stock our road, and the necessary machine shops, at Indianapolis. I remark, however, in this connection, that while cars may be about the same weight on all grades, I am satisfied that locomotives should be adapted, in weight, to the grade upon which they are run, and that, upon our 30 feet tangent maximum grade, 18-ton freight, and 16-ton passenger engines, will be as heavy as we should use; by excluding the heavy engines used for high grades, we shall make a great saving of wear and tear of iron, and track, without injuriously affecting the power of our engines for the business of the road.

We are carrying the daily mail from Indianapolis to Anderson, and will extend it to Muncie about the first of next month, and from station to station to Union, as the road shall be opened—supplying the offices on the line with a daily mail, except Sundays.

We have now arrived at a period when longer indulgence cannot be given to our delinquent subscribers. The money *must* be had, and it will be their fault, not ours, if they have to pay costs. I shall, in a few days, instruct the Treasurer to prepare our claims and notes that are due, for suit.

In relation to the prospects of our road, and its business, I write more for the eye of our Eastern friends than for our own, when I say that this is not a *finished* country. It is only a few years of age—just springing, as if by magic, from a state of nature. I have seen the whole of central Indiana when it was a vast uncultivated wilderness, lying quietly in the undisturbed possession of the Indians. We have no mountains nor barren lands; the country through which our road passes is a vast alluvial plain of rich and productive lands. Our people are stimulated by the prospect of certain reward for their labor, to active and energetic industry, and if our cheap through roads pay 6 per cent. this year on their cost of construction, they will pay 7 per cent, next year, with a like advance from year to year from the natural increase of business.

The road is being opened and put to immediate use and profit, as each section is finished. We have laid and ballasted six miles this Spring, adding another section to the line, and are now running the cars to Yorktown, forty-eight miles. The track laying is progressing well, and I feel confident that the road can and will be finished and opened to the public to Union, by the first of December, at furthest. The cars are run, in connection, with the Madison and Terre Haute lines, completing the through line from the Ohio and Wabash rivers to the head station on our line.

For an estimate of our financial condition, I refer to the Appendix. There will, of course, be losses on subscriptions and casualties in our monetary affairs, not now sufficiently apparent to be pointed out. In the course of the next financial year, the road will be completed, the stocks all issued, the outstanding certificates all called in, and new certificates, including interest, issued, upon which cash dividends will be declared semi-annually, from the net proceeds of the road; then a nearer approach to certainty of our whole affairs can be presented, showing the complete success of our important enterprise.

In closing this brief report, it affords me great pleasure to acknowledge the constant aid and counsel I have received from the able and faithful directors and officers of the company, with whom I have been associated since our first organization.

O. H. SMITH.

Large Subscriptions to Railroad Stock.

The City Council, on Saturday night last, voted to subscribe $100,000 of stock to the Bowlinggreen and Tennessee railroad—payable in Nashville and Chattanooga railroad stock; conditioned that the depot of said road shall be in the vicinity of the Chattanooga road.

On Tuesday night, the board subscribed $150,000 to the Southern railroad—payable in N. and C. railroad stock—with the above provision as to the location of the depot.

A bill is pending before the board to subscribe for $100,000 in the North Western railroad, which has been passed on its second reading, and will come up for final action at the next regular meeting of the board.

The corporation of Nashville, in June 1847 subscribed for stock in the Nashville and Chattanooga road to the amount of $500,000—a smooth half a million. Having so much stock in a single road, it was contended, was not equitable to other routes; some of which were as important to the prosperity of city as the Nashville and Chattanooga road.

So, in 1851, the corporation took stock in the Winchester and Alabama road to the amount of $50,000; paying the subscription in Chattanooga stock—or in other words, transferring so much of her stock to the Winchester and Alabama road.—Last week, a similar transfer was made, of $100,000 to the Bowlinggreen road—and this week, of $150,000 to the Southern road. If the bill now pending before the board shall pass, another hundred thou-

sand will be transferred to the Northwestern railroad.

Footing up these various subscriptions, the city will have stock in the following roads to the amount annexed:

Nashville and Chattanooga road	$100,000
Winchester and Alabama road	50,000
Bowlinggreen and Tennessee road	100,000
Southern road	150,000
Northwestern road	100,000
Total	$500,000

From the above it will be seen that the city has subscribed for no more stock than was originally taken in 1847.

The bill which passed the board on Saturday evening, providing for the subscription of $100,000 in the Bowlinggreen road, contains a proviso that the subscription may be paid in the stock of the Nashville and Chattanooga road, *or in the bonds of the corporation*—a clause which is not contained in the acts providing for subscription in either of the other roads. In case the subscription to that road is paid in the bonds of the corporation, then the city will have $200,000 in the Chattanooga road, instead of $100,000; and the total amount of stock held by the corporation will be $600,000, instead of $500,000.

As to the policy of paying in bonds or stock some contrariety of opinion exists among the members of the board; though a majority of them are opposed, at present, to the issuance of additional bonds, or to increasing the total subscription.—*Gazette.*

Pennsylvania Coal Trade.

In our paper some days since, we showed the enormous growth of the anthracite coal trade of Pennsylvania. The effects of this trade upon the interests of those engaged in the mining and transportation of coal, will now be briefly considered.

According to the statements which we made in our previous article, the anthracite coal trade has thus far doubled itself every five or six years. In reference to the future, the smallest rate of increase that we have ever heard named, as among the probabilities of the case, is that of 20 per cent. per annum. Taking this ratio as the basis of conjecture, we have the following exhibit of the probable consumption of coal for the next three years,

		Tons.
1851	(actual)	4,383,730
1852	[conjectural]	5,260,476
1853	do	6,312,571
1854	do	7,575,085

What are the existing means for getting this large amount of coal to market? We say "existing," because, with the heavy amount of capital already invested in the business, and centred in the hands of four leading companies, it is not probable that any new means will be very soon called into existence. Four lines already established, and in working order, and controlling a capital of not less than $45,000,000, render any new enterprise, of the nature of a competition, a very formidable undertaking. Indeed, we might almost dismiss, as idle, all conjectures as to the establishment of new coal lines, until the present lines are worked to the extent of their capacity.

The question then recurs, what is the capacity of our several lines for the transportation of coal?

We begin with the Delaware and Hudson Canal. The principal part of the coal transported by this Company is that mined by themselves, at and near Carbondale. This coal is first transported by railroad sixteen miles to Honesdale. This Honesdale road is what is called a "gravity" road; that is, the coal is raised a certain number of feet up an inclined plane, by means of a stationary engine. From the point thus gained, the road is constructed, for some distance, with a descending grade, sufficient to move the cars along by the force of gravity. Then a new inclined plane occurs, with its stationary engine, and a new descending slope, and so on to the terminus in the canal. The Honesdale road is constructed throughout with a double track, one for the loaded cars, and one for the empty cars. The ascent of the inclined planes is made, in some cases, by means of water power. Four cars, of three and a half tons each, are drawn up the inclined plane at a time. The average number of trips, per day, is about one hundred and twenty. The utmost capacity of the Honesdale road for transporting coal is given at 550,000, tons per annum.

The railroad of the Pennsylvania Company, from the neighborhood of Pittston to Hawley (a port on the Delaware and Hudson canal, eleven miles beyond Honesdale,) is also a gravity road, forty-four miles in length, with ten inclined planes on the empty car track, and twelve on the loaded track, each plane being from seventeen hundred to two thousand feet in length. Three of these planes are worked by water power, the others by steam. Most of the planes are supplied with three stationary steam engines, of thirty horse power each. There are, in all, on this road, forty-eight steam engines, of thirty horse power each. The road, in some places, is constructed on high tressel work. In one place, it is from twenty-eight to thirty-five feet high, for more than a mile. This tressel work was made in a hurry, is easily put out of order, and requires constant attention to keep it wedged in its place. The gravity part of the road is badly constructed; the grade, in some places, is too steep, and the wheels of the cars have to be spragged well with care. There is, in every part, much wear and tear. The maximum capacity of this road is 450,000, tons per annum.

The utmost capacity, therefore, of the two lines which supply the Delaware and Hudson Canal is 1,000,000, tons, which is just about the capacity of the canal itself. The canal has been already, and very recently, enlarged, and, without a still further enlargement, cannot carry more than 1,000,000, tons. This latter amount, therefore, must be taken as the measure of its present capacity, beyond which it cannot go, materially, without an enlargement of the canal, and without the construction of additional tracks and motive power on the existing roads. Such an enlargement would not only require large additional capital to a concern that has already invested (with its auxiliaries) about $11,000,000, but a tempory and very embarrassing suspension of business. Such an enlargement may possibly take place at some future time, but certainly not till both itself and all the other lines are worked to their full capacity, and at remunerating prices.

The Lehigh Canal has some exit for its coal, by the Morris Canal, across New Jersey: but the difficulties of transfer from one canal to the other, at Easton, as well as of the defective lockage along the line of the canal itself, have heretofore rendered the Morris canal almost a nullity, so far as the coal trade is concerned. These difficulties have been, to some extent, removed, and the Morris canal, it is hoped, will hereafter be a sharer in this important business. There are, however, no data on which any accurate estimate of its business can be made. Its friends suppose that it may be able to carry as much as 400,000, tons. It cannot, in any event, be sufficient to alter any of the conclusions to be derived from the general scope of our argument.

The principal, and, at present, the only measure of the capacity of the Lehigh, is the State canal, sixty miles in length, from Easton to Bristol. The capacity of this canal is 900,000 tons. The Lehigh Company, therefore, by all its means, cannot possibly do a business exceeding 1,300,000, tons, without an enlargement of its own canal, as well as of the State canal, throughout its entire length, which neither the Company nor the State is in a condition at present to undertake, without some imperative necessity.

The present capacity of the Schuylkill Navigation Company is 800,000, tons. This may be increased to 1,000,000 tons, by putting on additional boats. Any increase beyond this requires more water, which can only be obtained by the construction of large reservoirs among the mountains, where water may be stored up in the wet season to supply the deficiencies of the dry season. The business of this Company, by means of these additional investments, may be increased, possibly, to 1,500,000 tons. Its condition, however, seems to preclude any prospect of such an increase, at least, until all existing means are put to their full developement.

The Reading railroad, with its existing cars, engines, and wharves, can transport 2,000,000 tons, and by adding cars, engines, and wharves, as the demand may increase, without interrupting its business, or increasing its permanent investment, may increase its coal tonnage to 4,000,000. Beyond this it may go almost indefinitely, by means of parallel tracks, every additional track giving an increase of between two and three millions. Such an additional track, however, would require an addition to the permanent investment, though it would make no interruption to the business of the Company. We will, therefore, consider 4,000,000 as their ultimatum under existing circumstances.

Now, if we put these several facts together, we will find that most of the companies are already worked nearly to their full capacity. The business of the Lehigh Company was 989,296 tons in 1851, leaving a margin for increase of only 310,704 tons The business of the Delaware and Hudson Company was 795,095, leaving a margin for increase of 204,905. The Schuylkill did, in 1851, a business of 579,156 tons, leaving a clear margin of 220,844 tons, without additional boats, and of 420,844 tons, with such addition. The business of the Reading road was 1,605,084 tons, leaving room for an increase of 394,916 tons, with their existing running power, and 2,394,916 tons with the addition of running power, as it is needed.

This gives us the means of forming some legitimate conclusions, as to the necessary distribution of the trade among the several companies during the next two or three years. If we suppose the Delaware and Hudson and the Lehigh Companies worked at once to their full capacities, which we see no good reason to doubt, and if we suppose that the Schuylkill Navigation Company shall be able, at the end of a year from this time, to command the additional capital necessary to put upon their canal the additional boats needed, so as after that time to be worked to its full capacity, the outstanding balance of the demand must, of necessity, fall to the Reading road. This distribution of the business may be exhibited to the eye as follows;

	Estimated demand.	Lehigh Company [full capacity.]	Delaware and Hudson [full capacity.]	Schuylkill Navigation [full capacity.]	Reading railroad, necessary to supply the demand.
'52	5,260,476	1,300,000	1,000,000	800,000	2,160,476
'53	6,312,571	1,300,000	1,000,000	1,000,000	3,012,571
'54	7,575,085	1,300,000	1,000,000	1,000,000	4,275,085

If, under these circumstances, all the companies do not make money, they have not the business sagacity for which they are generally credited. They are now all thoroughly organized and equipped for a successful prosecution of the business. The experience of the last year, seems to have convinced them all that their true vocation is to carry coal at remunerating prices, instead of seeking to underwork each other. Indeed, with the prospect before them of having a demand for as much as they can possibly do, harmony among them, as to rates and prices, is as certain as any future event, dependent upon the laws of either mind or matter. The operations of the present year have, indeed, already commenced upon an amicable basis. Pursuing this line of policy, every addition to their business adds, in a rapidly increasing ratio, to their net returns. The main expense of the roads, canals, engines, boats, lands, and other permanent investments, having been already incurred, increase of business brings with it small comparative increase of cost. The addition to their income from increased tonnage, is almost entirely profit. The ratio of net profits to the gross income is necessarily a constantly increasing one, until each line is worked to its full capacity.

Under these circumstances, we repeat, all the companies, must necessarily do a profitable business. Even those lines already worked to nearly their full capacity will greatly increase their profits, because it will be the interest of the other companies, equally with themselves, to raise their freights and prices above those of the last year. The Delaware and Hudson Company has already raised the price of coal fifty cents a ton, and the Reading railroad has added ten cents a ton to its charge for freight. The result to the consumer will be, without doubt, an increase in the price of

the article; but to the great companies engaged in mining and transporting it, we see not how it can be otherwise than a full realization of those rich returns for which they have so long, and at some periods so disastrously, labored.— *North American.*

American Railroad Journal.

Saturday, May 22, 1852.

Indianapolis and Bellefontaine Railroad.

We give, in another part of our paper, the 4th annual report of this company, which, as will be seen, presents their affairs in a very favorable light. The cost of the road will not exceed $10,000 per mile, exclusive of machinery, nor more than $13,000 per mile, with an ample equipment.

There is now a certainty that the road will be completed, and brought into profitable use, during the present year, as a portion of the great through line reaching from the Atlantic States to the western boundary of Indiana. From Dayton, the Greenville and Miami road will be opened in a few days to Greenville, which is but 10 or 15 miles from Union, the eastern terminus of the Bellefontaine and Indiana railroad. This connecting link is in progress, to be completed by the first of December next. There is also every prospect that the Bellefontaine and Indiana railroad will be opened during the present year; furnishing two outlets from Indiana eastward.

We are happy in presenting such a favorable statement in relation to the above road. The energy and capacity displayed in its construction, in overcoming all obstacles, reflects the highest credit upon the President of the company, to whom the project is mainly indebted for its success, and the favor with which it is regarded by the public. The bonds of the company have become a popular security, and command high rates in this market. We have no doubt that all the expectations formed of the road will be fully realized.

Toledo Norwalk and Cleveland Railroad.

It is confidently stated that the above road will be completed during the present year. The company through its President Mr Boalt who has just returned from England, have made very favorable contracts for the purchase of Iron, and the sale of the Bonds of the company.

The completion of the above road will secure a continuous line of railroad from New York to Chicago, so that by the close of navigation on the Lakes, the whole distance between the above cities, which is about 1,000 miles can be performed by railroad.

New-York.

Rochester and Lake Ontario Railroad.—A meeting was held at Rochester last week for the purpose of organizing the Rochester and Lake Ontario railroad company. The following gentlemen were elected directors: A. Boody, Rochester; Freeman Clarke, do; H. E. Rochester, do; Wm. Otis, do; E. D. Carpenter, do; Edward Whitehouse, New York; J. B. Varnum, do; E. B. Holmes, Brockport; G. C. Latta, Charlotte; Wm. Rankin, do; J. Eaton, do; L. B. Langworthy, Greece.

Ohio.

Hillsboro Railroad.—This road is now opened for its whole length, we believe, and is doing a very fine business.

Surveys are in progress for the extension of this line eastward so as to connect with the Northwestern and Baltimore and Ohio railroad.

Buffalo and Brantford, and Great Western Railroad of Canada.

We learn that good progress is making upon both of these roads. They have a common object, the opening of a short route by railroad, from the roads of Western New York, to Detroit. There are no roads in the country that have more flattering prospects of a large business, both from through and local traffic. The peninsula formed by Lakes Ontario, Erie and Huron, is altogether the best part of Canada, and is one of the very finest portions of this continent. It is well settled, and must afford a large local business. The through business must be very large, as the above road, in connection with the Michigan Central, will form the shortest route between Buffalo and Chicago. The whole line will, from the favorable character of its grades and curves, be capable of the highest speed, and the distance, [510 miles,] between the above cities, can be easily done at the rate of 30 miles the hour.

Although the above roads are in Canada, they are to a certain extent, *American* projects, and both are receiving important aid from our own people, especially the Buffalo and Brantford road. This is purely a Buffalo project, and the unanimity of the vote in favor of loaning its credit in aid of it, to the amount of $150,000, shows the importance attached to it in that city. Out of some 4,400 votes there were only 36 nays. The people of Buffalo, threatened with a divergence of trade and travel by the roads upon the south shore of Lake Erie, felt the above project to be necessary to the maintenance of their position, and to place them on both of the great channels of travel and commerce between the east and the west. By the construction of the Great Western, and the Buffalo and Brantford roads, this position will be rendered impregnable. By means of them, that city will secure a very large Canadian trade, and with the proposed reciprocal arrangements between the U. S. and Canada, she would command a very large part of the trade of the peninsula. This road is of the utmost importance to Buffalo, and secures to her all she could wish in the matter of railroad connections, and places her on the *convenient* route of travel between the east and west.

As the means provided for the construction of the above roads are ample, they will be pushed forward with all possible dispatch, and will be opened for their entire lengths in all of 1853. The Buffalo and Brantford railroad will probably be completed within a year from July next. The length of this line will be about 80 miles, and the cost of the road equipped for business will not exceed $1,000,000. We hardly know of a more important road, nor one that promises a better return upon its cost. It is under the most efficient management. The American directors are James Wadsworth, [late Mayor of Buffalo,] who is President of the company, and J. D. Patchin, a well known capitalist of Buffalo. The company have secured a stock subscription of $600,000, and propose to raise the balance by sale of bonds.

Lawrenceburgh and Upper Mississippi Railroad.

The sale of these bonds take place to day. There will be no better railroad security offered in this market than the above for years to come. There can certainly be no reason why the bonds, of this road should not sell as well as those of other roads of Indiana, most of which are now held at *par*. The above road, connecting Cincinnati with Indianapolis, is certainly one of the best projects in the country.

Ohio.

Junction Railroad.—We give in another part of our paper, the recent exhibit of this company. It sets out the objects, and business prospects of the road so thoroughly and distinctly, as to render any remarks by us, superfluous. The fact that it is the shortest route between two such important places as Sandusky and Cleveland, will convey the best idea of its future business. Cleveland is a large city, and nothing can prevent Sandusky becoming a very important town. It must always continue the centre of the trade of a very large section of country. The business and the pleasure traveller, will always take the large towns in his route, and this fact must always secure to the Junction railroad a very conspicuous position among the railroads of the west. It is the direct continuation of the Lake Shore line, which connects, by the shortest route, all the leading points on the lake.

The company propose to raise the sum of $150,000, necessary to complete the road, by an issue of its bonds based upon an equal amount of stock subscription. This proportion of stock is regarded as entitling western roads to borrow an equal amount upon the best terms. It makes the investment perfectly safe, and upon a strong line a very choice security. Such, we have no doubt, will be the opinion entertained in reference to the Junction road, when its bonds come into market.

Maysville and Lexington Railroad.

The following gentlemen have been chosen directors of this road for the current year.

Henry Waller President. A. M. January, John Norton, C. Schultz, F. T. Hord, William Nunn and W. S. Allen.

Stock and Money Market.

The money market continues very easy, with large transactions in railroad securities. The fancy stock market is a trifle under our previous quotations, caused chiefly by speculative movements. The demand for bonds of new works is good, and prices are decidedly in advance of the corresponding period of last year. Confidence in these securities is steadily growing stronger, and as the rates of interest paid is high, there is no reason why the best of them should not go up to par. The very large number of railroads that will go into operation the present season will tend to strengthen this confidence still further.

Advices from England show some advance in the Iron market. The prices asked, free on board at the Welch ports, are £5 per ton.

The Baltimore and Ohio railroad company have sold $700,000 second mortgage bonds. The highest rates bid were 93¼. The lowest taking bids $86,10. The sale was made in Baltimore, and the purchasers were chiefly citizens of that town.—This sale secures the balance requisite to complete the road.

The sale of the Conhocton Valley railroad bonds made last week by Mr. Draper, went off with much spirit. The whole amount, $400,000, was sold at 95½ down to 92½, averaging about 93¼. This is a very good sale, in view of the fact that there are two competing roads for the through travel.

The receipts of the Long Island railroad from the 1st to the 8th of May, 1852, inclusive, amount to..... $5,037 03
For the corresponding week in 1851.... 4,257 53

Increase in favor of 1852..... $779 50

The returns of the Morris canal company for the week ending April 24, 1852, were..... $2,348 75
Do. for the week ending May 1, 1852... 3,423 03
Do. for the week ending May 8, 1852... 4,207 37

The following is a statement of the receipts on the Cumberland Valley railroad for the month of April, compared with receipts for the corresponding time last year:

For the month of April, 1852	$11,914 24
For the month of April, 1851	9 285 97
Increase, equal to 29 per cent	$2,629 27

The receipts of the Columbia road, Pennsylvania, for the month of April, were.....$33,906

The earnings of the Harlem railroad continue to show a large gain on last year.

For April they were	$61,046 79
April, 1851	49,610 82
Increase nearly 26 per cent	$11,435 97

The directors of the road for the current year are as follows.

Robert Schuyler, George Barker, Philip Dater Nelson Robinson, William S. Wetmore, R. M. Blatchford, Thomas W. Ludlow, Edward Bement, William S. Miller, Charles Denison, Wm. C. Wetmore, Gouverneur Morris, Isaac E. Haviland.

Gold and Silver.—An officer of the Treasury department at Washington, in answer to a semi-official inquiry made at the Department, has presented an elaborate report, estimating the production of the precious metals, from 1492 to 1852. The writer, after an examination of the standard authors upon the subject, Humboldt, McCullough, and Jacobs, estimates the total product of the world, exclusive of Australia, as follows:

America, exclusive of U. S		$8,377,833,300
California, received at mint	$98,408,000	
Do. foreign exports, manufactured, etc	51,692,000	
Other U. S. gold at mint	15,855,000	
Do. do. not brought to do	1,145,000	
Total United States		$167,000,000
Total America		$7,044,833,800
Europe and Asia, exclusive of Russia		1,855,000,000
Russia		213,581,000
Total production, 1492 to 1852.		$9,013,414,800

The present annual product of the precious metals, the writer estimates as follows:

All South America	$30,710,000
Add for any probable increase according to the best authorities	3,290,000
Hungary, Saxony and Northern Asia	4,000,000
Russia, at the highest estimate of late years	20,000,000
Africa and South Asia, (a rough estimate)	1,000,000
Carolina, Georgia, etc	500,000
California	64,500,000
Total	$124,000,000

The annexed statement of the receipts of the Harlem road for the past seven months shows a very fair gain.

COMPARATIVE RECEIPTS OF THE HARLEM RAILROAD.

	1850-51.	1851-52.
October	$45,641 63	$57,228 13
November	40,776 82	50,727 62
December	40,770 92	49,161 60
January	41,501 32	45,949 55
February	37 101 10	45,772 11
March	42,615 16	64,254 41
April	49,610 82	61,046 79
Total	$298,017 77	$374,140 21

The above shows an average increase in seven months of $76,122 44, or nearly 26 per cent.

It will be seen that the receipts for April were about the same as those of the Hudson River railroad which has cost twice as much as the Harlem. The latter has a good local business which the Hudson River railroad never can have, hence the difference between the earnings of the two.

The receipts of the Baltimore and Ohio road for April were, $119,405 32, against $147,792 95 for April 1851.

The earnings of the Macon and Western railroad company for April, 1852, were as follows:

Freight	$14,482 49
Passengers	6,097 95
Mail	1,645 20
Total	$21,625 64
Corresponding month last year	14,266 52
Increase over fifty per cent	$7,359 12

The receipts of the Michigan Southern and Northern Indiana railroad in April were,

Passengers	$19,758
Freight	28,764
	48,522
April, 1851	21,648
Increase	$26,874

The result of the Harlem railroad for the month of April was as follows.

April, 1852	$61,046 79
April, 1851	49,610 82
Increase, nearly 25 per cent	$11,435 97

The receipts of the Cleveland, Columbus and Cincinnati railroad for March, 1852, were.....$38,408 46

For April, 1852..... 52,544 74

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 22, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	108½
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118½
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120½
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	91½
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	106½
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	95
Ohio 6's, 1856	106
Ohio 6's, 1860	108½
Ohio 6's, 1870	112½
Ohio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	96
Pennsylvania 6's, 1847,-'53	101½
Pennsylvania 6's, 1879	108
Tennessee 5's	87½
Tennessee 6's, 1880	106
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	107
Cincinnati 6's	99
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	104
New York 5's, 1890	103½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1876-'90	107
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116½
Erie 2d mortgage, 7's, 1859	107½
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	97
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	97
New York and New Haven 7's, 1861	105
Reading 6's, 1870	82
Reading mortgage, 6's, 1860	87½
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	97
Cleveland, Col. and Cin. 7's, 1859	105½
Cleveland and Pittsburg 7's, 1860	98½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	95½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	May 12.	May 19.
Albany and Schenectady	104¼	103¾
Boston and Maine	107½	108½
Boston and Lowell	108½	107½
Boston and Worcester	103¾	106½
Boston and Providence	91	90½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson (canal)	117	117
Eastern	99½	102
Erie	89½	87½
Fall River	99½	99½
Fitchburgh	105	106½
Georgia	—	—
Georgia Central	103	—
Harlem	72½	72½
" preferred	114¼	114¼
Hartford and New Haven	128	124½
Housatonic (preferred)	35	35
Hudson River	62	62
Little Miami	—	—
Long Island	21½	21½
Mad River	—	—
Madison and Indianapolis	101	103
Michigan Central	100	100
Michigan Southern	116	119
New York and New Haven	112	111½
New Jersey	134	136
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	58	56½
Ogdensburgh	27½	29½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	78½	78½
Rochester and Syracuse	116½	116½
Stonington	55	55
South Carolina	—	—
Syracuse and Utica	128	128
Taunton Branch	115	115
Utica and Schenectady	132	132½
Vermont Central	17½	17
Vermont and Massachusetts	20½	23½
Virginia Central	—	—
Western	106½	108
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

From the Chillicothe, Ohio, Daily Gazette, of May 14.

Cincinnati and Marietta Railroad.

Important Movement.—The most important session ever yet held, of the board of directors of the above road, adjourned this morning. The steps, towards the early completion of this great work, which they felt themselves justified in taking, and called upon to take, at the late meeting, are of first-rate consequence to the whole country immediately crossed by their line, and cannot fail to excite the liveliest interest in Philadelphia, Baltimore, Pittsburgh, Wheeling, Cincinnati, and St. Louis, and all intermediate places, along the principal through route of the Atlantic and Pacific chain of railways.

Our readers know that 77 miles of the C. and M. line have been under contract nearly a year, and that the work has progressed with commendable speed at various points along the western section. A primary object with the directory has been to open a connexion between the mineral coal mines east of Chillicothe and the city of Cincinnati.—Greater rapidity of progress in the construction of this portion of the line would, however, have been attained, but for the difficulty of collecting private stock, and the delays incident on the judicial proceedings which resulted in affirming the validity of county and city subscriptions. As it is, the contractors hope to complete the western section almost if not entirely within the scope of time at first announced to be necessary, ready for the iron and the cars by the summer of 1853.

During the past winter, an engineering corps, under the immediate direction of Mr. Arms, has been incessantly engaged in running trial lines between Athens and Marietta. Four such several lines have been instrumentally surveyed; and a reconnoisance made of the connecting link between the main line and Belpre—which the company stands pledged to construct simultaneously with the completion of the Northwestern [Va.] railroad to Parkersburg. The results of these surveys and measurements are of the most satisfactory character. A good through line, from Athens to Marietta, has been found at a distance not exceeding 37 1-10 miles. The connecting link between Parkersburg and our main line is within 10 miles of measured distance.

Yesterday, the board, by an unanimous vote, directed the President and Chief Engineer to advertise for proposals for constructing the line, from the eastern limit of the section now under contract, [viz: Byers's in Vinton county,] to the present eastern terminus of the main road at Marietta. The length of the section to be advertised is within a fraction of 70 miles—more or less—completing the connection between Marietta and Cincinnati.

The board also, by an unanimous vote, ordered an instrumental survey of a proposed extension of a line, from Marietta to Wheeling, to be made without delay. The money for discharging the expenses of this new survey has been pledged for some time, rendering it unnecessary to trench upon the funds of the company for that purpose. It is understood that a good route, from Marietta to Bridgeport, exists within the distance of 75 miles at farthest; and it is believed the surveys will prove a still shorter line. Influential parties in Philadelphia are pledged to secure the filling-up of this link, between their Hempfield line, and the great Southwest, simultaneously with the completion of our road to Marietta. In fact, the necessity of that step, on the part of the Philadelphians, is imposed by the rival lines at the West, which open up a direct connexion, by railway, between Tennessee, Kentucky and the Southwest, generally, and the city of New York. It behoves Philadelphia to provide for herself without delay, the most direct line leading from the South-West to her own market.

The board also, by an unanimous vote, passed this resolution, viz:—

"*Resolved*, That it is the true policy of the Company to construct an independant line of railway into the city of Cincinnati;—and that the President be directed to adopt such measures as may be necessary to obtain subscriptions of stock for this purpose, with a view to an early commencement of operations between that city and the point to which the road is now under contract; and that the President employ such agents as he may deem necessary to accomplish the objects of this resolution."

This resolution merely affirms the steady policy of the company—adopted on the rejection by the Hillsborough and Cincinnati Board, of a "basis of arrangement" previously agreed upon—to form no entangling alliances, especially with rival parties disposed to be hostile, but to pursue the one great object of retaining control of their own road, gauge, grades, directions and connexions. This independent course the Board believe themselves able to maintain. They have resolved upon having the best road in the State, and ask only the co-operation of those who will be benefited by its construction, in carrying their design to a successful conclusion.

We expect to be able, in a short time, to announce the purchase *of all the iron* required for the entire line from Marietta to the most westerly point now under contract. Offers of a favorable character have been made the company, and the President was directed, at the late meeting, to perfect the contract, if able thus to do on terms which, it is believed, will be perfectly acceptable to the selling party.

Thus are the Directors of our great Through Line pursuing their arduous duties, with such alacrity as actually to anticipate the expectations—and especially the acts—of a portion of the subscribers It now rests with those who have pledged their money and names to the work, and with the towns and counties to be directly benefited by its completion to manifest whether the period of such completion be hastened or delayed. As for the Board, their aim is now, as heretetore, to "Clear the Track, and Go-Ahead."

New Orleans and Jackson Railroad.

The citizens of Natchez and Adams county, Mississippi, have recently held a large meeting, for the purpose of taking such steps as might be deemed necessary, to induce the Board of Directors of the New Orleans and Jackson railroad, to run the road through that city. We copy the following from the proceedings:

"And whereas, in the opinion of this meeting it can be demonstrated, that a line from New Orleans to Jackson, in this State, bending to the river at this point, would not materially augment the cost of construction or lengthen the road, nor appreciably retard the transit of passengers between those two points, but give, in fact, increased facilities for its early completion—accommodate a greater intermediate transportation—insure its permanency—render it more productive as a corporation, and, without impugning the claims of the eastern and intermediate counties, form a surer basis for the development of their inherent capacities for agricultural, commercial, and social advancement.

A Committee of seven was appointed by the Chair, consisting of Dr. Stephen Duncan, John T. McMurran, C. L. Dubuisson, J. F. Gillespie, T. Henderson, Fred. Stanton and L. R. Marshall, Esqs., to communicate with the New Orleans Board of Directors. With the following instructions of the meeting to the committee:

Resolved, That said Committee be instructed and requested to lay before the Board of Directors, such plans and specifications as will enable them readily to comprehend our common interest in reference to this matter; and to ascertain the conditions, if any, by which a deviation from any premeditated line will be made, so as to attain the object contemplated in the first reading.

The selection of such a committee, says the New Orleans Commercial Bulleton, by the general meeting, and the acceptance of the trusts confided to there care by the gentleman named, foreshadows the success of the project now claiming the attention of our Natchez friends. They are all gentlemen of a high order of intelligence, and practical, business capacity— have a larger pecuniary interest in the prosperity of the country, than probably any other seven men have—and are abundantly able to *build the road themselves*, out of their own immediate means, should they think proper to do so. The example set by the people of Natchez, in the selection of Committees, is worthy general imitation. Our Board of Directors will, as a matter of course, take whatever communications these gentlemen may make, under careful consideration.

Influence of Railroads Upon the Value of Real Estate in New Orleans.

The most superficial observer must have noticed, says the New Orleans Commercial Bulletin, the striking contrast between the present value of real estate in this city, as compared with its condition [we cannot say worth, for that is undefinable] six or eight months ago. The advertisements of auction sales in the newspapers are about as fair a criterion as any other, of the state of business, and the general prosperity of the city. Before the meeting of the Legislature property could not be sold on any terms; those who were forced, from the pressure of their affairs, advertised their property for sale, but to no avail; there was no demand; there were no purchasers, even when good property was put up without reserve. The cause was obvious, and equally well known to buyers and sellers. There was no encouraging prospect of improvement; our municipal organization was radically defective, a heavy debt was hanging, like an incubus, over the city, a large amount of which was past due, and dishonored—the taxes were heavy, and heavy as they were, they did not meet the expenditures, the chances for building railroads were disheartening, and the people generally seemed to be oppressed with a feeling of hopelessness, and stolid apathy. But mark what a transformation has been accomplished within a few months! What a change has come over the spirit of our dream! No sooner was it ascertained from the action of the Legislature, that it was determined to tread the path of progress and reform, in pursuing which every other State in the Union was either advancing to, or had already reached the goal of wealth and prosperity, than, like the transmission of the electric fluid, or the transfusion of some healthful element in the system, the effect produced was instantaneous; the cold torpid body became at once quickened with warmth and vitality, and healthful, vigorous action immediately followed.

Those who are interested, and have watched the current of affairs, noticed, that from the date of the passage of the Consolidation bill, the fixed certainty of the prospect of a revision of the Constitution, and the adoption of a practical system of railroad improvements, public confidence was retrieved, and

a fresh spring and impulse were given to all descriptions of business, and a renewed activity in all the avocations of life. The most palpable consequence of these progressive movements, was an advance in the price of property in New Orleans, to a degree unparalleled in this city, for the same space of time. This is the best and most infallible symptom of reviving health and prosperity.

Railroad from Columbus to Opelika.

The City of Savannah proposes to extend aid to the above road, by a corporate subscription to its stock, to the amount of $100,000. The above will open a direct railroad communication from Savannah to Montgomery, Alabama, from thence a railroad is to be constructed to connect with the Southern road, now in operation from Vicksburg to Brandon. Mississippi. In reference to this project, the Springfield Republican says:

Through the road from Columbus to Opelika, the distance by railroad from Savannah to Montgomery, will be one hundred miles short of the distance, by railroad, from Charleston to the same point. It is obvious that Savannah must be the place of entry for all merchandize destined for middle and lower Alabama and Mississippi, in preference to Charleston—for, superadded to the advantage of the one hundred miles in the distance, there is the further great advantage of a continuous track. It will not be possible for the upper line, through Augusta, to compete with the lower for the merchandize to go westwardly into the heart of Alabama. In the course of a year, the Augusta and Waynesboro' road will reach Augusta, and thus merchandize destined for upper Georgia and Tennessee will be invited to Savannah for the obvious reason that here the freighter will have choice of the two routes—by the Savannah river, or by the new railroad, which new road is shorter than the railroad from Charleston to Hamburg, and of the easy maximun grade of 33 feet to the mile.

Nothing seems to be wanting to place our city and the Central Road on the highest pinnacle of prosperity, but this short road of thirty miles, from Columbus to the West Point and Montgomery railroad at Opelika.—The more we reflect upon the subject, the more clearly we see the value of this connection, especially to the property holders in Savannah.

Ogdensburgh and St. Lawrence Railroads.

The Rouse's Point Advertiser announces that the Ogdensburgh railroad company have made arrangements which cannot fail to draw a great amount of business from the Western States and from Western Canada. This business, on reaching Rouse's Point, may take a direction either towards Boston, or by way of the Lakes to New York, or by the Champlain and St. Lawrence railroad to Montreal. The fleet of steamers on Lake Ontario, connected with the railroad, has been increased to ten, besides several sailing craft of the first class. Most of these vessels run directly through the Welland canal, to ports on Lake Erie, and some of them to the bay of Quinte, touching at the various Canadian ports to deliver or take on board freight. It is evident that such arrangements, by ensuring regular lines of transportation, must greatly facilitate and increase the business of the railroad. It has received an additional impulse by the withdrawal, by the Canadian government, of the steam tow-boats, which were last year employed on the St. Lawrence river.

The Champlain and St. Lawrence railroad is now connected with Montreal, by means of steamers running regularly between that city and Laprairie. Trains now run over the road, although it is not yet finished—running in part, we suppose, over the old track. When completed, cars will run over it with great rapidity. Three-quarters of the road between South Montreal and Rouse'e Point is new. When finished, the line will be remarkably straight for the whole distance, with the exception of a curve at Rouse's Point, and one at St. Johns, and its length forty four miles. It is said that when it is completed, which will be in August next, trains will run over it, including all stops; in an hour and a half, and in an hour of running time. Large quantities of freight already go over the road for the Montreal market.

Georgia.

Waynesboro Road.—This road is now finished to Waynesboro, a distance of 21 miles. The ware-houses, cotton yards &c. are also completed to that point. The work on the remaining thirty miles from Waynesboro to Augusta, is in an advanced state and progressing satisfactorily. A large portion of the iron for this part of the road has been purchased and has arrived and will be laid down as fast as the work can be pushed forward, a due regard being had to its durability and efficiency. The road is worked by the Central company, under a contract between the two companies, and when completed, will be one of the smoothest and most substantial roads in the country.

Milledgeville and Gordon Road.—With the exception of the bridge near Milledgeville, this road is now completed. The bridge, we are informed, will be finished in the course of a month, when the cars will run up to the capital. The construction of the road is very creditable, the work being strong and substantial. It is worked by the Central company.

Eatonton Road.—This road is an extension of the Milledgeville and Gordon road. It will be twenty two miles in length. The grading will be finished in about six weeks. It is believed the superstructure and iron can be laid at the rate of a mile a week, which will insure the completion of the road, at furthest, by the first of November next. This will also be worked by the Central company.

To the Editor of the American Railroad Journal.

H. V. Poor, Esq.,

Dear Sir: Among the annoyances in railroad travel, I find you have noticed the *dust* as very offensive, and as the subject intends to be examined, according to the public notice in your Journal, you would oblige by informing your reader of the *cause* of this dust, whether it is produced by the *action of the wheels* on the rails, throwing up the same, or the *rapid motion of the cars*, in creating a vacuum, etc. Before a *remedy* can be suggested for this evil, it will be necessary to know the source of it, and it may aid your readers who may have turned their attention to the subject in their thoughts of the remedy. Respectfully submitted by your constant reader. R. M.

City Washington, May 12, 1852.

Alabama.

The Common Council of Savannah have subscribed one hundred thousand dollars to the stock of the Columbus and Opelika railroad, subject to the approval of the citizens of the place. The road will be about thirty miles in length, and will connect the Muscogee and Montgomery and West Point roads, thus completing the uninterrupted railroad connection between Savannah and Montgomery. The cost of the road is estimated at three hundred thousand dollars, of which two-thirds have been subscribed on the line of the route, so that if the Savannah subscription is confirmed by the people, the entire means to construct the road will be provided.

Importation of Iron

The following table shows the amount of the imports of Iron into the port of New York for the year 1851. Our importations of Iron are almost entirely from Great Britain.

	1851.	1850.
Sheets and Plates	10 616	9.575
Hoops and Rods	9.530	3,918
Bar	47 259	50,919
Railroad Bar	141,230	70.022
Pig	50,983	38,951
Russia, Swedish, and Norway Iron	14 550	12.993
Total	274,168	186,088
	186,088	
Increase	88,080	

It will be seen that the receipts of Railroad Bar at this port 1851, are double those of 1850. This fact shows the extent of the diversion from the New Orleans to the Erie Canal route. A further reduction of tolls made the past winter, will have the effect to secure to the New York roads, almost the entire transit of railroad iron for western roads. The change that has taken place in one year, is significant of the future route of the trade of the great Mississippi Valley.

Lehigh Coal Company.

The Philadelphia North American has the annexed abstract of the annual report of the Lehigh coal and Navigation company. The total receipts from all sources, during the past year, amounted to $445,210 50, and the expenditures to $574,046 22, as will be seen by the following items:

RECEIPTS.

Water rents and lots sold	$31 565 23
Profits on coal	185,079 16
Tolls	428,566 11
Total receipts	$645,216 50

EXPENDITURES.

Tax on capital stock	902 13
Interest account	325,874 99
Repairs of navigation	121,121 20
New work on navigation	81,790 08
Lehigh and Susquehanna railroad	44,357 82
Total expenditures	$574,046 22

Leaving an excess over interest and repairs of $71,164 28. The whole amount of the company's liabilities, including the capital stock, loans and obligations of every kind, was, on the 1st of January last, $7,538,345 34. The arrears of interest, with the exception of a few thousand dollars, have been funded, and the past due loans have been so generally extended as to leave but a very small per centage to come in. The report congratulates the stockholders upon the sound and healthy condition of the company's finances.

Finances of Connecticut.

The message of Gov. Seymour, of Connecticut, states that the financial affairs of the State are in a most prosperous condition. Its ordinary expenses for the fiscal year ending on the 31st of March were $109,847 53 which with $26,832 paid to the school fund and $646 76 unpaid taxes, made a total of $137,326 18. The receipts for the year, including a balance of $26,266 22 on hand, were $176,456 21 leaving a remainder of $39,103 03 beyond the expenditures. Eighty thousand dollars of this has been appropriated to the payment of the indebtedness to the school fund, which is now discharged in full, and the State commenced its present fiscal year entirely free from debt, and with $31,000 in its Treasury. Under these circumstances, the Governor recommends that the State tax be reduced from one to three-fourths of one per cent.

Ohio and Pennsylvania Railroad.

The business on the Ohio and Pennsylvania railroad, for the month of April, has been very gratifying.

The number of pass. carried, was.....	15,403
Receipts from passengers.....	$13,400 40
" " freight.....	4,341 11
Total.....	$17,741 51

The receipts from passengers and freight, since the 1st of January last, are as follows:

Receipts in January.....	$12,058 46
" " February.....	11,037 01
" " March.....	16,041 28
" " April.....	17,741 51
	$56,878 26

This does not include mail service.

The number of passengers carried since the first of January is 50,282. Number carried since the opening of the road, 106,488. Total receipts since the opening of the road, $89,821 38.

The month of April shows a very gratifying increase over the month of March, although about a week was lost by stoppages occasioned by land slides. Had the trains run regularly, the receipts would have amounted to some $23,000. The prospects of the road are truly flattering, and under its admirable management, must be a subject of just pride to the citizens of Pittsburgh, as it will be ultimately of profit to its stockholders.

City Subscription to the Allegheny Valley Railroad Company.

Last evening the ordinance authorizing the Mayor of Pittsburgh to subscribe for 800 shares, ($400,000,) of the stock of this company, passed the Councils, and will be officially published in this paper.

Governor Johnston, President of the road, addressed the Select Council briefly, setting forth in forcible and convincing terms the great benefits which this road will confer upon this city, by giving it a direct connection with Western New York, the lower Lakes, Canada, the cities of New York and Boston, and with the vast systems of railroads of the north eastern States. He had previously addressed the Common Council on the subject.

At the conclusion of the Governor's remarks a brief discussion took place, when by unanimous consent the vote on the final passage of the ordinance was taken and decided in the affirmative by yeas and nays, and passed with but two dissenting votes. It had previously passed the Common Council by a unanimous vote.

This action by the Councils of Pittsburgh places the success of this noble enterprise beyond a peradventure. The condition annexed, we doubt not, will be speedily complied with, and when that is done, the aggregate of stock will amount to one million of dollars, an amount that will warrant the vigorous prosecution of the work, and place it in a position to command what further funds may be necessary.—*Pittsburgh Gazette.*

Chesapeake and Ohio Canal.

The National Intelligencer has the following, in reference to the Chesapeake and Ohio canal.

The Chesapeake and Ohio canal company have received such assistance from the cities of Georgetown and Alexandria, and from the banks of the district, as to be in a condition to commence, (and it is believed, to carry through) the repairs to the canal rendered necessary by the ravages of the late freshet. Georgetown has advanced $30,000, Alexandria $25,000, and the balance has been made by the bank.

The Chief Engineer feels assured that the amount of $80,000, nor the time mentioned for the completion of the repairs, (viz: the 1st of July next,) will be exceeded. He thinks that the damage done is not really so bad as that of 1847, and that when repaired the canal will be worth $40,000 more than it was before the flood.

Active operations are commenced all along the line. On the great bank at Bear Island, about two miles east of the Big Falls of the Potomac, the contractor for the repair is at work with a large force.

New York and New Haven Railroad.

The double track from New Haven to Westport, 29 miles, is now finished, with the exception of a day or two's work on a small bridge, and a few hundred yards of the rails yet to be laid. The grading of this portion was all completed, so that the company laid their rails some time before the contractors were required to finish their work—Beyond Westport the grade is nearly completed, and within a month the whole will be ready for the rails, which will be laid as fast as they are received, and the two tracks will then be continuous to New York, except about five miles from New Rochelle to the Harlem Junction. From New Rochelle, a new line is contemplated which, if built, will form a route into New York independent of the Harlem road, and if not, doubtless the old line will be doubled.

Area of California.

The area of California is estimated by Mr. Eddy, Surveyor General of the State, at 146,285 square miles, equivalent to 93,622,400 acres, which he classifies as follows—

Mineral lands, including that which is worthless, being mountainous or desert, also much that will eventually be classed as agricultural.....	52,000,000
Agricultural, which can be irrigated....	20,000,000
Agricultural which cannot be irrigated.	19,000,000
Swamp lands.....	2,622,400
Total.....	93,622,400

Delaware and Hudson Canal.

The Legislature of Pennsylvania have, by a recent act, surrendered to the company the right, under its charter, to assume the improvements of the company within the limits of that State. The act authorises the company "to conduct their business as they have heretofore done, according to their character, and maintain and use their works and appurtenances as heretofore, without liability to account, and surrender as provided for in the said eighteenth section of the aforesaid act, passed on the 13th day March, 1823"

Kentucky.

Lexington and Danville Railroad.—At a meeting of the Stockholders of the Lexington and Danville railroad company, at Nicholasville, on the 4th inst., the following gentlemen were elected directors of said company, for the present year: Messrs. John McMurtry and P. E. Yeiser, of Lexington; Mr. Thos. E. West, of Jessamine; and Messrs. Jeremiah Boyle, John Barclay and Thomas Barbee, of Danville.

New York.

Susquehanna Railroad.—The line of this road is 143 mile, exclusive of ten miles of branches. Its esmated cost is $4,113,603 02, or $28,760 per mile.

The corporation of Binghamton have just subscribed $50,000 to the stock of the above road.

Kentucky.

Covington and Lexington and Maysville Railroad.—Both of these roads we understand are making good progress. Messrs. Nash, Seymour & Co. have commenced work upon the line from Paris to Lexington, which is to be common to the two roads.

East Tennessee and Georgia Railroad.

The portion of this road between Knoxville and Blair's ferry have been placed under contract.

Ohio and Pennsylvania Railroad.

This company have negotiated a sufficient amount of *income* bonds to complete and equip their road.

UNITED STATES CAR-SPRING COMPANY.

OFFICE 25 CLIFF ST., NEW YORK.

HAVING purchased Fuller's Patent for the United States for manufacturing INDIA RUBBER CAR SPRINGS, and erected an extensive Factory, with the most improved machinery, we are prepared to furnish to Railroad Companies and Car Builders, *Rubber Springs* of as good quality as ever before offered, and at the reduced price of *Fifty cents* per pound for *Cash.*

Only the *best quality* of Rubber is allowed to be used, and the manufacture of our Springs is under the supervision of one of the most experienced Rubber manufacturers in the United States.

We also manufacture all kinds of HOSE, not only for Railroad, but all other purposes, to which it can be applied; PACKING of all qualities and thickness, and BUCKETS of every size, of a superior quality. Terms favorable, and prices such as to offer great inducements to the public.

All orders promptly filled by addressing either the Selling Agent, D. S. DODGE, No. 25 Cliff street, or GEO. T. M. DAVIS, Secretary and General Agent.

DIRECTORS:

Anson G. Phelps, of N. Y. Wm. E. Dodge, of N. Y.
Alfred Kelley, of Ohio, Edmund Burke, of N. H.
Horace H. Day, of N. J Geo W. Pratt, of N. Y.
Daniel S. Dodge, of New York.

DANIEL S. DODGE, President.
GEORGE W. PRATT, Treasurer.
GEO. T. M DAVIS,
Secretary and General Agent.

New York, May 18th, 1852. 3m

Notice to Bridge Builders.

OFFICE OF CENTRAL OHIO R.R. Co.,
Zanesville, May 14, 1852.

SEALED PROPOSALS will be received at this Office until Monday, June 7th, 1852, for the Superstructure of a Double Track Railroad Bridge, with a foot passenger way attached, across the Muskingum River, at Zanesville. The whole length will be 528½ feet, divided into four spans of 124½ feet each in the clear. The Bridge seat on the abutments will be four and a half feet; and upon the four piers six and a half feet each.

Proposals will also be received for building a Draw or Pivot Bridge of forty-six feet span, in the clear, across the canal at Zanesville.

Bids are solicited for either Iron or Wooden Bridges, and may be made upon plans submitted by builders.

ROBERT MAC LEOD, Chief Eng.

To Mining and Civil Engineers, Surveyors, etc.

A YOUNG MAN, who has been engaged for the last six years with eminent Engineers in Scotland, is desirous of a situation. Has had considerable practice in the working of mines—being a good draughtsman, and in possession of engineering instruments.

Address ENGINEER, care D. H. ARNOT,
1m20* 50 Wall st., New York.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

Railroad Iron.

THE undersigned are now prepared to enter into contracts to deliver Railroad Iron free on board at shipping ports in Great Britain, or at ports in the United States.

P. CHOUTEAU, Jr., SANFORD & CO.,
May 17, 1852. No. 51 New st.

To Engineers.

A YOUNG MAN of collegiate education, who is a good Draughtsman, wishes to obtain a Rodman's situation, or some other in which he can acquire a practical knowledge of Engineering.

Address RODMAN, at this office. 2021

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

Dissolution of Copartnership.

THE Copartnership heretofore existing between the subscribers under the firm of CHOUTEAU, MERLE & SANFORD, is this day dissolved by its own limitation. Either of the partners will sign the name of the firm in liquidation.

PIERRE CHOUTEAU, JR.,
GUILLAUME MERLE,
JOHN F. A. SANFORD.

New York, May 1, 1852.

N.B. The Iron Department of our business, and the concerns relating thereto, are assumed and will be continued by P. CHOUTEAU JR., SANFORD & Co., and we ask reference of our friends to the following notice of that firm.

CHOUTEAU, MERLE & SANFORD.

May 7, 1852,

COPARTNERSHIP NOTICE.

The undersigned have this day formed a copartnership, under the firm of P. CHOUTEAU, JR., SANFORD & Co., for the transaction of a General Iron Commission and other business.

P. CHOUTEAU, JR.,
J. F. A. SANFORD,
U. A. MURDOCK.

New York, May 7, 1852.

The Iron Business heretofore conducted by the late firm of Chouteau, Merle & Sanford, is assumed and will be continued by us.

P. CHOUTEAU, JR., SANFORD & CO.

Steam Engines and Tools.

ONE Horizontal Steam Engine, of superior workmanship and material—12 in. cylinder, 3 feet stroke, on heavy bed frame of 4,600 pounds weight, well finished in all respects.

One Steam Engine finished as above—10 in. cylinder, 3 feet stroke.

A sample of the above Engines may be seen at Bogardus' Iron Buildings, corner Centre and Duane sts., and at Platt & Brother's, Maidenlane, N.Y.

Two 6½ feet Planing Machines, of the most approved pattern, strong and heavy, will plane 31 in. wide, and fitted up in the very best manner.

Six 2 feet 4 in. Planers, will plane 12 in. wide, and work with quick motion, well adapted to locomotive tools and engine work.

One 12 foot Lathe 25 inch swing, with counter shaft, etc., complete.

Also, Boiler Punches, Power Shears, Presses, and other Tools, Shafting, Pullies, Hangers, and Machinery of all kinds fitted up in the best style.

Apply to the MATTEAWAN MACHINE CO., Matteawan, Dutchess Co., N. Y.; near the Hudson River Railroad Depot, at Fishkill.

4t21 A. L. ACKERMAN, Agent.

BOARDMAN'S PATENT Steam Boiler and Furnace,

FOR LOCOMOTIVES, STEAMBOATS, AND STATIONARY PURPOSES. It is fully demonstrated that this Boiler effects a saving of 50 per cent of the fuel used by the best flue boilers, and 40 per cent of the amount required by locomotive boilers. Its form and construction insure great strength and durability. It is convenient in use, its flues never clog, and no sparks nor smoke can escape from it.

Pamphlets of certificates will be sent to persons desiring it. Single and territorial rights are sold on reasonable terms. For further information, apply to

H. BOARDMAN, 128 Fulton-st., N. Y.

Railroad Commission Agency,

166 PEARL ST., NEW YORK.

THE subscribers are prepared to furnish Railroad Companies with the most approved patterns of Railroad Iron. Also, Chairs and Spike, Passenger and Freight Cars, Locomotive Engines, and Railroad Track and Depot Scales, at manufacturers prices.

Orders are Solicited.

JOHN STRONG. WM. T. PINKNEY, JR.

REFERENCES:

Simeon Draper, New York; John Bradley, Burlington, Vt.; Duryee, Forsyth & Co., Rochester, N. Y.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,

6m*15 No. 7 Platt st., New York.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fittings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALE.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, JR.,
Chief Engineer.

Steubenville, April 26, 1852.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

Notice to Contractors.

SEALED proposals will be received at this office until sunset on Monday, the 30th inst., for the graduation and masonry required on 26 miles of the Pittsburgh and Steubenville Railroad, from Campbell's Run to the Virginia Line. Plans and profiles will be exhibited, and the necessary information respecting the work given by the Engineer at his office for five days prior to the letting.

By order of the Board.

D. MITCHELL, JR.,
Chief Engineer P. and S. R. R. Co.

Engineer's Office, Pittsburgh,
May 6th, 1852.

GLENDON LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston.

ARTIFICIAL LIGHT FOR RAILROADS.

LANTERNS FOR LOCOMOTIVE ENGINES with argand burners and Reflectors of a true parabola, were introduced by the subscribers in May, 1840, since which time we have supplied the following named Railroad Companies with them, viz:

Androscoggin & Kennebec,	Michigan Central,
Albany and Schenectady,	Mad River and Lake Erie,
Auburn and Syracuse,	Manchester and Law'ce,
Boston and Providence,	Mansfield and Sandusky,
Boston and Worcester,	Macon and Western,
Boston and Lowell,	Nashua and Lowell,
Boston and Maine,	Newburyport,
Buffalo and Rochester,	N. Hampshire Central,
Columbia and Philad.,	N. York and N. Haven,
Columbus and Xenia,	Norfolk County,
Cheshire,	Northern, N. Hampshire,
Connecticut River,	" New York,
Conn and Passumpsic,	Norwich and Worcester,
Cocheco,	N. Orleans & Carrollton,
Cuba,	N. London, Willimantic
Eastern,	and Palmer,
Erie,	Old Colony,
Essex and Manchester,	Port., Saco and Ports'th,
Fitchburg,	Rutland and Burlington,
Fall River,	Richmond and Peters'b'g,
Great Falls and Conway,	Saratoga & Washington,
Hartford and New Haven,	Stonington,
Hart., Prov. and Fishkill,	Syracuse and Utica,
Hudson River,	South Reading Branch,
Kennebec and Portland,	Vermont Central,
Lowell and Lawrence,	Vicksburg and Jackson.

In all cases our Lanterns have given satisfaction. The reflectors are made with great care, are heavily plated with pure silver, and every part of the work is strong and substantial.

The reflectors are similar to those used in the United States Lighthouses as now furnished by us. The United States Commissioners for running the North Easterly Boundary line, procured of us a small parabolic reflector with an argand burner of ⅝ inch diameter, and Major Graham, in his report to Congress, says the light was distinctly seen thirty miles, and was used in establishing the lines.

Having heard complaints of the artificial lights used for lighting Railroad Passenger cars, we made experiments to obtain a superior light to any then in use. In November, 1847, we introduced a double parabolic reflector to an argand burner, which reflects the rays of light in a direct horizontal line parallel with the sides of the car and over the heads of the passengers, thus avoiding the inconvenience of a concentrated light. These lamps are esteemed the best in use, and are sold at moderate prices.

Samples of our Locomotive and Car Lamps may be seen at Messrs. Bridges & Brothers, 64 Courtlandt street, New York.

HENRY N. HOOPER & CO.,
No. 24 Commercial St. Boston.

May, 1852.

To Contractors.

OHIO AND MISSISSIPPI RAILROAD, EXTENDING FROM CINCINNATI TO ST. LOUIS.

SEALED proposals will be received at the offices of the undersigned in the cities of Cincinnati and St Louis, until the 15th day of June next, for the grading, masonry and bridging, of the following portions of the above road.

First—From Cincinnati, extending 72 miles westerly, to the intersection of the Madison and Indianapolis railroad.

Second—From Illinoistown, opposite St. Louis, extending 50 miles easterly, to a point near the town of Carlyle.

Maps and profiles of the line will be ready for exhibition and all the necessary information will be given at the above offices on and after the 24th inst.

For the remaining 213 miles, proposals will be received from such parties as desire to bid for the work upon their own examinations and such information as the Engineers will be able to give, the character of the country being uniform and preliminary surveys in progress.

Co-partnership firms bidding for the above work will please give the full name and Post-Office address of each member of the firm.

H. C. SEYMOUR & CO.

SALE OF MORTGAGE BONDS.

OF THE

Lawrenceburgh and Upper Mississippi Railroad Co.

THIS COMPANY OFFERS FOR SALE FIVE HUNDRED THOUSAND DOLLARS of their seven per cent. First Mortgage Bonds, with Interest Coupons annexed.

These bonds are in sums of $1000 each, payable 1st March, 1866, with interest on the 1st days of March and September, at the office of the Ohio Insurance Life and Trust Company in the city of New York, where the principal is always payable. They are convertible into the stock of the Company at par, at any time within five years from their date, and are secured by a first mortgage on the entire road, its franchises and equipments, by deed of trust to George S. Coe, of the city of New York.—This being the first and only lien upon the road, and this being the entire sum authorized to be issued by the mortgage.

The road extends from the road to run from Cincinnati to St. Louis, at Lawrenceburgh to Indianapolis, the Capitol of the State of Indiana, a distance of 90¾ miles, and will, when completed, with the twenty miles of the road aforesaid, between Lawrenceburgh and Cincinnati, form the nearest and most direct line from Indianapolis to Cincinnati.

It passes through several important towns and over a most fertile and well improved country, and by means of railroad connections made and making at Shelbyville and Indianapolis, this line will be placed in communication with fully one half of Indiana, forming the best, and for much of the country, the only avenue of travel and trade to Cincinnati.

Seven railroads are made or making to Indianapolis, the most of which will be important feeders to this Cincinnati road—three railroads are made to Shelbyville, the business of which must naturally seek an outlet over this road.

The entire line is under contract, about 20 miles is now ready for the iron—the grade will be prepared to receive the superstructure as far as Shelbyville, 63 miles, this fall, which place is already connected by railroad with Indianapolis, and the contracts for the road complete to Indianapolis expire on the 1st October, 1853.

The rails for the entire line, 9,200 tons, are purchased, 1200 tons are on the line, and are now being laid down; 1000 tons will be forwarded from this port immediately; 4,200 tons are ready for shipment in Wales, and the residue is to be delivered in New Orleans next winter.

The total cost, with rolling stock and equipments, ready for business, is $1,250,000; $800,000 of stock has been subscribed and the largest portion of it paid in and expended. This mortgage provides for only $500,000, and is the only one intended to be given, as with it the means of the Company are ample for the entire work, and the lien thus created only amounts to $5,500 per mile.

Indiana is now the fifth State in the Union, and is fast advancing in wealth and population. Indianapolis, her seat of government, is likely to be the largest inland city in the west. There is being concentrated at it a net work of railroads, which, with connections, will penetrate every part of the State. It must be evident that the road which shall form the nearest and best connection with this system of public works, and Cincinnati, the great Emporium of the West, must become an important trunk line, and amply repay the expenditure upon its construction.

In addition to the mortgage the directors and principal stockholders of this road have deposited with the Trustee their personal guarantee to the holders of these bonds for the punctual payment of the interest thereon until the road is completed. Proper certificates and references are given, showing the entire ability of those parties to fulfil their engagements.

Sealed Proposals for any amount of these bonds, not less than $1,000, will be received until Saturday, the 22d of May next, at 3 o'clock P. M. Proposals to be directed to Messrs. DE LAUNAY, ISELIN & CLARKE, No. 63 Wall street, and endorsed "Proposals for Lawrenceburgh and Upper Mississippi Railroad Bonds."

Fifteen per cent of the purchase money to be paid on accepting the bids, the remainder in equal monthly instalments of 15 per cent each. The takers of the bonds to be at liberty to pay at any time in full. Interest on the bonds to run from date of payments.

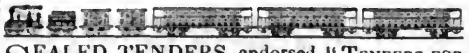
The above $500,000 bonds will be sold absolutely to the highest bidder.

Pamphlets and Maps, and any further information relating to these securities, can be had by application to

DE LAUNAY, ISELIN & CLARKE,
63 Wall st.

Great Western Railroad,

CANADA WEST.



SEALED TENDERS, endorsed "TENDERS FOR CARS," will be received until Nine o'clock A. M., WEDNESDAY, May 26th, for furnishing the following CARS for the Great Western Railroad Company, to wit:—

25 Eight Wheel Passenger Cars,
4 Eight Wheel Express and Mail Cars,
8 Eight Wheel Baggage Cars,
20 Eight Wheel Emigrant Cars,
100 Eight Wheel Platform Cars,
150 Eight Wheel House Freight Cars,
100 Four Wheel Gravel Cars,
25 Four Wheel Repair Cars,
15 Hand Cars.

The above Cars are to be manufactured in the City of Hamilton, in buildings erected for the purpose, by the Railroad Company, and are to be completed on or before the First day of July, 1853. A portion of the same are to be completed by the First day of October, 1852.

Plans and Specifications will be ready for examination on and after the Eighteenth day of May next. Plans of the buildings can be seen at the Office of the Engineer.

The Contractor will be required to rent the buildings of the Company, and to furnish all of the requisite machinery, except the Engine and main line of shafting, which will be provided and put up by the company.

Information will be furnished by mail to parties wishing to tender.

The gauge of the road will be five feet six inches.

The Directors reserve the right to accept or reject tenders, as they may consider for the interest of the company.

R. G. BENEDICT,
Chief Engineer, G. W. R. R.

Office of the Great Western R. R.,
Hamilton, April 20th, 1852.

FILES.

THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make.

WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms.

RICHARD MAKIN,
April 22, 1852. 65 Broad st., second floor.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch.

WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.
June 20, 1851. 3m.

Ogden & Martin's
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our Cement for public works or other purposes. We warrant the cement equal in every respect to any manufactured in this country. It attains a great degree of hardness, setts immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength.

For sale in tight barrels, well papered, at their office by

OGDEN & MARTIN, 104 Wall st.
February 16, 1850. 1y*

The above cement is used in most of the fortifications building by government.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Ca. Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
29 Central Wharf.

Boston, June 1, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st

To Railroad Contractors.



OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First	Division,	from	Cairo to Big Muddy River.....	60 miles.
Second	"	"	Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian...	53 "
Sixth	"	"	Bloomington to the Illinois River....	60 "
Eighth	"	"	from Freeport to Dubuque.....	67 "
Ninth	"	"	Chicago to Kankakee river.....	55 "
Tenth	"	"	Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

1852.  1852.

PEOPLE'S OSWEGO LINE, New York and Oswego,

ARE prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.
LEWIS & BEARDSLEY, Oswego.
JAMES W. CAMPBELL, New York.

AGENTS.
James W. Campbell, 111 Broad st., New York.
W. H. Clark, 60 Quay st., Albany.
Lewis & Beardsley, Oswego.
Smith & Hunt, Toledo, Ohio.
C. W. Bissell, Detroit, Mich.
C. Walker & Son, Chicago, Ill.
H. H. Hurlbut, Western States.
May 15, 185

Bowling Tire Bars.

40 Best Flange Bars 5½x2 inches, 11 feet long.
40 " 5½x2 " 7 feet 8 in. long.
40 " Flat " 6x2 " 11 feet long.
40 " 6x2 " 7 feet 8 in. long.

Now in store and for sale by
RAYMOND & FULLERTON,
45 Cliff street.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction—India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.

March 23 tf. GORDON McKAY, Agent

CHILLED RAILROAD WHEELS.—THE UNdersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the ubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St., below 13th,
Philadelphia, Pa.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK. Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

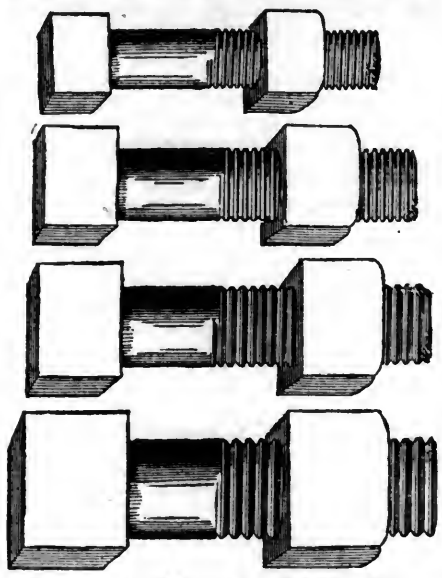
The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Slide Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

N. A. BARRETT, Agent,
75 State Street, Bosto .

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JER, CARMER & CO.,
6m*14 75 Broad st. ,New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS

HAVE FOR SALE

Plain Garnet Plush.		Fig. Garnet Plush	(Butterfly pat.
" Crimson "		" Crimson "	(Elegant.
" Scarlet "		" " "	(Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR

Of every description and quality.

New York, 1850. 1y16

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.

Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York

Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on*. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To Mr. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, *etc.* OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself*. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

RAILROAD
India-rubber Springs.

IF any Railroad Company or other party desires it, the NEW ENGLAND CAR SPRING CO. will furnish India-rubber Car Springs made in the form of washers, with metalic plates interposed between the layers, or in any other form in which they can be made; in all cases guaranteeing the right to use the same against any and all other pretended rights or claims whatsoever.

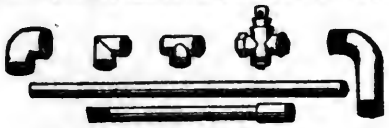
F. M. Ray, 104 Broadway, New York.

TO RAILROAD COMPANIES AND BUILDERS OF MARINE AND LOCOMOTIVE ENGINES AND BOILERS.

PASCAL IRON WORKS.

WELDED WROUGHT IRON TUBES

From 4 inches to ¼ in calibre and 2 to 12 feet long, capable of sustaining pressure from 400 to 2500 lbs. per square inch, with Stop Cocks, T's, L's, and other fixtures to suit, fitting together, with screw joints, suitable for STEAM, WATER, GAS, and for LOCOMOTIVE and other STEAM BOILER Flues.



Manufactured and for sale by

MORRIS, TASKER & MORRIS.

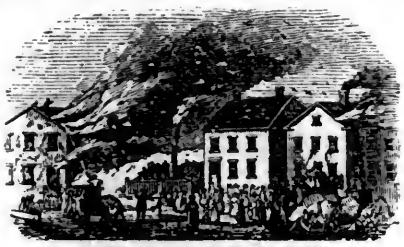
Warehouse S. E. Corner of Third & Walnut Streets,

PHILADELPHIA.

Railroad Paint.

FOR depot buildings, bridges, burthen cars, wheels and axles, pipes, steam joints, fences, and every description of work requiring protection from the action of the elements. Price per barrel of 300 pounds, nine dollars.

Orders addressed to J. M. HALL, 36 South street, New York, will receive prompt attention.



Blake's Patent FIRE-PROOF PAINT.

This paint, in a few months after applied, turns to slate or stone, forming a complete enamel or coat of mail over whatever applied, protecting it from the action of fire, water or weather. It has now been tried over seven years, and where first applied is now like a stone.

LOOK OUT FOR FORGED BRANDS AND WORTHLESS COUNTERFEITS, as this paint has gained such universal credit throughout the country, that many persons have been getting up all kinds of worthless counterfeit stuff, and pushing it into the market upon the credit of the genuine, but most of it has proved itself so entirely worthless, that it is impossible to sell. Some of them have commenced forging my brands, and putting it upon the barrels—the forgery can be detected from the fact that on the genuine the words "Blake's Patent Fire Proof" are put on in a circular form, but on the spurious it is straight. I have now three suits in the United States Court against those who have been infringing my patent by selling "fire proof paint" not of my manufacture. I would, therefore, caution all to be very particular, and see that they get the genuine article, which can at all times be had of the Patentee, at 84 Pearl street, New York.

WM BLAKE.

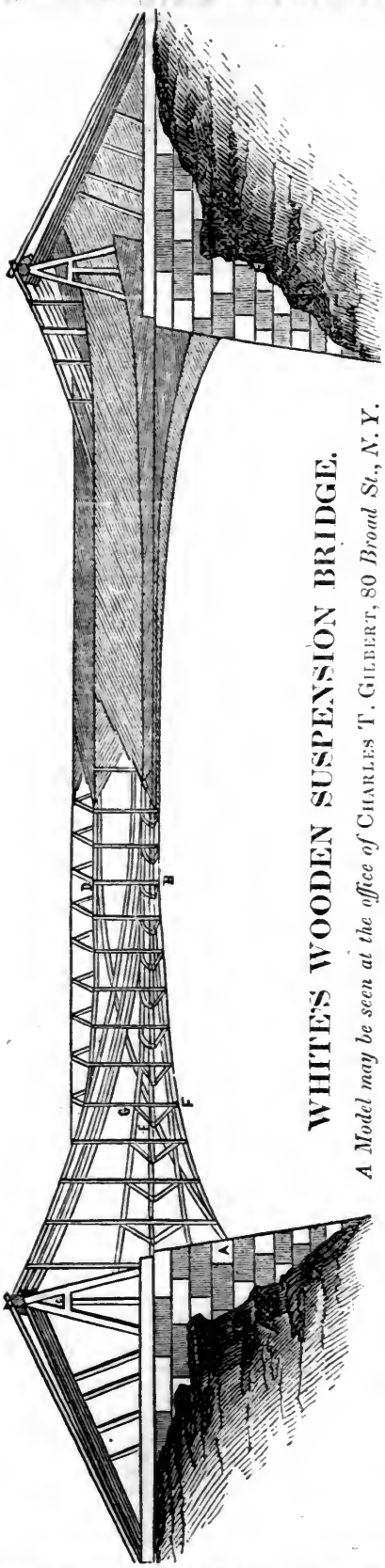
Pneumatic process for making Foundations for Bridges, Piers, etc.

THE Attention of Engineers, Contractors, and Bridge Builders, etc., is directed to this method of forming secure foundations. Hollow Cylindrical piles from 8 inches to 10 feet in diameter may be sunk through sand, mud, clay, etc., to any required depth, and filled with concrete or masonry.

The efficacy and economy of the process has been demonstrated in the construction of numerous permanent works, at a much less cost than the use of any other method. (See evidence in Parliamentary enquiry, Railroad Journal, April 19, 1851.)

Contracts made, or licenses granted for the use of the invention in any part of the United States, by

CHARLES PONTEZ,
34 Liberty street, N. Y.

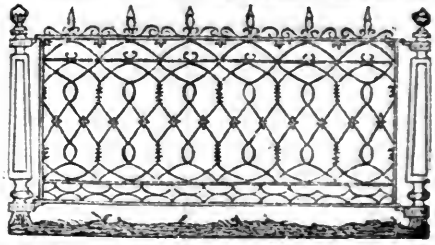


WHITE'S WOODEN SUSPENSION BRIDGE.

A Model may be seen at the office of CHARLES T. GILBERT, 80 *Broad St., N. Y.*

Length of span, anything short of 1,500 feet, with perfect safety for every kind of travel. The above cut represents one with roof, which however is not essential. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, proprietors,

Cambridgeport, Mass.,
Office next door to the Athenæum.



NEW YORK WIRE RAILING WORKS.

WIRE RAILING.

[SECURED BY LETTERS PATENT.]

Enclosures for Public Grounds and Cemeteries.
Fences for Cottages, Gardens Farms, etc.
Window Guards and Gratings, for Stores, Dwellings, Lunatic Asylums, Prisons, etc.
Columns and Cornice Work for Cottages and VERANDAHS.

THE above are made entirely of Wrought Iron and Wire, (at one half the cost of Cast Iron,) being extensively used in the city of New York, etc.—Superseding all other kinds of work for the same purpose.

RAILROAD AND FARM FENCE.

Made with Wrought Iron or Wooden Posts, being so constructed as to be used for moveable or permanent fence, at 80c. to $3 per rod.

WIRE FOR FENCES,

always on hand.

Portable Iron Bedsteads, Iron Statuary, Greyhounds, Dogs, Lions, etc.

Wrought and Cast Iron Railings made to order.

By addressing the Manufacturer and Proprietor, Circulars and drawings of the above will be forwarded.

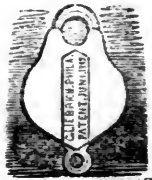
JOHN B. WICKERSHAM,
312 Broadway.

Works, 59 & 61 Lewis st.

AGENTS—C. B. Conant & Co., 215 Pearl st. N. York.

New York, June 2, 1851.

To Railroad Companies, etc.



The undersigned has at last succeeded in constructing and securing by letters patent, a Spring Pad-lock which is secure, and cannot be knocked open with a stick, like other spring locks, and therefore particularly useful for locking Cars, and Switches, etc.

I also invite attention to an improved PATENT SPRING LOCK, for SLIDING Doors to Freight and Baggage Cars, now in use upon the Pennsylvania Central, Greensville and Columbia, S.C., Reading, Pa., and other Railroads.

Companies that are in want of a good Pad-lock, can have open samples sent them that they may examine and judge for themselves, by sending their address to

C. LIEBRICH,

May 9, 1851. 46 South 8th St. Philadelphia.

ENGINEERS' AND SURVEYERS'

INSTRUMENTS MADE BY

EDMUND DRAPER,

Surviving partner of

STANCLIFFE & DRAPER.



No 23 Pear street, near Third, below Walnut, Philadelphia.

Lovegrove's Patent Cast Iron Water and Gas Pipes.

THE Subscriber, the Inventor and Patentee of the Centrifugal mode of giving form to metallic substances while in a molten state, is preparing to make Cast Iron Water and Gas Pipes, of any dimensions, at prices much lower than they can be made in the old manner, and the pipes warranted to stand a pressure of three hundred pounds to the square inch, and to be soft enough to drill. Steam Engines and all kinds of machinery. Cast Iron Doors and Frames, and Mill Castings of every description, made to order.

THOMAS J. LOVEGROVE,
Machinist and Founder,
West Falls Avenue, below Pratt st., Baltimore

CAUTION

TO RAILROAD COMPANIES AND CAR MANUFACTURERS.

THE PATENT OFFICE having decided in favor of F. M. Ray as the first and true inventor of the India-rubber Railroad Spring, and against W. C. Fuller, who had claimed the same as his invention, and at whose instigation and that of Horace H. Day (who has manufactured the metallic or vulcanized rubber for such springs), several Railroad Companies have infringed, not only upon the rights of the said F. M. Ray, and rendered themselves liable for large damages, but also upon the patent rights of Charles Goodyear, against all of whom suits for damages for infringement will be commenced, in the event of failure to recover compensation speedily against Horace H. Day, against whom several suits are now pending:—all Railroad Companies are cautioned against infringing or pirating upon the said patent rights of said Charles Goodyear, or of F. M. Ray, by the use of such India-rubber car springs, and for all future infringements, actions will be immediately commenced.

Annexed is a copy of the official certificate from the Commissioner of Patents:

COPY.

U. S. PATENT OFFICE, WASHINGTON, D. C.,
12th September, 1850.

Sir—You are hereby informed that in the case of the interference between your claims and those of W. C. Fuller, upon which a hearing was appointed to take place on the second Monday in August, *the question of priority of invention has been decided in your favor.* I enclose a copy of the decision.

The testimony in the case is now open to the inspection of those concerned.

Yours respectfully,
Signed DELLITT C. LAWRENCE,
Acting Commissioner of Patents.

To Mr. Fowler M. Ray,
C. M. Keller, Esq., New York.

In conformity with the above decision, a Patent has been granted to me for the same invention for which Fuller had obtained a Patent dated October 8, 1850, and a bill has been filed in the U. States Circuit Court to repeal the Patent granted to Fuller.

In answer to the above, Mr. Knevitt states in his Advertisement in effect that Mr. Ray obtained his patent by *bribing the Commissioner.*

When a case has become so bad that parties in their desperation in defense of themselves are compelled, as a last resort, to attack the character of a person holding an office of such high honor and trust as that of Commissioner of Patents of the U.S., what reliance can be placed upon any of their statements? The character of the Hon. Mr. Ewbank, Commissioner of Patents, stands too high with the public to require any defense at my hands; and all attempts by Knevitt or Day to escape from the charges of having tried to deceive the public and railroad companies, by aspersing the character of Mr. Ewbank, and insinuating that he has been improperly biased or influenced in deciding against W. C. Fuller, and in my favor as the first and original inventor of the spring in question—will only recoil on themselves.

Now what was the question between Fuller and Ray thus decided in favor of Ray?

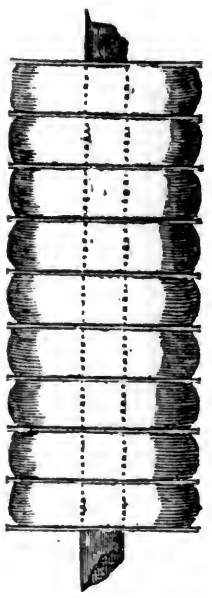
It was whether Fuller or myself was the first inventor of India-rubber springs, with metallic plates interposed.

On the 1st August, 1848, I obtained a patent for a form of spring, (about which there is no disoute) which consisted of a cylinder of India-rubber, with circular bands upon the outside circumference. This kind of spring, in nineteen cases out of twenty, I may say, has been adopted as the best and most approved form of spring by railroad companies. The validity of this patent was not questioned in this controversy; but the question submitted to the Commissioner of Patents for his investigation and decision, and in respect to which a very large mass of testimony was taken, was whether W. C. Fuller or F. M. Ray was the first inventor of a form of spring, composed of alternate discs or rings of India-rubber, with metallic plates interposed, etc? That question has been decided *against* W. C. Fuller, and in *my favor, as the first inventor.*

There is no escaping from this decision, and the parties who hope to do so by injurious imputations against the Commissioner of Patents, who made the decision in this case, will be disappointed.

It will require something more, they will find, than mere assertions or insinuations to produce any distrust of the integrity of the Commissioner of Patents. The testimony in this case clearly proved that I was the first inventor of the spring in question, and justly entitled to the patent which had been granted to W. C. Fuller for the same invention, and the Commissioner of Patents could not have made any other decision.

The cut given below represents a model for which a patent was granted to Mr. Ray in his contest with Fuller. It is a perfect *fac simile* of the original invention.



A patent was granted to Fuller by the United States on the 22d October, 1846, under the title of "An improvement in Railway Carriages." At this time I was pursuing my experiments with a view to ascertain with greater certainty, the best form of spring for railroad cars, and knew nothing about the invention or patent of Fuller till I applied for a patent shortly afterwards, and received notice from the Patent Office of the interference with Fuller's which *this decision has settled against Fuller and in my favor.*

Knevitt says that I made the same application to Mr. Burke, the former Commissioner of Patents, which was refused, without giving the reason why it was refused, leaving it to be inferred without daring to make the assertion openly, that, as between Fuller and Ray, Mr. Burke had decided against Ray: whereas, the fact is, as the record of the case at the Patent Office will show, that the application was refused on the ground that there had been a patent granted in England to Lacy prior to either Ray or Fuller, and that objection, if correct, would prove fatal to a suit by Fuller upon his patent, as well as to a suit by me upon my patent for the same thing; but the Commissioner of Patents, upon a closer and fuller investigation of the English patent granted to Lacy, than was given to it on the first application, has decided that the patent to Lacy is not in the way of a patent either to Fuller or myself, for the form of spring in question—that is, alternate discs of rubber, with metal plates interposed, etc. And, as between Fuller and myself, *the Commissioner of Patents has decided that Fuller is not the first inventor, but that I am, and am entitled to the patent in question.*

It would seem unnecessary to add anything more; enough I trust has been shown to put the question at rest with the various railroad companies, the parties most interested in this decision.

I ought, perhaps, to say something in reply to Mr Knevitt's statements in regard to his and Day's infringement upon Goodyear's patent by the manufacture and sale of Vulcanized rubber, and the publications which they have put forth to induce railroad companies to become parties to the infringement on said patent, and to get them involved in controversy; but as there are a number of suits against Day for damages to a large amount for infringement in this respect and other matters, and particularly as there is a suit by Goodyear against Day, which Day is under stipulation to try at the next March term of the U. S. Circuit Court, to be held at Boston, unless Day succeeds in putting it off, of which there is very little probability, as I am informed, I shall abstain for the present from saying anything about this subject.

Mr. Knevitt wisely declines to say anything about the suits of Charles Goodyear against Horace H. Day for damages for infringement of Goodyear's patent, by manufacturing for Knevitt the vulcanized rubber, of which all these springs, sold by Knevitt to railroad companies, were composed, and I leave both Day and Knevitt to answer to the few railroad companies whom they have deceived, and thus rendered liable for large damages for infringment of Goodyear's patent, in the best manner they can.

Knevitt does not pretend to deny that he has given false assurances to the few railroad companies whom he has thereby induced to infringe upon the springs, which the Commissioner of Patents has decided against Fuller, and in my favor, as the first and true inventor; but, for the purpose of diverting attention from this fact, he still continues to harp upon *a separate and distinct patent* of mine for railroad springs, which, he says, was for *India-rubber* and *air*, and has proved useless. How much truth there is in this assertion may be gathered from the following copy of the claims in that patent, and from the fact that the spring patented by me in 1848, is the most approved form, and the one adopted in nineteen cases out of twenty, and is used on nearly every railroad in the United States.

Copy of the claims in patent granted to Fowler M. Ray, August 1st, 1848:

FIRST—In combination with springs made of vulcanized India-rubber, substantially as above described, the use of hoops or bands on the external circumference at the ends, or between the ends, or at the ends, and at any required distance between the ends, substantially in the manner and for the purposes above described.

SECOND—I claim combining the elasticity of India-rubber cylinders, substantially such as herein described, with the elasticity of atmospheric air, or other permanently elastic gas, by closing up the ends of such India-rubber cylinders either with discs of India rubber, or the equivalent thereof, such as solid discs of metal, substantially in the manner and for the purposes specified.

This patent bears date 1st Aug., 1848.

I take no notice of the opinions of counsel cited by Knevitt. Knevitt ought to know that the paid opinions of lawyers employed in a case, will have no weight whatever. There are always two sides to all causes, and it is the business of counsel to advocate the cause of their clients.

F. M. RAY.

New York, October 1, 1850.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,
Importer of Stationary 191 Pearl st., N. Y.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 22] SATURDAY, MAY 29, 1852. [WHOLE No. 841, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Convention at Burksville.....337
Coal Fields of Ohio.....338
Cincinnati, Hamilton and Dayton Railroad...339
Columbus, Piqua and Indiana Railroad.....341
Evansville and Illinois Railroad.....342
Michigan Central Railroad.....343
New York and New Haven Railroad.....343
Railroads in Switzerland.....343
Hudson River Railroad.....344
White's Suspension Bridge.....344
Panama Railroad.....345
Ohio Central Railroad.....345
Stock and Money Market.....345
Banking in Wisconsin.....346
Railroad Convention at Florence.....346
Ventilation of Cars.....347
Cincinnati, Wilmington and Zanesville Road.347
Savannah vs. New Orleans.....347
Dayton and Michigan Railroad.....348
Mobile and Ohio Railroad.....349
Lake Superior Railroad.....349

American Railroad Journal.

Saturday, May 29, 1852.

South-Western Railroad Convention.

A convention of delegates of the friends of the Southwestern railroad project assembled in Burksville, Kentucky, on the 5th of April, and continued two days. It was organized by the appointment of Gen. John B. Rodgers, of White Co., Tennessee, as chairman; W. E. Nelson, of White Co., Tenn., Secretary; and M. T. Chrisman, of Boyle county, Kentucky, assistant secretary; whereupon eighty delegates composed from the counties of Franklin, White, Overton, Fentress, and Coffee, Tennessee; Adair, Boyle, Fayette, Clinton, Wayne, Casey and Cumberland, Kentucky; reported themselves and took seats in the convention.

The following were appointed permanent officers of the convention, having been previously reported through L. Pope, Esq., of Warren county, chairman of a committee appointed for that purpose, viz:

Hon. A. Cullom, of Tennessee; President.

H. C. Pindell, Esq., of Fayette co., Ky.; Gen. Joshua Buster, of Wayne co., Ky.; Col. T. M. Emmerson, of Cumberland county, Ky.; Dr. S. B. Fields, of Adair co., Ky.; Gen. John B. Rodgers, of White co., Tenn.; Maj. Ben. Decherd, of Franklin co., Tenn.; Col. P. M. Armstrong, of Overton, co., Tenn.; Vice presidents.

M. T. Chrisman, of Boyle co., Kentucky; J. Q. A. King, of Cumberland co., Ky.; J. E. Manning, of White co., Tenn.; Dr. S. McHenry, of Overton co., Tennessee; Secretaries.

After the appointment of Messrs. Pindell, Pope, Rodgers, Milton, King, Goodpasture, Anderson of Overton, Fields, Alexander and Gaither, a committee on resolutions, and listening to a forcible address from Mr. Pope, the convention adjourned until 2 o'clock, P. M.

On re-assembling, addresses were listened to from Messrs. Nelson and Decherd of Tennessee, and Messrs. Pindell, Gaither, and J. Q. A. King, of Kentucky, after which an adjournment was had until 7 o'clock, P. M.

On re-assembling, the committee on resolutions, through its chairman, Mr. Pindell, reported. In looking to an immediate organization, and an early commencement of the Southwestern railroad from Danville in Kentucky, to McMinnville in Tennessee, the committee did not deem it necessary to comment upon or set forth the merits and claims of this road to the consideration and interests of the section of country through which it would pass, and to the cities and railroad interests of the North and South. They believed, however, that the road had been selected in reference to the interests of the North and South—the community at large—as well as to the interests of the region, which it will traverse, and is such an improvement as is commended to all, as connecting the avenues of travel and the great marts of commerce of this Union; and recommended that committees be appointed in the counties of Franklin, Coffee, Grundy, White, DeKalb, Warren, Van Buren, Overton, Fentress, and Jackson, Tennessee; Cumberland, Clinton, Adair, Casey, Pulaski, Boyle, Lincoln, Wayne, Greene, Taylor, Russell, Jessamine, Fayette, Mason and Kenton, in Kentucky, as immediately interested in the construction of the road, to present to the people of their respective counties, by public addresses, and such other means as they may deem proper, the merits and importance of the enterprise, and to solicit subscriptions for the purpose of defraying the expenses of an experimental survey of the route, and such other expenses as may be necessary to bring about an early commencement of the work.

The Hon. J. L. Goodall, Wm. E. Nelson, and Gen. John B. Rogers were appointed a central committee to take such measures as may be necessary to obtain subscriptions of capital and the organization of a company, and among other things, charged with procuring an experimental survey of the whole route, and publishing the report of the engineer, with an address containing such other information as will fairly present the merits of the enterprise to the public.

In the appointment of a central committee, it was not intended to trespass upon the duties of the commissioners appointed by the act of the Tennessee Legislature incorporating the company, but only to provide an auxiliary, whose duties will extend over the whole line from Winchester to Danville.

Regarding this enterprise as forming the last link in a line of railway leading from the lakes of the north to the Gulf of Mexico in the south, running centrally through Ohio, Kentucky, Tennessee and Alabama, bringing distant sections of the confederacy into close proximity, thereby becoming a work of great national importance, the committee recommend that the Respresentatives and Senators in Congress from Tennessee and Kentucky, be requested by this convention to use all fair and honorable means to secure the appropriation of 500,000 acres of land belonging to the general government in aid of its construction, urging as a strong reason, that Congress had heretofore appropriated large quantities of land to purposes less national.

The convention considered the section of country through which it was proposed to run the road as highly favorable to its construction, and as affording it a successful business when completed; and the delegates pledged themselves to use every effort to accomplish its completion and maintain its prosperity.

A committee in each county previously named, was appointed, auxiliary to the central committee, to forward the enterprise. Addresses followed from Messrs. J. D. Goodpasture, Wm. Bosson, and P. B. Anderson, of Tennessee, and Messrs. M. T. Chrisman and Junius Caldwell, of Kentucky.

L. Pope, Esq., was recommended as a suitable person to be employed in soliciting subscriptions to the stock of the road.

The thanks of the convention were tendered to its officers for the able and impartial manner in which their respective duties had been discharged; also to the citizens of Burksville and the county of Cumberland for the assistance, kindness, and hospitality they have extended to the delegates.

After the passage of a resolution ordering the Representatives in Congress to be each furnished with a copy of the proceedings as speedily as possible, and a short but appropriate closing address from Judge Cullom, the convention adjourned, *sine die*.

For the American Railroad Journal.

Coal Fields of Ohio.

Next in importance to the fertile soil of the Ohio Valley, as an element of growth and prosperity, are the vast coal fields that underlay the country. The first will give to that region the superiority in agricultural wealth, and the latter will secure to it the supremacy in the productions of manufactures.—Proximity gives enhanced power and value to each; and both, in combination, gives a unity of power that defies competition. When they begin to operate, one on the other, like the plates of a galvanic battery, they develop a power that quickens the springs of life in everything brought in contact with them. Agriculture, slow in its development in a new country, where it has no stimulus of a reacting interest, no sooner feels the impulse of a consumer brought in contact with it, than it starts into new activity, and sends back new vitality and strength to the interest which first awakened its own powers.

The boundless extent of these natural gifts has heretofore made them of no value. They seemed inexhaustible, abundant beyond all possible demand, and were to be had almost for the taking.—Will it be believed fifty years hence that rich coal lands on the banks of the Ohio river were daily passed by thousands of shrewd and intelligent men, while they were offered, and remained unsold from 1825 to 1835, at one *bit* an acre? None then, and few now understand the powerful sympathetic influence of one branch of industry on another. None imagined the revolution in the condition of the industry of the country, by the erection of a few workshops and factories along the river. The influence seems magical. As late as 1842, along the lower Ohio, the farmer, after harvest, counting the number of hard day's labor he and his laborers had bestowed upon raising his crop, and estimating it by the current price of his products, found that his labor had not produced him in value two dimes per day. With this poor encouragement to industry, he labored only to raise products enough for his family's consumption. He produced his own homespun clothing by labor that was not even so productive as that in the field. He debarred himself of all luxuries, often made his sugar from the Maple tree, and the only article consumed, not the product of his own labor, was a few pounds of coffee. In those days, the whole cash receipts of a farmer, with a large family, in many regions along the river, ranged from $25 to $50 per annum. The industry of the country, under such influences, was lifeless and unproductive. It stimulated no desires, and supplied no wants but the first necessities of nature. It raised the people scarcely above the savage state, so far as the agriculture of the region had an influence upon the habits and conditions of the people.

At that time the whole consumption of coal from Lowisville to Natchez, by steamers and citizens, would not employ fifty miners the year round. The consumption of New Orleans at that period was not equal to the quantity now consumed by a single line of steamships running from that port. Not one of the river steamers in twelve at that time, would use coal, if given to them. Unacquainted with the management of it in their furnaces, engineers declared it would produce no steam. Men who now admit that ten bushels of coal, which could then have been bought for 50 cents, is equal in evaporative power to a cord of wood, gave $2 and $2 50 for wood then, rather than use the coal.

The coal mines on the river at that period, were owned by Eastern men, who purchased and opened them with their Eastern impressions of the important uses and value of coals. They were, in their ideas, many years in advance, in this respect, of the country to which they brought their capital labor. The little esteem in which the article was held, and the prejudices against the use of it, brought disappointment and sad losses to all the earliest enthusiastic adventurers in western coal mines; many scarcely escaping bankruptcy. This species of property has, therefore, till within a few years, been held to be of little value. The misfortunes and prejudices of the past, have hidden the future value of it from view.

But since 1842, a change has occurred. Furnaces, foundries, workshops, and factories have arisen on the banks of the river, fed and moved by coal. Villages and towns have gathered around them; towns' people have found the use of coal cheaper than to cut the wood when hauled to the door. Instead of one river steamer in twelve burning coal, there is not now one in twelve that does not use it. The consumption of the southern cities is ten times greater than it was five years ago.—Nearly every point of the coal Basin which approaches the river is now open, and the mines in full activity; but on the present scale of working are scarcely able to supply the demand; and this demand is increasing at the rate of 25 per cent. on the amount of each preceding year.

The changes which the next ten years will effect in this species of property cannot now be calculated, for it is advancing not by a single ratio of progression, but it acts and is reacted on by forces that are multiplied at every step of its advance. The coal first brought the workshop and factory to the locality; they stimulated the farmer; gave him double prices for his labor; the farmer gave all his labor to his farm, and furnished his wants from the workshop and factory; they exchanged labor with him, and left him a surplus. Farmers and workshops multiplied, both making surpluses. The increased production increased the transport steamers; the steamers opened new markets, and the new markets have multiplied the workshops, and the workshops the farmers, and these again acting and re-acting on each other, all result in multiplying the demand for coal, which is the motive power which sets all in motion, and keeps the whole machinery of trade moving. The most skeptical eastern man now admits that the seat of the heavy and coarse manufactures, must, in a short period, be transferred to the Ohio Valley. These seats will be grouped around the coal banks.

In 1840, there was but one coal mine regularly worked on the Ohio river below Louisville. The workable vein below the falls is in the rear of Cloverport, in Kentucky. It is five or six miles from the river, and in the vicinity of Pretolceum Springs. It has the appearance of the purest Cannel coal. It can be ignited very readily from the flame of a candle, and burns with more freedom, and with a most brilliant and glowing flame. In appearance, and as far as tested, it is the finest coal found on the continent. The right to the land has recently been bought by New York capitalists for $50,000, it is said. The same tract was offered to the writer in 1845, for $1500. The objections to this mine, are its distance from the river, the route to it being over a rugged country unfavorable for the construction of railways. From the purity and inflamability of this extraordinary coal, it is thought by many to be compact indurated pretoleum, which has flowed from extinct springs, and spread over the surrounding surface. If it has had this local origin, the vein is not likely to be extensive nor continuous, and will be found only in spots, and require new openings for the deposit of each separate spring. Similar deposits, on a very limited scale, are found around springs still flowing in the vicinity. The mine has not yet been worked sufficiently to prove the extent of the deposits. It is found in various places, all of the same character, but whether it be a regular vein or a succession of different deposits which have flowed from various springs, has not been decided. If the supply be abundant and it can be brought to the river, it will probably be found to be one of the most valuable coals for steam ever mined. It resists the action of the atmostphere, with the tenacity of anthracite.—It will cover itself with moss before it disintegrates.

The next mine on the same side of the river below, is at Hawesville. This was the first mine opened on the Ohio river below the falls; its first proprietors were the American Cannel Coal company, composed originally of Boston gentlemen, who met the fate that usually attends the first pioneers in a new enterprise in a new country. They left their capital scattered over the hills from which they took their coal. Their successors removed their works to the opposite side of the river, where they have, after many years of labor in developing the resources of their property, built up the thriving manufacturing town of Cannelton, and where now they possess one of the most valuable estates in the western country, and a coal bed that extends over 5,000 or 6,000 acres of their own land. The mines at Hawesville have been worked by various separate individuals on a moderate scale. They have now passed into the hands of Mr. Trabue, of Louisville, who will mine hereafter on a more extensive scale, and the two mines at this point, on opposite sides of the river, will probably deliver from 1,500,000 to 2,000,000 bushels of coal the coming year.—The coal has long been the most popular coal used by steamers on the western waters. The demand for it the past year, has been much greater than the means of supply.

Thirty miles below Cannelton, on the Kentucky shore, are the Bon Harbor mines, which afford a strong and valuable coal for certain purposes; but its impregnations of sulphur, and the quantity of iron pyrites causes it to disintegrate rapidly when exposed to the weather and in use to form large quantities of slag and cinder, and carrode and destroy grate-bars and boilers.

On the Indiana side, opposite Bon Harbor, on Pigeon Creek, there is a vein of inferior coal, which has been worked to some extent, but its quality condemned it where it came in competition with better coal. The same vein extends through to the Wabash River, and it is said to improve as it is traced north. The canal and railway now constructing from Evansville up the valleys of the White and Wabash rivers will intersect the better portions of this vein at several points, and will afford the means of transporting it to a market.

On the Green river, from 50 to 100 miles from its junction with the Ohio, there are three or four coal mines, with veins of excellent coal varying from six to eight feet in thickness. The coal crops

out in the Bluffs immediately over the current of the river, from which it can be delivered by shutes into flat boats at a cost of two cents per bushel. But there is no home demand for passing steamers nor neighboring factories, and the owners cannot compete with the mines on the Ohio, having superior facilities for shipment to distant markets; these mines are therefore of little value at present; but the rich agricultural district above the mines on Green and Barren rivers, with the easy transit afforded by the slackwater navigation of those rivers, will one day make them the seats of manufactures, and render these abundant coal deposits extremely valuable.

The next coal mine on the Ohio, is one hundred and twenty miles below the Bon Harbor and Pigeon mines, at Caseyville, in Kentucky. These mines are worked by Messrs. Mulford, and supply nearly 2,000,000 bushels this year. It is almost entirely taken by steamers at the mines and at depots formed at different points on the Lower Mississippi, to which the coal is taken to supply the ascending and descending boats. This coal is similar in quality to that at Cannelton and Hawesville, and is highly esteemed by boatmen. It cannot, however, withstand the effects of exposure to the hot and humid climate of the south, and, like most of the lower Ohio coals, it is difficult to keep through a whole season at New Orleans, without its disintegrating and impairing its strength and quality. Nature seems to have placed her legible declaration in the character of all these coals, that they were created for "home use," and were designed to be kept within their own latitude and dispense their blessings over the regions in which they were formed.

Three or four miles above the mouth of Tradewater river, which empties itself into the Ohio a mile below Caseyville, and in the same range of hills that contain Mulfords' mines, is an extensive colliery belonging to the Hon. John Bell of Tennessee. The coal is equal to the best lower Ohio coals, and has the recommendation of suffering less injury from exposure at the south than the others. The mine is situated upon a small stream, and the coal cannot be got out at all seasons of the year. It is however extensively worked, and were it located immediately on the banks of the Ohio, it whould be the most valuable mine on the river.

All of the above mines, except the Green mines, contain but a single vein of coal, varying from 3½ to 4½ in thickness. They pervade the hills at a slight elevation above the bottom lands of the river, with a dip varying in the different mines from one foot to eight in one hundred. Railways are laid through the whole extent of the mines, and the coal is brought out in small cars drawn by small mules, selected for their low stature for the labor.

Near the mouth of the Saline, and opposite to Mulfords' mines, are Chamberlin's mines in Illinois, which present some extroadinary features. There are six separate workable veins of excellent coal underlying each other, imbedded in the substrata, thirty to fifty feet apart. Combined they measure about 28 feet of perpendicular coal extending through thousands of acres, and each acre, properly mined, would yeild one million of bushels. A shaft 300 feet in depth would cut all six of the veins, and enable the owner to work all the veins at once. The mines are within two miles of the Ohio river, and within a few hundred feet of the banks of Saline, which is boatable at nearly all seasons up to the mines. Salt has been made in this vicinity from the earliest settlement of the country, in a rude way, for the supply of a small district; and there can be little doubt but there is saline waters through this whole coal section. A little enterprize and a few hundred dollars expense would prove the existence of a stratum of water more valuable even than all the coal. Superior salt is now manufactured at the Pomroy coal mines, above Marietta, at a cost of *seven* cents per bushel, while the farmers on the rivers, below Chamberlin's mines, are paying 37½ cents a bushel for Liverpool brought 4000 and 5000 miles to them. These mines have been opened and the quality of the coal tested, but they have never been worked to any extent for the want of capital. They are now for sale, and there is no chance in the western country equal to it, for an investment. These are the lowest coal mines on the Ohio river, where the descending boats, having completed their cargoes, take in their last supplies of coal fuel for the passage; and it is the point where the ascending boats meet the first coal depot. If there be any one in Wall street, that would like to lay down $40,000 or $50,000 on the property, and realize a million in ten years hence for it, here is the chance, and no mistake.

The writer, though he has intimate knowledge of all the western coal mines, has no interest in any of them. He speaks from honest, thorough conviction. The consumption of coal on the lower Ohio is now millions of bushels where it was hundreds of thousands ten years ago. Multiplied by the same ratio, what will it be ten years hence. Every accessible point of the coal basins on the Ohio river are now occupied, and the present demand exceeds the present means of supply. The works of all must be rapidly enlarged, and Chamberlin's is the only new competitor that can come into the field.

Leaving the Ohio and turning her bow up against the current of the Mississippi, the first depot of coal above the Ohio for a steamer, is at the mouth of Big Muddy, which is supplied with coal from a mine twenty miles up that small stream, formerly, if not now, owned by Messrs. Gales and Seaton, of Washington. It is a coal of excellent quality and is just being brought into notice since our river steamers have so generally adopted the use of coal.

The next point at which a boat meets coal is at St. Louis where it is brought from mines 6 or 8 miles to the west of the city, and from the Bluffs opposite to the city and across the American bottom, in Illinois, 7 and 8 miles from the river. Above St. Louis, both on the Mississippi and Missouri rivers, coal banks are found at short intervals in the voyage of a steamer. There is now no difficulty in a steamer leaving Pittsburg bound for the highest settlements on either of the great rivers, that form the trunk of Mississippi, in finding her supply of coal fuel within the distance of each day's run. She need not, in the whole voyage, burthen herself with more than one day's fuel at a time. When boats could not get coal but for a part of a voyage, and were obliged to resort to wood for the remainder of the way, they could not adapt their grates and furnaces properly for the consumption of coal, without rendering them unfit for burning wood. They could never realize the full benefit and value of coal till they were fitted to burn it exclusively: this they could not do, till they were assured of a full supply at proper stations in the voyage. This having been now secured, boats are now adopting coal exclusively for fuel, and this it is, that has so rapidly increased the demand, the last year. The increase in the number of mines, instead of injuring each other, is the very thing that has secured their success. A less number, could never have created so large a demand.

At all the mines on the Ohio river, the actual cost of delivering coal into boats, is about four cents per bushel. It is sold to steamers for six cents. Ten bushels of coal is equal in evaporative power to a cord of wood. The cost of coal is equivalent to wood at only 60 cents per cord. The saving of labor and time in taking it on board, and of space in stowage increase the economy of its use, which is so great and obvious that it must become, in a year or two, the sole reliance of our steamers. If the seven hundred steamers navigating the Mississippi and its tributaries were to adopt coal as their only fuel, and consume each, on an average, 500 bushels per day, the demand for coal from the consumers alone would be more than 100,000,000 bushels per annum, which would be about double the present product of all the mines west of the Alleghenies. Coal is now placed on board steamers at New Orleans, in any quantities they desire, from 10 Bbls to a 1,000, at 16 cents per bushel, or about $4, per ton; this is equivalent to wood at $1,60 per cord, but wood can not be had below Natchez for less than $3,00. It is evident therefore that steamers must resort to coal. All that is needed to secure its immediate and universal adoption, is the assurance of an abundant and constant supply at the proper place. F. Y. C.

Cincinnati, Hamilton and Dayton Railroad.

REPORT OF THE DIRECTORS TO THE STOCKHOLDERS.

Gentlemen:—In accordance with the requisitions of the charter and by-laws, I herewith submit a report of the present condition and future prospects of the company, together with a statement of the transactions of the board for the past year.

On the 18th day of September last, the first train of passenger cars left Cincinnati for Dayton; and on the 30th day of the same month the road was regularly opened for travel, two daily trains being regularly placed upon it.

Not until near the close of the year was it found practicable to put in operation a freight train, owing to the unfinished state of the road; nor are we yet fully in condition to receive, at the various stations on the line of the road, the produce of the valley. Freight depots are now in course of construction at several important points, and it is hoped they will be completed in the course of the next 90 days. So far the freighting business has not been heavy, nor has it been desirable that it should be, while so much work remained to be done upon the track, in consequence of shrinkage, the road having been built in so short a time, and during unusually dry weather.

The facilities for shipment, without expense of drayage, afforded by the canal, at Dayton, and of making sales at Cincinnati from the boats, must be equalled by the railroad, before a great amount of down freight, from *this* point, can be expected. During this spring and summer these facilities will be provided; which, together with the favorable features of our road, will enable us to do a heavy freighting business at rates much less than usual on railroads, leaving a fair margin for profit. The saving of time and interest to the shipper, the board feel confident, will insure the greater share of the business to the road. The large amount of capital invested both in boats, and in warehousing facilities on the canal, together with the habits and modes of business pursued for a quarter of a century, will require time and effort to produce a material change.

Our stockholders, however, have other sources from which to derive a large and profitable business, and for which we shall have no competition. Before this year ends, connecting roads will be completed, opening to us the heavy business of central, northern and western Indiana. During the present month it is expected the Greenville and Miami, and Dayton and Western railroad, extend-

ing from Dayton to Greenville, will be in operation. This road has also been put under contract to Union, on the State line, a distance of eleven miles northwest of Greenville, to be finished by the first of October next, where it will connect with the Indianapolis and Bellefontaine road, which is to be completed to that point by November or December. When this connection is formed, we shall be able to send to, and receive freight and passengers from all that portion of the rich country lying between Indianapolis and our State—and also between Terre Haute on the west, and Lafayette on the north of Indianapolis.

The Eaton and Hamilton road, forming a junction with our road two miles north of Hamilton, and running up the fertile and populous valley of Seven Mile creek, will be opened during the summer to Eaton, the county seat of Preble, a distance of 37 miles, and it is expected, before the end of this year, that it will be opened to Richmond, Indiana, the principal place of business of the rich, populous, manufacturing and productive county of Wayne, the largest in point of population and capital in the State, distant from Cincinnati 69 miles. In the counties of Butler and Preble, through which the Hamilton and Eaton road passes, before it enters Indiana, there were produced in the year 1850, more than 1,000,000 bushels of wheat, and 3,300,000 bushels of corn. At Richmond, and along Seven Mile creek and Whitewater, there is a great amount of water power. A large number of flouring mills and other manufacturing establishments are already in operation on these streams, and when railroad facilities are furnished, the number will doubtless be much increased. These facts should satisfy the most incredulous of the importance of the Eaton and Hamilton railway to the country, our city, and to our road.

From Richmond to Logansport, via Newcastle, Anderson and Kokomo, the road is all under contract, and stock sufficient subscribed to insure its speedy construction. The distance from Cincinnati to Logansport, by a continuous railroad, *of the same gauge* will be 176 miles—from thence to Chicago 113 miles, making the whole distance 289 miles from Cincinnati to Chicago.

From Richmond to Indianapolis, the Indiana Central road is all under contract, the iron and locomotives provided, and a sufficient amount of means to complete it during the next twelve months. When this road is opened, our connection with Indianapolis, and the whole central portion of Indiana, will be much more direct than by way of Greenville and Union, though we may always expect a heavy business from the latter route over the whole line of our road, from Greenville, Union and Fort Wayne.

During the present year we shall also be in railroad connection with Columbus, Cleveland and Zanesville, via the Springfield and Columbus road. The president of the latter road assures us that he shall be able to open it early next fall. The assistance proposed to be furnished to the Springfield and Columbus, and Greenville and Miami roads, by our stockholders individually, will secure them advantages such as will amply repay for the investment.

The Mad River and Lake Erie road, with which we now connect at Dayton, is progressing rapidly in relaying their new rail, and assurances are given that the whole line will be finished by midsummer. A road is also in course of construction between Sandusky and Cleveland, with a fair prospect of being completed this year, which will furnish us with a connection with Cleveland via Sandusky, but little longer than the present route by way of Columbus. The heavy local, together with a full share of through business, to be derived from the M. R. and L. E. road, must always make it an important and natural connection for us, and profitable to their stockholders.

The Dayton and Michigan road, from Dayton to Toledo, will also be an important connection. It continues up the same rich valley in which our road is located, through a productive region of country—the inhabitants having for a long period of time had their principal business relations with Cincinnati. When completed to Sidney it will give us another connection to the east, by the Bellefontaine and Indiana road. The work is now under contract to Troy, to be completed for the cars by next fall. A strong appeal has been made to our stockholders for aid in behalf of this line; and promises have been given that so soon as an amount within fifty thousand dollars has been subscribed, to prepare the road for the iron as far as Sidney, we will raise the balance from among our citizens and stockholders.

The Springfield and Loudonville road, when completed to Delaware, will furnish another line from Cincinnati to New York by way of the Lake Shore and New York Central and Erie roads; and when finished to Loudonville will open a very favorable route, in connexion with the Ohio and Pennsylvania road, to Pittsburgh.

The Ohio and Mississippi railroad has recently been placed under contract from Cincinnati to St. Louis, and in the course of sixty days a large force will be at work upon in, at both ends of the line. This important road is expected to enter Cincinnati, side by side with ours, and they may be connected to the mutual advantage of each, and of the public. They can in no way come in competition or conflict, but on the contrary must be mutually beneficial to each other.

The board feel strong confidence in assuring our stockholders, that within twelve months the conections with other roads will have been so far made as to call into full requisition all of our large depot facilities and expensive outlays for equipment, that have been prepared to accommodate the large business sure to flow over our road from those referred to, and to demonstrate the great value and profitableness of their investment in the stock; *and that their fullest anticipations will then be realized.*

The Little Miami, (now in fine order and in prosperous condition,) and the Cincinnati, Hamilton, and Dayton railroads, running up the Little and Great Miami valleys, situate fifteen miles apart, and nearly parallel, occupy the only natural and favorable approaches to Cincinnati, from the north and northeast, and have equal chances for the business. If managed judiciously, they must continue to be profitable, and secure against danger from competing lines.

Previous to making the final location of our road, the country east and west of the Great Miami river was thoroughly examined by several competent engineers. To have adopted the *shortest line* as to number of miles, between Cincinnati and Dayton, it was found would be the *longest in point of running time.* The amount of tunneling [one and a half miles.] necessary to be done on the shortest line—the heavy grades—the greater expense to be incurred, not only in construction, *but in operating the road forever,* in consequence of the heavier grades—together with the fact that a location east of the Miami river involved the necessity of running in close proximity to the canal, turnpike, and river, were objections too serious to that route. The line as adopted presents no such obstacles, and occupies a position to receive the business to flow into it from the rich valley, and from the country west of the Miami river—from whence comes *three fourths* of all the travel and produce of the north and northwest to Cincinnati. A location on the "short line," so called, *east* of the canal and river, would have secured to the canal the heavy business which we shall undoubtedly receive, until another road should have been built on our present location. That this would have been the result from Hamilton to Cincinnati, at an early day, we have no doubt. The adoption of the "short line" would have left Hamilton too far to the west, a town which furnishes *more business* than would *all* the villages not now accomodated by our road, on the other route.

The project of building another road, through the narrow strip of hilly country between the little and great Miami roads, is deemed by our Board and our citizens generally, as a visionary scheme, no way likely ever to be accomplished. Men exercising *ordinary* discretion, will not advance millions of money with the certainty of receiving no return. Had our Board, instead of consulting the true interests of the stockholders and the country, allowed the road to have been located with a view to promote the personal interests of a few individuals, this wild scheme would have now no existence. Our stockholders need have no apprehension of the "short line," from Dayton, for were a dozen of them built through the region proposed, we should still be able to give them satisfactory dividends, when our western connections are formed and the resources of the country reached. Should, however, the "short line" ever be built, whilst *its stockholders* might sink millions of money, the property holders at each end, and at one or two other points of the line, would probably be enabled to dispose of their real estate at an advance. Herein consists the merit of the scheme. Considering the existence of two roads now in operation, and not over an average of fifteen miles apart, each being entitled to its proportion, this "short line" would have left for its support a very narrow strip, the business of which would be divided with the Canal.

This must certainly be considered a visionary age if men can be found, east or west, willing to sink millions of money, sufficient to build a railroad between and parallel with two other railroads, distant fifteen miles apart, and in successful operation, in the hands of powerful companies.

Since the opening of our road, nine-tenths of the travel has been from local or way passengers. The number exceeds our expectations, and has gone beyond that of any road in the state, during the same period. This travel is rapidly increasing, and before the year closes, we feel confident, will have increased at *least* fifty per cent over the present amount. The whole number carried during the seventh months ending the 1st inst., has been 106,328.

Since the last report we have added to our real estate account $100,000—principally for three acres of land purchased of Henry Hathaway, Jr., and of T. F. Marsh, adjoining our Sixth street depot grounds—about 1,000 feet front by 200 deep, of Messrs. Longworth and Horne, on the north bank of the White Water canal, and adjoining the railroad, within the limits of the city—two acres of Col. R. E. Price, and several lots on North Canal street. Also a warehouse at Hamilton for a freight depot, substantially built of brick, two stories, 33 feet front by 140 deep.

On account of low water in the Ohio and Mississippi rivers the past season, and the consequent delay in the receipt of our iron, we were under the necessity of purchasing in New York sufficient for about twelve miles, and having it brought by way of the canal and lake. This leaves us with 1200 tons on hand, which it is the purpose of the Board to use in extending a double track to Cumminsville,—from Hamilton to the junction with the Hamilton and Eaton road,—and at other points where siding is most needed.

The Cincinnati depot for freight, erected during the past fall and winter, will compare favorably with the best in the country. It is built of brick in a plain and substantial manner, covered with a tin roof, and is 103 feet wide by 500 in length, running through from Fifth to Sixth streets. The fronts on each street, for the depth of fifty feet, are two stories high, furnishing in the second story rooms for the various offices of the company, and some ten or more for renting to commission merchants. The building has also very extensive room for storage in the basement, which is dry and suitable for that purpose. It stands in a situation to be but little exposed to fire, having the White Water canal on one side, and streets on the other side and ends. There has also been erected at Cincinnati a substantial engine stable. The inconvenience of this arrangement, will require during the coming summer the erection of commodious and convenient shops, both for repairing engines and cars.

At Dayton there has been built a freight depot, 50 by 150 feet—also an engine stable, sufficient to house six locomotives,—wood house, turn table, &c. At this place we are at present occupying a house for a passenger depot, for which the company pays rent. During the ensuing summer, it is expected the several railroads connecting at Dayton, will join in building a passenger depot, to be used in common.

At other points on the line of the road, passenger and freight depots, turn tables, wood houses, water stations &c., are built, and building. At Hamilton we are occupying, for a temporary passenger depot, a house purchased, in obtaining the right of way through the town.

It has been found necessary, recently, in order to meet the expense of additional purchases of real

estate, of additional iron, of running machinery, beyond our first estimate, of extensive depot buildings, and of increased cost of road, to make a second issue of a half million of unconvertible, second mortgage bonds, payable in fifteen years. The sale was confined exclusively to the parties holding interest in the road; and the whole issue was readily taken at the price fixed. They were disposed of at a discount, each stock and bond holder having the privilege offered him of taking his pro rata share—making it fair and equitable.

Shortly after the first opening of the road, a series of accidents occurred, by which considerable damage was done to the cars; but no serious personal injury to the passengers. The principal cause of these accidents, incident to the opening of a new road, was the encountering of cattle. We are now fencing such portions of the line, as the land holders in their releases are not obligated to fence, and the recurrence of such accidents, it is hoped, will be avoided. For several months past, the road has been run with great regularity, and without accidents.

Since the opening of the road for travel, but one person has been killed—and that was owing to the fault of the individual, in attempting to get upon the cars, when in motion.

By the annexed summary of the secretary's account, it appears that the cost of the road to the present time, inclusive of right of way, depot grounds and buildings, real estate, running machinery, interest to stockholders on money paid on account of stock, interest on bonds, engineering and other expenses etc., is..... $2 145,595 20

Amount of stock account	1,436,325 00
" bonds	583,000 00
The gross earnings of the road for the first six months ending April 1st, 1852	$97,214 51
Expenses during the same time, embracing repairs to machinery, ..	35,181 95
Net earnings, ...	$62,032 56

The net earnings of the road for the first six months, is equivalent to about three per cent on the total cost, and it is not in full operation.

The increase of travel during the past month makes it probable that a cash dividend of four and a half per cent may be declared in July next. and from that time regular cash dividends every six months.

S. S. L'HOMMEDIEU,
Cinn., May 3, 1852, President.

Ohio.

Exhibit of the Columbus, Piqua and Indiana Rail-Road Company.

The Columbus, Piqua and Indiana railroad now extends from the city of Columbus to the town of Union, on the line between the States of Ohio and Indiana, making its length 102 miles.

At its eastern terminus, it connects with the Columbus and Xenia, and Cleveland, Columbus and Cincinnati roads, in successful operation between Lake Erie and the Ohio river. Also with the Steubenville and Indiana, and Central Ohio railroads, leading to the cities of Baltimore, Philadelphia and New York, via Pittsburg and Wheeling, by the Pennsylvania and Baltimore and Ohio railroads. The Mad River and Lake Erie railroad intersects this line at the town of Urbana; and at the city of Piqua it is intersected by the Miami canal, and the Dayton and Michigan, and Eaton and Piqua railroads, in process of construction to that point.

The Indianapolis and Bellefontaine railroad meets the line at its western terminus, and carries it west to Indianapolis. To this point the Terre Haute and Indianapolis railroad, now in operation, extends. Active measures are taken to complete the important link between Terre Haute and St. Louis.

This great central trunk railway, extending thro' the States of Ohio, Indiana and Illinois, as to its several parts, is in that state of advancement that its completion at an early day is certain. The Pennsylvania and Baltimore lines are rapidly forming connections with those of the west. Railroads are running from Philadelphia and Baltimore to Harrisburgh, and of the 248 miles between this last point and Pittsburg, 191 are now in successful operation; 18 miles more will be opened in July next, and the residue in process of construction.

The Pittsburg and Steubenville, and Steubenville and Indiana roads, which continue the Pennsylvania line on a central route through the State of Ohio to its capital, under their present prospects, will attain completion in the course of the coming year. These last roads, opening the only direct eastern outlet for travel settling through Columbus to Pittsburg, constitute important eastern connections for the Columbus, Piqua and Indiana railroad. At this terminus joins the Central Ohio railroad, leading to Wheeling on the Ohio, and the cities of Baltimore and Philadelphia, by the Baltimore and Ohio and Hempfield and Pennsylvania railroads. Twenty-five miles (between Zanesville and Newark) of this last mentioned road are in operation, and the portion between Columbus and Newark is expected to be in operation during the summer months. The roads commencing at the western terminus of our road, and carrying it on to Terre Haute, and eventually to St. Louis, are the Indianapolis and Bellefontaine, the Terre Haute and Indianapolis, and the Atlantic and Mississippi. The first of these roads, by the last report of the company, will be completed the present season. Forty-eight miles of the line (of 83 miles) is in successful operation. The second of these roads is already in operation. The third and last road is under survey and location, and active measures are now had to further its construction.

All the lines leading from Pittsburg to Terre Haute, by way of Steubenville, Columbus, Piqua and Union, have adopted the Indiana gauge of 4 feet 8½ inches. The through business of these joint roads will thereby be greatly facilitated by the transport of freight over them without ttranshipment. The companies of the roads extending from Steubenville to Terre Haute, via Columbus and Union, bave entered into arrangements, by which their roads shall be run in common; through tickets and freight bills to be issued by each company, and freight and baggage will be carried to their places of destination without change of cars. This chain of roads, it is seen, are connected in position, in gauge, in business, and are constructed upon a scale commensurate with the important work they will perform, as the main avenue of transportation of persons and property between the commercial and producing portions of the Union.

The geographical position of this chain of roads, with its unrivalled connections, and directness and shortness of route, is such as to command a perpetual and greater amount of way and through traffic than any other combination of lines traversing the country, east and west.

The Columbus, Piqua and Indiana railroad, the third link in the above described chain of roads, passes through the richest agricultural districts of the state; and, competing for a local and through traffic, nowhere excelled in activity, and which must increase as new facilities are opened for its accommodation. See tables of "Traffic and Income" in accompanying exhibit, with map showing connections. This line is greatly strengthened by the success of connecting roads already in operation, and its completion is of the greatest necessity to the majority of the eastern and northeastern, and the Indiana lines of railway, to perfect the connection between the capitals of Ohio and Indiana, on this shortest and most expeditious route. The distance between Colnmbus and Indianapolis is 185 miles; and by the arrangements existing between the companies of these roads, greater facilities will be had for the accommodatian of the large travel plying between these important cities. It is the intention to run through daily express trains from point to point, and make both lines, for purposes of business, a joint road.

The Columbus, Piqua and Indiana railroad compano, with a view to meet the cost of completing their road, issued, on the 1st day of Jannary, 1852, six hundred thousand seven per cent. mortgage bonds, with coupons attached; they are in sums of one hundred thousand dollars each, payable on the first day of January, 1862, in this city, with interest at 7 per cent., semi-annually, on the first day of January and July, at the office of the Ohio Life Insurance and Trust company, where the principal is also payable.

These bonds are secured by a mortgage to George. S. Coe, Esq., in trust for the bondholders, covering the entire road of 102 miles, with its income, property, rights and privileges; and constitutes the first and only lien upon the road. The mortgage is recorded in every county through which the road will pass. The trustee is authorized, upon the nonpayment of the principal or interest, to sell the entire property of the company to pay such default. $140.000. of the original issue were disposed of last winter at par, and the residue of $460,000 are now offered. These bonds are convertible into the stock of the company, at the option of the holders, at any time before maturity.

The following facts will show the character of these bonds, the entire and perfect security afforded to capitalists for an investment in them, and the value of the property subject to their payment:

I. THE LENGTH AND COST OF ROAD.

The road is 102 miles in length. Few roads in the West, owing to the favorable character of the country, will be constructed at so low a cost, and contain so many characteristics of a first class road. The entire cost, including depots, stations, and all necessary equipments for first year's business, will be $1,250,000.

II. PROGRESS OF WORK.

The eastern division of the road, being 49 miles between the city of Columbus and Urbana, will be ready for the rails on or before the 1st September next. 4,500 tons of rail have been purchased for this division, and are in course of arrival. Allowing four months for laying track and delays, we shall have this portion of the road in operation by 1st January, 1853. The completion of a connection between the Columbus lines and the Little Miami and Mad River and Lake Erie roads, passing between Cincinnati, through Urbana to Sandusky, on the Lake, will then be had. The work of the middle division, between Urbana and Covington, 32 miles, is rapidly advancing under a heavy force. The whole of the masonry, including piers and abutments at the crossing of the Miami river and canal at Piqua, will be completed by the first of September next. The earth work of this division is about half completed, and will be finished the coming fall.

The western division of 24 miles, between Covington and Union, is in the hands of responsible contractors. The contracts on this portion of the line require the completion of the graduation and masonry, and furnishes the cross-ties an the track, by 15th May, 1853.

The state of advancement of the work is thus seen. 46 miles of the road will be in actual operation by January, 1853, and the residue of 56 miles by January, 1854, without probability of failure.

III. WAYS AND MEANS.

Bonds secured by mortgage.....	$600,000
Subscriptions to capital stock by counties, townships and individuals,.....	650,000
	$1,250,000

Of the above sum of $1,250,000, $579,930 have been paid in.

Of which, the amount expended on road is	$550,000
Add the sum of present loan,.....	460,000
Security for payment of the bonds.....	$1,020,000

From the foregoing figures, the present condition of the company is seen. Since the date of the last exhibit, and within the last few months, the affairs of the company have assumed a more settled character than during any period since their organization. Subscriptions to the capital stock of the company, during the fall and winter months, have been large and unprecedented by any similar period. Several contracts of importance, for work and material, were entered into, in which over 60 per cent. of the remuneration was in the stock of the company, at par.

The estimates were all based upon the standard of a first class road, with every equipment necessary for the first year's business, and for the most part upon the contracts already entered into.

To add to the value of the security, the proceeds of these bonds are to be expended at once upon the road, which, with the amount already expended, and the outlay of the avails of stock on hand. and that gradually accumulating, the security offered by the road will be ample to cover more than the present loan, and every other outstanding liability and debt of the company. They are therefore re-

commended to the stockholders and capitalists as every way worthy of confidence as a safe and permanent investment.

M. G. MITCHELL,
May 1852. *President.*

Indiana.

Exhibit of the Evansville and Illinois Railroad Company.—This company was incorporated by the Legislature of the state of Indiana on the 2d day of January, 1849, and organized by the election of directors, and officers on the 18th of August, of the same year.

Its objects were to construct a railroad from Evansville, Indiana, on the Ohio river, up the Wabash Valley, and to connect more or less directly with all the Indiana railroads, converging at Indianapolis, the capitol of the state; and also to construct one important link of a central chain of railroads, now building and organizing, uniting the lakes of the North, with the seaboard of the South.

The company has now built and in successful operation, that portion of their line lying between Evansville, and Princeton, from depot to depot 27½ miles, with the exception of a few hundred yards at Princeton, now being completed, and about four miles more, terminating at the town of Patoka, on Patoka river, in the heart of one of the most populous and fertile agricultural regions in the state, which is fast being prepared for the rails, and will be in operation this season.

The remainder of the line to Vincennes being 19½ mils beyond Patoka, has been located and estimated, and is nearly ready for letting. And the right of way, is with but trifling exceptions, which will give no trouble, all secured.

ITS CONNEXIONS.

This railroad starts at Evansville, Indiana, on the Ohio river, by far the largest town, and the greatest depot for produce, merchandize and travellers, on the whole line of that river, between Louisville and its mouth, a distance of four hundred miles.

The present section, now constructing, terminates at Vincennes, Indiana, on the Wabash river, 51 miles distant from Evansville, amidst one of the most productive and fertile districts of Indiana and Illinois, and on the line between the two states.

At Vincennes it intersects the great Ohio and Mississippi railroad, the short line between Cincinnati and St Louis, now all under contract for construction.

The western division of this latter railroad extending from Vincennes to St. Louis, 145 miles in length, being very easy of construction, and the means chiefly provided, is to be finished within two years.

The opening of this part of the Ohio and Mississippi railroad, in connexion with our road to Vincennes, will by making a cut off railroad route from the Ohio river at Evansville, to the Mississippi river at St. Louis, 196 miles in length, in opposition to the present thronged river route, between the same points of 370 miles in length, and embracing the most dangerous part of the Mississippi river, throw an amount of traffic upon our road of which no present adequate estimate can be formed. On the other hand, the opening of the eastern division of the Ohio and Mississippi railroad from Vincennes to Cincinnati, will, to say nothing of the travel from or to points farther south, make our road the most speedy and convenient northern and eastern medium for the travel of south western Indiana, south eastern Illinois, south Kentucky, and much of Tennessee.

As shown by the accompanying map the line of our road branches at Vincennes.

The Wabash or Terre Haute branch continues almost due north 56 miles to the city of Terre Haute, Indiana, where it intersects the Terre Haute and Indianapolis railroad, now completed and in operation, and also the Terre Haute and St. Louis railroad, now being located and which is to be prosecuted to completion with great vigor under the able management of John Brough, Esq., its President. It is expected that this branch of our road will be completed almost if not quite as early as the section now under construction to Vincennes. The country through which it runs, in which a large amount of stock has been subscribed, being very able to prepare it for the iron, and the work is remarkably light.

The other branch runs from Vincennes directly towards Indianapolis, or the two branches may diverge at some point north of Vincennes, and the Indianapolis branch will most probably unite with the New Albany and Salem railroad at Gosport, 67 miles from Vincennes, crossing the Wabash and Erie canal at Point Commerce, some 40 miles from Vincennes. The New Albany and Salem railroad is fast being completed and is all expected to be in operation, including its branch of 43 miles in length, from Gosport to Indianapolis, in 1854.

The necessary legislation is granted for extending the Wabash branch of our line from Terre Haute to Crawfordsville, Indiana, a distance of 51 miles from Terre Haute where it intersects the New Albany and Salem railroad: and the population on the extended line are very able to prepare the road for the iron, and through the interest taken in the matter on the route and at Terre Haute there seems but little doubt but this last short link in a very direct line of railroad from Evansville to Michigan city through Terre Haute will soon be commenced. This line of roads would be perfected by the intersection of our road with that of the New Albany and Salem at Crawfordsville.

For routes via our railroad to Indianapolis, Cincinnati, Cleveland and the Eastern cities, and southern routes to Nashville and the southern seaboard see accompanying map and table of distances thereon. The Henderson and Nashville railroad company have commenced a survey of their road and are now in the field raising stock with a good prospect of success. The length of the road would be about 130 miles. The country is very favorable to a cheap road, and the population along the line abundantly able to build it. Independently, however, of any of these connexions, the character of the country traversed, and of the trade of the Wabash Valley, taken together with the history and present experience of other Western railroad enterprises, warrant us in saying that our railroad finished to Vincennes, without any connexions whatever would be well sustained by its local business, and not only able to pay the interest on its bonds proposed to be issued but also remunerating dividends on its stock.

EVANSVILLE, ITS POSITION AND PROSPECTS.

The importance and business of railroads are, to some extent, governed by the importance and business of their starting or terminating points.

The city of Evansville, and her county of Vanderburgh, as shown by the census returns of 1840 and 1850, increased between those years, in a ratio, compared with that of the increase of the five other principal towns of the State, including their counties, [viz: Indianapolis, Madison, New Albany, Terre Haute and La Fayette,] nearly 50 per cent. greater than New Albany, the next to her in ratio of increase and in a much greater ratio over the increase of any of the other four. And this, too, when there was no public work of any description opened to her, not so much as macadamized or plank road, and when therefore, she was during a great portion of the business season of the year, inaccessible, except by the Ohio river.

Since 1850 her growth has been much more rapid than at any former period.

She is situate on the banks of the Ohio river, in the midst of the most healthy, fertile and productive region of the Mississippi valley.

She is at once distant from any other city, and central between several of the cities of the west.—By river, there is no city nearer to her than 200 miles. By straight lines, [except the little city of Terre Haute, 107 miles distant,] the cities of Louisville, Kentucky, New Albany, Indiana, St. Louis, Mo., and Nashville, Tennessee, are the nearest cities to her, and are all distant about 140 miles.—She is virtually at the junction of the Wabash river with the Ohio, being the depot for a greater part of both freight and passengers going into or out of that river.

Green river, navigable all the year round, for 150 miles into the heart of Kentucky, empties into the Ohio, six miles above Evansville, and already affords her a very profitable trade.

The Wabash and Erie canal, 463 miles in length, and the longest on this continent, having its southern terminus at Evansville, will be finished to Evansville, and in operation throughout its whole length during the present year.

Evansville is in the midst of the great western coal field, which has been explored and reported upon by Professor Owen, (for this coal field, see the accompanying map.) Within a few miles of Evansville, on the line of the E. and W. canal, this coal is found of excellent quality, and in exhaustless quantities, and at some points the canal itself is cut through veins of great purity and thickness. These facilities for obtaining coal, together with the abundance of wood about Evansville, will make her the cheapest point for fuel on the western waters.

On the line of this canal, and within 100 miles of Evansville, are exhaustless mines of iron ore of a superior quality; already, in the absence of any facilities for tsansportation, worked to advantage, and which will be fully developed by the opening of the canal. These advantages added to the fact of her position, on the dividing line between the products of the northern and southern states will give her manufacturing facilities, second to no other city in the Union.

She has a beautiful site; a crescent front on the river, an excellent landing at all seasons of the year, and has the advantage of almost all, if not every city on that river, of being situate though not inconveniently high, with all her territory a few feet above the highest water mark. Her exports and imports, shown by statistics taken two years ago, amounted then to $7,000,000 annually, the arrivals and departures of steamboats at her wharf, were, as show py the Collector's returns for the year 1851, 5,398, or equal to two-thirds of the whole arrivals and departures reported at Cincinnati. Her wharfage receipts pay more than 10 per ct. on the cost of a fine wharf, upwards of six hundred yards in length. The United States government has just established a marine hospital in the city, and the legislature of Indiana, during its present session, almost unanimously passed a joint resolution, petitioning Congress to establish the contemplated western armory at this point. Her grocery business has increased fifty per cent within little more than a year.

These facts clearly mark Evansville out as the future commercial metropolis of the state. Her population now between 6,000 and 7,000 has doubled in six years, and her taxable property has trebled in the same time.

CONDITION AND PROSPECTS OF THE ROAD.

For the purpose of constructing the road to Vincennes, we have raised a stock subscription of $345,300. We have constructed, and with an excellent T rail, put into operation the first 27½ miles of the road, at a cost but little above $10,000 per mile, exclusive of equipments, and but a trifle above the original estimates of the engineer.

We have now under contract, four miles further, including a bridge over Potoka river, which will be ready for running during the present season.

We have located and have nearly ready for letting the remaining 20 miles.

MEANS APPLICABLE TO CONSTRUCT AND EQUIP THE ROAD TO VINCENNES, 51 MILES.

Stock subscribed	$345,300
Receipts from transportation and Vanderburgh county	16,580
To which add issue of the company's bonds—proposed to be issued to cover present debt, and to iron and equip the road to Vincennes	350,000
	$711,880

TOTAL EXPENDITURES AND REQUIREMENTS.

Actual cost of 27 miles completed	$281,007 66
Equipment on same	30,830 17
Estimates of engineer for completion to Vincennes, grubbing, grading and bridging	84,996 37
Superstructure and laying track	30,760 00
Rails, chairs and spikes	105,420 00
Depot, water stations and engineering.	10,750 00
Additional equipments	100,000 00
	$613,764 20

Being, exclusive of equipments, a fraction over $10,000 per mile.

SECURITY OFFERED.	
Stock subscription	$315,300
Cash from other sources	16,583
Real estate, taken under statute	10,000
Proceeds of loans, subject to discount	350,000
	$721,883

The company now proposes to sell three hundred and fifty of its coupon bonds of $1,000 each, running ten years, from the first day of last January, payable January first, 1862, at the Phœnix Bank, in the city of New York, with interest, payable semi-annually at the same place, at the rate of 7 per cent per annum; secured by a mortgage or deed of trust upon all the real and personal property of the company, including the railroad from Evansville to Vincennes, all depots, grounds and appurtenances and all the equipments of the road.

It will be seen by the foregoing statements, that the company offers in security, including the proceeds of the bonds to be sold, property of at least double the value of the debt incurred, including more than 27 miles of railroad, in operation, whose earnings for the present year alone, without further extension, will produce a considerable net income, and which will, before the close of the season, be extended to upwards of 31 miles in length, and terminating in one of the best pork and produce regions in the State.

The whole 51 miles will, without unexpected delays, certainly be opened during the next season, and it is scarcely less certain, that the extension of the road for 50 miles farther, to Terre Haute, will be effected in about the same time, but without any extension beyond Vincennes, or connexion at that point, we know the road will pay well, and that under any possible contingencies the security offered is ample. No commercial revulsion will so affect western railroads, penetrating good agricultural districts to the distance of 50 miles, as to disable them from paying interest on one-half the amount of their cost. The products of the country must go to market in some shape, at any price; and in our case, the groceries and other merchandise of the south must be received in return, and the cost of transportation being a cash demand, must be paid before any other charge. These freights, and the great travel incident to them, and to the active nature of western population, will, under any circumstances, however adverse, support western railroads such as ours, costing, as ours does, but little over ten thousand dollars a mile, exclusive of equipments, running through a country without turnpikes, where clay roads are half the year impassable: a country just beginning to be developed, tho' already rich in its productions: a country whose one great want is a sure, steady and quick road to and from market; in short, a railroad.

It was in the depth of commercial and agricultural depression, that the M. and I. railroad, above instanced, started and achieved its first success. It has been justly remarked, that the difference between eastern and western railroad construction is, that in the east, railroads are built up to the country, in the west, the country is built up to the railroads. The comparative difference in the profits cannot be doubtful.

Michigan Central Railroad.

Opening to Chicago.—After various delays and disappointments we have now the satisfaction of announcing that the Michigan Central railroad is through to Chicago. The train of yesterday morning performed the first trip between Detroit and the Garden city, and hereafter there will be two trains daily (morning and evening) between the two cities. A change of the hour of departure will be required, owing to the necessity of properly connecting with the boats from Buffalo and Dunkirk, and the respective roads of the East. Hereafter the passenger trains of the Central road will leave the depot at 9 A. M., and at 5 30 P. M. to reach Chicago at 9 20 P. M. and 5 45 A. M., and leaving Chicago at 8 30 A. M. and 9 P. M., will arrive at this city at 9 P. M. and 9 20 A. M, thus making the run in about twelve hours, each way. This is a decided improvement on the time heretofore consumed on this route, and the present arrangements will bring us in very close communication, and greatly facilitate our business intercourse with our sister city.—*Detroit Free Press.*

New York and New Haven Railroad.

The late report of this company gives the following result of the operations for the past year.

The gross receipts from the service:		
From passengers		$590,306 28
From commutation		$ 14,044 31
Total for passenger service		$604,350 59
Total for freight service		121,397 75
Total for mail service		11,433 17
Total receipts		$740,181 51
The current charges are as follows:		
Transportation, wages, etc.	$115,913 76	
Repairs of road, bridges, buildings, etc.	51,710 51	
Repairs of locomotives, tenders, cars, etc	56,479 53	
Wood consumed	80,347 83	
Oil, tallow, and waste	10,437 40	
Rents, station-houses, etc	6,739 27	
Haulage of cars in New York	51,065 63	
Total current charges		$372,743 98
Leaving an excess of receipts over the charges of		$367,437 53
Deduct payments to Harlem railroad company for use of their road,		
For 560,612 passengers	$49,135 56	
For freight	11,392 28	
		60,527 84
To credit of profit and loss		306,909 59
After deducting the above current charges, etc., the profit and loss account is as follows;		
Balance to credit on 31 March, 1851		$ 55 302 47
Excess of receipts as above stated, credit		306,909 59
Dividend on Harlem stock		12,800 00
Dividend on increased capital, issued for second tracks and other purposes, not yet productive, charged to the cost of the second tracks		17,500 06
Total for dividends, interest, etc		$392,512 00
The amount to credit of the profit and loss account for dividends, interest, etc., as above		$392,512 06
From this amount the following payments have been made:		
For dividend No. 5, Aug., 1851	$87,465 00	
For dividend No. 6, Feb., 1852	104,387 50	
For interest on bonds No. 1	11,250 00	
For interest on bonds Nos. 2 and 3, etc	81,850 01	
For taxes on capital in Connecticut	7,387 58	
For taxes on roadway, etc., New York	3,578 26	
For Hartford R. R. Co., per agreement	19,999 96	
Total ordinary appropriation		$315,868 34
Leaving to the credit of profit and loss.		$76,643 72
From this balance has been deducted the sum paid for damages to persons and property by accidents and injuries occurring from 1850 to date, but paid on judgments or settlements, within the past 12 months		19,712 11
Total		$56,931 61
The operations upon the Canal railroad, under leases to this company, have resulted in a loss, which by order of the directors, has been also charged to this account		28,549 07
Reducing the balance of profit and loss to		$28,382 54

The estimated cost of the second track from New Haven to New Rochelle, 54 miles, is $750,000, and the cost of the improvement of the Arsenal block in Center-st. is $50,000. Of this the payments to the 1st of May have been $551,926. The improvement of the Arsenal block will give much needed facilities for the freight business of the road. After the payments for the second track and Arsenal block, the capital stock will stand $3,000,000
Bonds issued and to be issued 1,800,000
$4,800,000

Expended as follows:		
For interest dividends		$162,865 12
For railroad station houses		2,675,609 26
For second track, 49·58 miles		750,000 00
For Arsenal improvements		50,000 00
For equipment		598,297 04
For Harlem preferred stock, 3,200 shares		160,000 00
Properties, cash, etc		433,228 58
		$4,800,000

Railroads in Switzerland.

In the March number of the Paris "Revie des deux Wendes," we find a review by Mr. Barret, of Geneva, of the report of Messrs. R. Stephenson & Swinburne, on railroads in Switzerland. It appears from the following summary by the reviewer, that the system proposed by the celebrated English engineer, Mr. Stephenson, for Switzerland, is the same which was introduced in this country on the Pottsville and Sunbury railroad, in Pennsylvania, about 20 years since. The reviewer remarks:

"Experience has proved that the most powerful locomotives produce no result beyond the traction of their own weight on an ascent of 45 in 1000, that when the rise is nearly 25 in 1000, they draw but about 21 tons, whilst the same engine would draw, with no greater effort, 300 tons on a level. No useful result then can be obtained from the locomotive engine on an inclination approaching 25 in 1000," (or 132 feet per mile.)

"If ever the Alps are to passed by railroads, it can only be by a succession of inclined planes.

"The system proposed by Mr. Stephenson for the working of his inclined planes, consists in causing his trains to descend by gravity, and to ascend by the assistance of *wagon reservoirs*, which are filled with water at the head of each inclined plane, in order to give them more weight, and which being thus made sufficiently heavy for the purpose, create in descending, and ascending motion of the returning trains of merchandize or travellers. Once at the foot of the plane the wagon reservoirs are emptied of the water which they contain, and then without difficulty they are taken back with the first ascending train which presents itself. The application is an ingenious one of the principle of self-acting planes, and has the sanction of experience. It is now nearly thirty years since Mr. Moncure Robinson introduced it in the United States on a railroad between Pottsville and Sunbury, in Pennsylvania. A minute description of the machinery and the manner of working the planes, on this work, may be seen in the text and atlas of the history of '*Ways of Communication in the United States*' by Mr. Michael Chevalier.—There will be found also in this work the plan of a very simple, very economical and very effective contrivance with which Mr. Robinson provided each of the planes in order to moderate the speed of heavily loaded descending trains."

The work in Pennsylvania, referred to by the reviewer, was commenced under the auspices of the late Stephen Girard, with the view of bringing the extensive body of coal lands in the Mahoney, or 2d coal field, then owned by Mr. Girard, and afterwards devised by him to the city of Philadelphia,

into market, and on his decease fell into disuse and dilapidation. The great and increasing demand for anthracite coal has lately attracted attention to this work, and it is gratifying to find the plan originally adopted for it, standing the test of time and examination, and that it is now recommended by the ablest engineer of the age, under similar circumstances in Europe.

American Railroad Journal.

Saturday, May 29, 1852.

Hudson River Railroad.

The fifth annual report of this company has been published under date of May 12th, 1852.

The construction account on the 18th of April last, shows the cost of the road at that time to be $10,345,805 23. No estimate is given of the am't required to complete the road, nor of the amount of unadjusted claims against the company, which we understand are very large; neither does the report contain any explanation of the largely increased cost of the road over the previous estimates.

The estimated cost of completing the double track (97 miles) is $987,000. Of this distance, the company propose to complete 55 miles the present year. To provide the means for this, as well as to purchase additional equipment, and to fund the floating debt, the company propose to make a further issue of $1,000,000 of bonds.

The earnings of the road, from the opening of the lower portion of it, up to September 30th, 1851, were $701,659 92. Expenses for the same period, $512,550 92. Earnings from October 1, 1851, to April 1, 1852, $584,142 71; expenses, $311,127 92—making the aggregate receipts up to April 1, $1,283,802 41; do. expenses, $823,678 84—net earnings, $462,123 57. The monthly earnings since October last have been as follows:

	Passengers.	Freight.	Mails, etc.
October.....	$64,372 41	$1,869 82	$2,795 80
November...	54,950 74	2,528 85	1,257 40
December...	81,424 22	24,936 77	1,579 89
January.....	62,484 26	36,707 62	1,312 80
February ...	54,914 69	60,011 66	8,768 09
March.....	63,223 68	43,834 68	12,169 29
Totals	381,370 03	169,889 40	28,882 28
	169,889 40		
	28,882 28		
	$580,041 75		

The expenses for the same period are stated to be $311,127 92—leaving $268,913 83 as net receipts for the past six months.

We are not given the items that make up the aggregate of expenses. It would be very satisfactory to have them, as it may turn out that they bear but a small ratio to the expenses of the whole year.

It will be seen that the passenger receipts for the past six months average $63,560 67, almost exactly the receipts for April from all sources, which were $64,154 60. The average of this month, for the six months ending October 1, 1852, would give an aggregate of $378,624, which added to the receipts for the six months already given, would give a total aggregate of $958,905 75.

The ratio of expenses to receipts for the first six months were very nearly 54 per cent. Applying the same ratio to the whole earnings, we have $441,124 20 as the net income for the year.

But this exhibit makes out an altogether too favorable case for the finances of the company. The results thus far show the freight business of the road during the season of navigation to be altogether *nothing*. During two thirds of the year, the ratio of expenses to receipts must be much greater. We think that during the summer months they cannot be less than 66 per cent of the gross receipts. The company are now running about 63,000 miles per month. For the two years ending September 1, 1851, the company run 460,675 miles, at an expense of $503,608 51, or $1 09 per mile. They may be running a little cheaper now. At the cost of previous years, they are just about paying expenses, taking the receipts of April as an average. But we are willing to allow a better result, even before a practical one is shown.

At the ratio of 66 per cent for the next six months, the result for the year would be as follows:

Receipts for six months ending April 1, 1852.....	$580,041 75	
Expenses	311,127 92	
Net earnings.....		268,913 83
Receipts for six months ending October 1, taking April as an average.....	378,924 00	
Expenses	250,089 84	
		128,834 16
Net earnings for the year.....		$397,747 99

Let us see how this balance will take care of the indebtedness of the company.

The construction account is stated at.....		$10,345,805 23
Of this there is stock to the amount of.....		3,739,974 85
		6,605 830 38
New issue of bonds.....		1,000,000 00
Showing a debt of..... bearing seven per cent interest.		$7,605 830 38

The interest on this debt is $532,408 12, or $134,660 13 greater than what will be the net earnings upon the above data!

But this does not fairly state the condition of the company. They cannot complete their road short of $12,000,000, if they can for that sum. This will leave a debt of $8,260,025 15, requiring a net revenue of $578,201 76 to meet the interest account alone. We believe that the cost of the road will exceed $12,000,000. It certainly will, if the past is any guide for the future. The estimated cost of the road, as given in the report of the directors, on the first day of August, 1849, was only $7,865,330, showing an increase in the cost of the road of about $1,000,000 per year since that time.

For the year ending October 1, 1852, we presume that the company will run not far from 800,000 miles. To make a fair show of business, the road should, during the same period, earn at least $1,500,000, or $125,000 per month. The actual receipts will probably not much exceed $1,000,000. The expenses of the year at the average of the two previous ones, will be $672,000.

The cost of operating the line from Buffalo to Albany averaged in 1850 very nearly 79 cents per mile run. It is not too much to say that this is one of the best and cheapest managed lines in the United States. It is one of our oldest lines, has a *finished* road, a full and perfect equipment, and is managed by a corps of experienced and most efficient superintendents. Admitting that the Hudson River road can be run at the same rate, the cost of operating the road the present year (supposing 800,000 miles to be run) will be $632,000. Deducting this sum from the gross receipts of $1,000,000, the balance of net earnings will be $378,000.

We can see no way by which the company can meet its indebtedness by its earnings, to say nothing of the additional loans which it proposes to negotiate. If a better result than the one to which we have come can be made out, we should be very glad to give the company the benefit of it. All we desire is to establish the truth; and we have stated what the company's report should have presented. Their report is certainly most meagre and unsatisfactory, and is not of that character which the public have a right to expect in reference to so vast a project.

White's Wooden Suspension Bridge.

We would call attention to the announcement of the above invention which will be found in our advrtiseing colums.

It will be seen that the Patentees claim to have solved the problem of spanning broad and rapid rivers with a structure which requires no piers, yet is suitable for railroad purposes, and can be built at a reasonable and practical cost. The extraordinary value of such an invention in our country render the claims of the Patentees worthy of a careful examination.

The principle feature of the invention is the substitution of wooden stringers constructed of boards cemented, dowelled and bolted, for iron chains or wire cables. There is no question as to the strength which may thus be attained, a reference to any tables of the strength of materials will show that the tensil strength of hard wood is much greater in proportion to its weight than bar iron, any number of these stringers considered necessary for a given structure may be placed one above another and each be firmly anchored beyond the points of support, by back stays fastened into the abutment; the only question seems to be, whether the stringers can be locked to the back stays with a sufficient degree of firmness. This is for practical builders to answer, and we apprehend that in this respect there is no danger of failure; no more certainly than in other suspension bridges. The principal advantage which is claimed for this invention is that it can be entirely freed from that tendency to vibration, which is fatal to the use of the iron suspension bridge upon railroads. The means used to effect this are very simple, and certainly seem to be effectual. Perpendicular oscilation is partly overcome by springing a direct arch from one abutment to another which in the centre rises nearly to the road bed, and which is firmly connected with the stringers above by the suspension rods which sustain the floor; and lateral oscilation is overcome partly by making the bridge deminish in width from the extremities to the centre; while all possibility of vibrations would seem to be avoided by the mode of covering which the inventor has adopted; and if this is the case it would seem that such a structure is the only one which could be thrown accross the Niagara suitable for the passage of the locomotive.

His mode of covering is this, the entire structure is covered with a double diagonal boarding, and the planks of the road bed are also laid double, crossing the floor joists also diagonally.

The weight of the structure decreases in a geometrical ratio as the distance from the towers increases, so that at the centre, though the full strength of the stringers and the direct arch below them is retained, the weight of the structure is diminished to an exceedingly low point. As to economy of construction this bridge can be surpassed by none, especially where a great span is required. There is no heavy timber, the entire structure being built of plank and boards, most of the materials and labor employed in building it,

are used directly upon the shore. No piers are necessary, the only stone work being the laying the abutments, etc.

His manner of constructing the stringers speak well also for its durability, they being put together with oil cement between each board which will render decay next to impossible, it is very well known that wood prepared in this way has been excavated from the ruins of old cities after being buried more than three thousand years in a state of perfect preservation.

For further information we would refer to the pamphlet which the Patentees are ready to send by mail upon application to them in Cambridge Port, Massachusetts.

Indianapolis and Bellefontaine Railroad.

There is to be a formal opening of this road to Muncie, on the 17th of June.

Panama Railroad.

It is stated that a contract for the completion of the above road has been completed with Mr. M. C. Story, of Poughkeepsie, a well known New York contractor. The amount to be paid is $75,000 per mile. We presume that this contract does not include the equipment, nor the iron.

M. C. Young, Esq,, late President of the Hudson River railroad goes out as engineer for the contractor.

The stock of the road is to be increased $1,500,000, making the whole amount $2,500,000. The road is to be completed by *contract* on the first of August, 1852.

Ohio.

Central railroad—Thirty-one sections of the Central railroad, east of Zanesville, have been let, and the names of the contractors are published in the Zanesville papers. The early completion of the road from Zanesville to Weeling is becoming a *fixed fact*, and its connection with both the Hempfield and the Baltimore roads at that point, will make the *Central*, a very important route.—*Ohio State Journal.*

Stock and Money Market.

We have no change to note in the transactions in railroad securities. Money is very abundant and bonds of new works are in request at advanced rates over the quotations for the same period the past year. The sales are very large both for the home and the foreign market, and there seems to be every probability that the best class securities will steadily advance in price.

The bids for the Lawrenceburgh and Indianapolis railroad bonds sold by De Launay, Iselin & Clark were as follows:

The amount bid for was over $600,000, ranging from 84 to 93. The taking bids were as follows:

$2,000	93.00	$13 000	91-52
5,000	92-00	127,000	91-51
5,000	91-87	112,000	91-50
15,000	91-79	20,000	91-49
48,000	91-75	45,000	91.48
10 000	91.70	*4,000	91-45
10,000	91-65		
30,000	91-66	$500,000	
54,000	91-62		

* Out of bids of $70,000 at 91-45-100

At St. Louis, on the 19th inst., the Pacific railroad company made a sale of $50,000 of the Missouri State six per cent. Bonds, at five per cent. above par.

The following are the receipts of the Pennsylvania railroad for the week ending 15th inst.:

From passengers	$22,267 00
From freight	13,138 41
Total	35,405 41

We annex a statement of comparitive receipts upon the Vicksburg railroad, for the months of March and April:

1849.	1850.	1851.	1852.
$18,972	$20,858	$20,839	$30,136

The earnings of the Southern Michigan and Northern Philadelphia road in April were as annexed:

Passengers	$28,764
Freight	19,758
Total	$48,522

The annual report of the Naugatuck railroad Co., states that the earnings for the year ending Dec. 31, 1851, were as follows:

Earnings from freight		$114 052 91
Earnings from passengers		72,307 57
Earnings from other sources		3,867 06
Gross earnings, 1851		$190,327 54
The expenses have been:		
For transportation. 1821	$35,287 42	
For interest on $440,000 bonds 7 per ct	30,800 00	
For interest and exchange on loans	1,071 82	
For taxes	2,006 34	
		$119,165 53
Net earnings, less running expenses, interest, etc		71,161 96

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 29, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	108½
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118½
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	120½
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	91½
" Canal preferred 5's	44½
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	106½
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	115½
New York 6's, ½ y., 1866	115½
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100½
New York 5's, 1866	105
New York 4½'s, 1858-'59 '64	97
Canal certificates, 6's, 1861	95
Ohio 6's, 1856	105½
Ohio 6's, 1860	109
Ohio 6's, 1870	112½
Ohio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	96
Pennsylvania 6's, 1847,-'53	101½
Pennsylvania 6's, 1879	108
Tennessee 5's	95½
Tennessee 6's, 1890	106
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106½
Albany 6's, 1871-1881	107
Cincinnati 6's	99
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	104
New York 5's, 1890	103½
Fire loan 5's, 1886	101½
Philadelphia 6's, 1870-'90	107
Baltimore 1870-'90	105½
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116½
Erie 2d mortgage, 7's, 1859	107½
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	97
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	82½
Reading mortgage, 6's, 1860	87½
Michigan Central, convertible, 8's, 1860	104½
Michigan Southern, 7's, 1860	97
Cleveland, Col. and Cin. 7's, 1859	105½
Cleveland and Pittsburg 7's, 1860	98½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	95½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	May 26.	May 19.
Albany and Schenectady	104½	103½
Boston and Maine	107½	108½
Boston and Lowell	108½	107½
Boston and Worcester	106½	106½
Boston and Providence	94½	90½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson (canal)	117	117
Eastern	103½	102
Erie	86	87½
Fall River	99½	99½
Fitchburgh	105	106½
Georgia	—	—
Georgia Central	103	—
Harlem	71	72½
" preferred	114½	114½
Hartford and New Haven	128	124½
Housatonic (preferred)	35	35
Hudson River	62	62
Little Miami	—	—
Long Island	20½	21½
Mad River	—	—
Madison and Indianapolis	101	103
Michigan Central	99½	100
Michigan Southern	118	119
New York and New Haven	112	111½
New Jersey	136	136
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	55	56½
Ogdensburgh	28½	29½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	77½	78½
Rochester and Syracuse	116½	116½
Stonington	52	55
South Carolina	—	—
Syracuse and Utica	128	128
Taunton Branch	115	115
Utica and Schenectady	134	132½
Vermont Central	16½	17
Vermont and Massachusetts	22½	22½
Virginia Central	—	—
Western	107½	108
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the advertisement of Zinc Paint in another column.

into market, and on his decease fell into disuse and dilapidation. The great and increasing demand for anthracite coal has lately attracted attention to this work, and it is gratifying to find the plan originally adopted for it, standing the test of time and examination, and that it is now recommended by the ablest engineer of the age, under similar circumstances in Europe.

American Railroad Journal.

Saturday, May 29, 1852.

Hudson River Railroad.

The fifth annual report of this company has been published under date of May 12th, 1852.

The construction account on the 18th of April last, shows the cost of the road at that time to be $10,345,805 23. No estimate is given of the am't required to complete the road, nor of the amount of unadjusted claims against the company, which we understand are very large; neither does the report contain any explanation of the largely increased cost of the road over the previous estimates.

The estimated cost of completing the double track (97 miles) is $987,000. Of this distance, the company propose to complete 55 miles the present year. To provide the means for this, as well as to purchase additional equipment, and to fund the floating debt, the company propose to make a further issue of $1,000,000 of bonds.

The earnings of the road, from the opening of the lower portion of it, up to September 30th, 1851, were $701,659 92. Expenses for the same period, $512,550 92. Earnings from October 1, 1851, to April 1, 1852, $584,142 71; expenses, $311,127 92—making the aggregate receipts up to April 1, $1,283,802 41; do. expenses, $823,678 84—net earnings, $462,123 57. The monthly earnings since October last have been as follows:

	Passengers.	Freight.	Mails, etc.
October.....	$64,372 41	$1,869 82	$2,795 80
November...	54,950 74	2,528 85	1,257 40
December...	81,424 22	24,936 77	1,579 89
January.....	62,484 26	36,707 62	1,312 80
February ...	54.914 69	60,011 66	8,768 09
March.....	63,223 68	43,834 68	12,169 29
Totals	381,370 03	169,889 40	28,882 28
	169,889 40		
	28,882 28		
	$580,041 75		

The expenses for the same period are stated to be $311,127 92—leaving $268,913 83 as net receipts for the past six months.

We are not given the items that make up the aggregate of expenses. It would be very satisfactory to have them, as it may turn out that they bear but a small ratio to the expenses of the whole year.

It will be seen that the passenger receipts for the past six months average $63,560 67, almost exactly the receipts for April from all sources, which were $64,154 60. The average of this month, for the six months ending October 1, 1852, would give an aggregate of $378,624, which added to the receipts for the six months already given, would give a total aggregate of $958,905 75.

The ratio of expenses to receipts for the first six months were very nearly 54 per cent. Applying the same ratio to the whole earnings, we have $441,124 20 as the net income for the year.

But this exhibit makes out an altogether too favorable case for the finances of the company. The results thus far show the freight business of the road during the season of navigation to be altogether *nothing*. During two-thirds of the year, the ratio of expenses to receipts must be much greater. We think that during the summer months they cannot be less than 66 per cent of the gross receipts. The company are now running about 63,000 miles per month. For the two years ending September 1, 1851, the company run 460,675 miles, at an expense of $503,608 51, or $1 09 per mile. They may be running a little cheaper now. At the cost of previous years, they are just about paying expenses, taking the receipts of April as an average. But we are willing to allow a better result, even before a practical one is shown.

At the ratio of 66 per cent for the next six months, the result for the year would be as follows:

Receipts for six months ending April 1, 1852.....	$580,041 75	
Expenses	311,127 92	
Net earnings.....		268,913 83
Receipts for six months ending October 1, taking April as an average.....	378,924 00	
Expenses	250,089 84	
		128,834 16
Net earnings for the year.....		$397,747 99

Let us see how this balance will take care of the indebtedness of the company.

The construction account is stated at.....	$10,345,805 23	
Of this there is stock to the amount of.....	3,739,974 85	
	6,605 830 38	
New issue of bonds.....	1,000,000 00	
Showing a debt of.....	$7,605,830 38	

bearing seven per cent interest.

The interest on this debt is $532,408 12, or $134,660 13 greater than what will be the net earnings upon the above data!

But this does not fairly state the condition of the company. They cannot complete their road short of $12,000,000, if they can for that sum. This will leave a debt of $8,260,025 15, requiring a net revenue of $578,201 76 to meet the interest account alone. We believe that the cost of the road will exceed $12,000,000. It certainly will, if the past is any guide for the future. The estimated cost of the road, as given in the report of the directors, on the first day of August, 1849, was only $7,865,330, showing an increase in the cost of the road of about $1,000,000 per year since that time.

For the year ending October 1, 1852, we presume that the company will run not far from 800,000 miles. To make a fair show of business, the road should, during the same period, earn at least $1,500,000, or $125,000 per month. The actual receipts will probably not much exceed $1,000,000. The expenses of the year at the average of the two previous ones, will be $872,000.

The cost of operating the line from Buffalo to Albany averaged in 1850 very nearly 79 cents per mile run. It is not too much to say that this is one of the best and cheapest managed lines in the United States. It is one of our oldest lines, has a *finished* road, a full and perfect equipment, and is managed by a corps of experienced and most efficient superintendents. Admitting that the Hudson River road can be run at the same rate, the cost of operating the road the present year (supposing 800,000 miles to be run) will be $632,000. Deducting this sum from the gross receipts of $1,000,000, the balance of net earnings will be $378,000.

We can see no way by which the company can meet its indebtedness by its earnings, to say nothing of the additional loans which it proposes to negotiate. If a better result than the one to which we have come can be made out, we should be very glad to give the company the benefit of it. All we desire is to establish the truth; and we have stated what the company's report should have presented. Their report is certainly most meagre and unsatisfactory, and is not of that character which the public have a right to expect in reference to so vast a project.

White's Wooden Suspension Bridge.

We would call attention to the announcement of the above invention which will be found in our advrtiseing colums.

It will be seen that the Patentees claim to have solved the problem of spanning broad and rapid rivers with a structure which requires no piers, yet is suitable for railroad purposes, and can be built at a reasonable and practical cost. The extraordinary value of such an invention in our country render the claims of the Patentees worthy of a careful examination.

The principle feature of the invention is the substitution of wooden stringers constructed of boards cemented, dowelled and bolted, for iron chains or wire cables. There is no question as to the strength which may thus be attained, a reference to any tables of the strength of materials will show that the tensil strength of hard wood is much greater in proportion to its weight than bar iron, any number of these stringers considered necessary for a given structure may be placed one above another and each be firmly anchored beyond the points of support, by back stays fastened into the abutment; the only question seems to be, whether the stringers can be locked to the back stays with a sufficient degree of firmness. This is for practical builders to answer, and we apprehend that in this respect there is no danger of failure; no more certainly than in other suspension bridges. The principal advantage which is claimed for this invention is that it can be entirely freed from that tendency to vibration, which is fatal to the use of the iron suspension bridge upon railroads. The means used to effect this are very simple, and certainly seem to be effectual. Perpendicular oscilation is partly overcome by springing a direct arch from one abutment to another which in the centre rises nearly to the road bed, and which is firmly connected with the stringers above by the suspension rods which sustain the floor; and lateral oscilation is overcome partly by making the bridge deminish in width from the extremities to the centre; while all possibility of vibrations would seem to be avoided by the mode of covering which the inventor has adopted; and if this is the case it would seem that such a structure is the only one which could be thrown accross the Niagara suitable for the passage of the locomotive.

His mode of covering is this, the entire structure is covered with a double diagonal boarding, and the planks of the road bed are also laid double, crossing the floor joists also diagonally.

The weight of the structure decreases in a geometrical ratio as the distance from the towers increases, so that at the centre, though the full strength of the stringers and the direct arch below them is retained, the weight of the structure is diminished to an exceedingly low point. As to economy of construction this bridge can be surpassed by none, especially where a great span is required. There is no heavy timber, the entire structure being built of plank and boards, most of the materials and labor employed in building it,

are used directly upon the shore. No piers are neccssary, the only stone work being the laying the abutments, etc.

His manner of constructing the stringers speak well also for its durability, they being put together with oil cement between each board which will render decay next to impossible, it is very well known that wood prepared in this way has been excavated from the ruins of old cities after being buried more than three thousand years in a state of perfect preservation.

For further information we would refer to the pamphlet which the Patentees are ready to send by mail upon application to them in Cambridge Port, Massachusetts.

Indianapolis and Bellefontaine Railroad.

There is to be a formal opening of this road to Muncie, on the 17th of June.

Panama Railroad.

It is stated that a contract for the completion of the above road has been completed with Mr. M. C. Story, of Poughkeepsie, a well known New York contractor. The amount to be paid is $75,000 per mile. We presume that this contract does not include the equipment, nor the iron.

M. C. Young, Esq,, late President of the Hudson River railroad goes out as engineer for the contractor.

The stock of the road is to be increased $1,500,000, making the whole amount $2,500,000. The road is to be completed by *contract* on the first of August, 1852.

Ohio.

Central railroad—Thirty-one sections of the Central railroad, east of Zanesville, have been let, and the names of the contractors are published in the Zanesville papers. The early completion of the road from Zanesville to Weeling is becoming a *fixed fact*, and its connection with both the Hempfield and the Baltimore roads at that point, will make the *Central*, a very important route.—*Ohio State Journal.*

Stock and Money Market.

We have no change to note in the transactions in railroad securities. Money is very abundant and bonds of new works are in request at advanced rates over the quotations for the same period the past year. The sales are very large both for the home and the foreign market, and there seems to be every probability that the best class securities will steadily advance in price.

The bids for the Lawrenceburgh and Indianapolis railroad bonds sold by De Launay, Iselin & Clark were as follows:

The amount bid for was over $800,000, ranging from 84 to 93. The taking bids were as follows:

$2,000	93.00	$13·000	91·52
5,000	92·00	127,000	91·51
5,000	91·87	112,000	91·50
15,000	91·79	20,000	91·49
48,000	91·75	45,000	91.48
10,000	91.70	*4,000	91·45
10,000	91·65		
30,000	91·66	$500,000	
54,000	91·62		

* Out of bids of $70,000 at 91-45-100

At St. Louis, on the 19th inst., the Pacific railroad company made a sale of $50,000 of the Missouri State six per cent. Bonds, at five per cent. above par.

The following are the receipts of the Pennsylvania railroad for the week ending 15th inst.:

From passengers	$22,267 00
From freight	13,132 41
Total	35,405 41

We annex a statement of comparitive receipts upon the Vicksburg railroad, for the months of March and April:

1849.	1850.	1851.	1852.
$18,972	$20,858	$20,839	$30,136

The earnings of the Southern Michigan and Northern Philadelphia road in April were as annexed:

Passengers	$28,764
Freight	19,758
Total	$48,522

The annual report of the Naugatuck railroad Co., states that the earnings for the year ending Dec. 31, 1851, were as follows:

Earnings from freight	$114,052 91
Earnings from passengers	72,307 57
Earnings from other sources	3,867 06
Gross earnings, 1851	$190,327 54

The expenses have been:

For transportation, 1821	$35,287 42	
For interest on $440,000 bonds 7 per ct.	30,800 00	
For interest and exchange on loans	1,071 82	
For taxes	2,006 34	
		$119,165 53
Net earnings, less running expenses, interest, etc		71,161 96

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, MAY 29, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	108¼
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	118¼
U. S. 6's, 1868	118¼
U. S. 6's, 1868—coupon	120¼
Indiana 5's	90
Indiana 2½	49
" Canal loan 6's	91¼
" Canal preferred 5's	44¼
Alabama 5's	91a92
Illinois 6's, 1847	76
Illinois 6's—interest	47¼
Kentucky 6's, 1871	109
Massachusetts sterling 5's	105
Massachusetts 5's, 1859	106¼
Maine 6's, 1855	103
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	103
New York 6's, 1860-'61-'62	110¼
New York 6's, 1864-'65	115¼
New York 6's, ½ y., 1866	115¼
New York 5½'s, 1860-'61	106
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	100¼
New York 5's, 1866	105
New York 4½'s, 1858-'59-'64	97
Canal certificates, 6's, 1861	95
Ohio 6's, 1856	105¼
Ohio 6's, 1860	109
Ohio 6's, 1870	112¼
Ohio 6's, 1875	116
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	96
Pennsylvania 6's, 1847,-'53	101¼
Pennsylvania 6's, 1879	108
Tennessee 5's	95¼
Tennessee 6's, 1890	106
Virginia 6's, 1886	109

CITY SECURITIES—BONDS.

Brooklyn 6's	106¼
Albany 6's, 1871-1881	107
Cincinnati 6's	99
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	97
New York 7's, 1857	108
New York 5's, 1858-'60	100¼
New York 5's, 1870-'75	104
New York 5's, 1890	103¼
Fire loan 5's, 1886	101¼
Philadelphia 6's, 1876-'90	107
Baltimore 1870-'90	105¼
Boston 5's	101

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116¼
Erie 2d mortgage, 7's, 1859	107¼
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	97
Hudson River 1st mort., 7's, 1869	106¼
Hudson River 2d mort., 7's, 1860	97¼
New York and New Haven 7's, 1861	105
Reading 6's, 1870	82¼
Reading mortgage, 6's, 1860	87½
Michigan Central, convertible, 8's, 1860	104¼
Michigan Southern, 7's, 1860	97
Cleveland, Col. and Cin. 7's, 1859	105¼
Cleveland and Pittsburg 7's, 1860	98¼
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	95¼

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	May 26.	May 19.
Albany and Schenectady	104¼	103¼
Boston and Maine	107¼	108½
Boston and Lowell	108½	107½
Boston and Worcester	106½	106½
Boston and Providence	94½	90½
Baltimore and Ohio	75	68
Baltimore and Susquehanna	32	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	142½
Delaware and Hudson (canal)	117	117
Eastern	103½	102
Erie	86	87½
Fall River	99½	99½
Fitchburgh	105	106½
Georgia	—	—
Georgia Central	103	—
Harlem	71	72½
" preferred	114½	114½
Hartford and New Haven	128	124½
Housatonic (preferred)	35	35
Hudson River	62	62
Little Miami	—	—
Long Island	20½	21½
Mad River	—	—
Madison and Indianapolis	101	103
Michigan Central	99½	100
Michigan Southern	118	119
New York and New Haven	112	111½
New Jersey	136	136
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	55	56½
Ogdensburgh	28½	29½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	77½	78½
Rochester and Syracuse	116½	116½
Stonington	52	55
South Carolina	—	—
Syracuse and Utica	128	128
Taunton Branch	115	115
Utica and Schenectady	134	132½
Vermont Central	16½	17
Vermont and Massachusetts	22½	23½
Virginia Central	—	—
Western	107½	108
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Wisconsin.

Railroad Bonds as a Basis of Banking—We have before us the act passed by the last session of the Wisconsin Legislature relative to banking in that State. It goes to the people in November next for approval before it becomes a law. Among its provissions for security is one based upon its own State railroad stocks or bonds, to be transferred in trust to the State Treasurer. Bonds or obligations of any railroad in the State duly organized, bearing not less than seven per cent. interest per annum, payable semi-annually, secured by mortgage or deed of trust upon the whole or a portion of a road constructed by such company, will be received at one-half their par value as security in place of United States stocks.

By this act a comptroller is appointed by the governor until January, 1854, and afterwards elected by the people, whose business it is to supervise the whole system. He has all the plates engraved, countersigns, numbers and registers all bills to be issued, and retains all plates, dies and materials for the printing and making of the circulating notes in his own possession. The expense arising therefrom to be paid by the parties applying for such circulating notes. The act provides specifically for ascertaining at various times and under various circumstances the value of government and other stocks to be offered or held as security, and also for their disposal in case it becomes necessary.

Mortgages, or deeds of trust, to secure railroad bonds or obligations are to be executed to a trustee, and to contain the usual provisions for the security of the holders of such bonds or obligations, and shall be a first lien on a portion of continuous road of not less than forty miles, or on the whole of a road of not less than twenty miles in extent, with all appurtenances. The governor, bank comptroller, and attorney general, or either two of them, are required to file a certificate with the state treasurer, that the requisite portion of road has been constructed in a substantial manner, with a solid road bed, and with an H or T rail, or one of some other approved pattern, to weigh not less than fifty pounds to the yard, and that the same has been fully equipped and in actual operation, and has earned for the year next preceding, a net revenue greater than the interest on the bonds or obligations secured thereon by such mortgage or deed of trust, before it shall be lawful to receive any such mortgage or deed of trust as security for any bank issue; and further, the attorney general shall file in like manner his certificate from actual examination, that such mortgage or deed of trust has been duly executed in the manner and with the provisions required by this act, and is the first lien on such portion of road, its equipments, depots, fixtures, machinery, income and franchises; and the directors of such railroad company shall file in like manner a statement under the oath of its president and secretary, setting forth the cost of such portion of road, and the net revenues thereof for the year next preceding. Bonds or obligations shall not be received at a rate higher than eighty cents on a dollar of the current and actual value thereof, nor at a rate, estimating the whole number of continuous miles in such portion of road, and the amount of bonds or obligations secured thereby, exceeding the one-half of the average cost and value of such road, nor at a rate to be ascertained by such estimate, exceeding eight thousand dollars per mile The bank comptroller in conjunction with the governor, shall reject such bonds or obligations, the security of which shall be found upon examination to be doubtful or liable to be seriously impaired; and in case the current or actual value of said bonds or obligations shall have depreciated, after they shall have been received, the bank comptroller shall reduce the rate at which the same shall be continued to be held as securities, and require other bonds or obligations, or public stocks of the United States, or of any state, to be deposited to make good the deficit.

All mortgages and deeds of trust, are to be recorded in the office of the secretary of state, in a proper book kept for that purpose, whose certificate of such registering endorsed on such mortgage shall be evidence thereof; and the said mortgage or deed of trust so recorded shall have the same effect as if recorded in the several counties through which such road may be built.

The provisions of this act seem to be well guarded, and if approved of by the people and properly administered, we see no reason why the system will not prove popular and safe.

Florence Railroad Convention.

A convention of delegates of the friends of the Nashville, Florence, Aberdeen, and New Orleans railroad, was held at the Court House in Florence, Alabama, on the 3d of May, inst., at which Sterling R. Cockrill, Esq., of Tennessee, presided in organizing. Delegates were present from Nashville, Williamson county, Spring Hill, Columbia, Lawrence county, Giles county, Tennessee; Franklin county, Alabama; Aberdeen, Mississippi; and about one hundred from Lauderdale county, Ala. The following gentlemen composed the permanent officers of the convention.

President.—Hon. Samuel D. Frierson, of Tennessee.

V. Presidents.—Hon. Stephen Cocke, of Mississippi; Thomas Martin, and S. D. Morgan, of Tennessee; James Irvine, of Alabama.

Secretaries.—John E. Hatcher, M. L. Andrews. J. W. Sykes, E. H. Foster, M. C. Gallaway.

Gen. L. P. Walker and Robert M. Patton conducted the President to the chair, who explained the objects of the convention in a few brief remarks, also returning thanks for the honor conferred upon himself in being selected to preside over the deliberations of a convention having for its object matters affecting such extensive and important interests.

The following gentlemen were appointed a committee on resolutions, viz:

Robert M. Patton, Davis Deshler, L. P. Walker, Solon E. Rose, Russell Houston, Thos. M. Jones, Stephen Cocke, George W. Hardy, Locke E. Houston and Jas. H. Weakley.

After which an adjournment was had. Upon reassembling, Russell Houston, Esq., of Tennessee, being loudly called for, addressed the convention in eloquent terms upon the subject which called it together. The books for stock subscriptions were opened and several names were entered. At the evening session letters were read from James Robb, Esq., of New Orleans, Hon. W. R. King, Robert C. Foster, of Tennessee, and Leslie Combs, of Kentucky, warmly approving the enterprise, and regretting their inability to be present to participate in the deliberations of the convention.

Previous to submitting the resolutions, Chancellor Stephen Cocke, of Miss., chairman of the committee, offered a report, which was unanimously adopted, setting forth that it was hoped the action of the convention would give an extended impulse to the object which all present had in view, viz:—a continuous and unbroken line of railroad between the extreme north and the city of New Orleans, connecting by a great chain of railway all portions of the United States, north and south. "Up to the present time," says the report, "we of the Southwest have been unfaithful to ourselves; no great line has been constructed; whilst other States have taken the lead of us in such improvements, and have left us behind in the race of progress; and were we to compare our natural wealth with theirs, we would be obliged to come to the conclusion that instead of being behind in the race, we ought to be far in advance. We may as an example compare Georgia with Alabama or Mississippi in natural wealth, looking to all the gifts of nature bestowed on each; and we are forced to admit that Georgia was, before the construction of her railways, far inferior to either. Compare them now, when the hand of man has been employed in aid of nature, and what is the result? It is that we can no longer keep by her side; her railroads have so increased her population that extensive districts of land before remote, and worthless in consequence of being so, are now settled and made to contribute largely to State wealth. Nor is this all; before her improvements were made, the productions of her neighboring States could not find its way into her limits—now the case is widely different; East Tennessee sends all her surplus products to that State, and four of the richest counties of north Alabama, send the principal part of their cotton over her railway to the markets of Augusta and Charleston. Thus has she by her enlightened enterprise succeeded in reversing former channels of commerce, and has drawn to herself the advantages mentioned with many other benefits unnecessary to enumerate. It is unnecessary to multiply examples, this one is sufficiently demonstrative and instructive, and teaches us a useful lesson on the subject of enlightened progress. We might here mention, however, without being tedious, that nearly all the Atlantic and some of the Northern States, have pursued the same enlightened policy with similar results."

The following extracts from the same report are so much to the point, and so appropriate to other localities beside the one to which they specially refer, that we cannot resist copying them. They evince a settled determination from right motives necessary to the success of all important undertakings.

"If we remain stationary whilst others are opening up sources of social intercourse and commercial exchanges, we shall as a necessary consequence become "a land unknown," for such facilities will monopolize all social and commercial advantages to themselves; cutting off those who pursue the stationary policy from social and commercial intercourse. Although thus far Kentucky, Tennessee, Mississippi, and Louisiana, have done but little in this race of railway progress, their present spirit promises far better things in future; it evinces a determination to carry into successful execution this great and magnificent project. If only prudent, good sense, and zeal will keep down jealousy in the control, and dissentions as to routes, there can be no doubt of speedy accomplishment."

"Cheapness of construction, amount of material aid in construction, directness of route, population, weight of commercial operation, wealth of production, and the like, ought to be the chief considerations in locations, beyond these no preference ought to be recognized, at the same time that we so declare, it must be recognized as practical wisdom in all business transactions, to place men in a situation where they can have in view the true object of desire, that they may be assured that their money or their labor goes to that object. Without such fair dealing there will be distrust and want of confidence, and under such circumstances it rarely happens that anything valuable can be accomplished."

The resolutions are able and in accordance with the spirit of the entire report which preceded them. It was resolved that the social, commercial and agricultural interests of the country represented in the convention demanded for their developement and permanent prosperity some more speedy and

certain media of communication and transit than are now afforded by the natural geographical facilities.

The construction of the road through the towns of Franklin and Spring Hill, the counties of Maury and Lawrence, or Giles, in Tennessse; the towns of Florence and Tuscumbia, Alabama; Aberdeen, Kosciusko, Canton and Jackson, Miss., observing the shortest and most direct route between intermediate points, in the opinion of the convention, would be in accordance with a previously declared opinion that the proposed line should be made with entire reference to the eligibility of the route, under the controlling influences of distance, population and the resources of the country through which it shall run, both present and prospective, as to trade and the stimulants to trade.

A union of the several roads between Nashville and New Orleans was recommended, as affecting more fully the proposed continuous connection. It was also recommended, in view of the fact that the New Orleans, Jackson, and great Northern railroad company is already organized under its charter, which confers on it the right of way in the State of Msssissippi, this convention recommends to the Canton, Aberdeen and Tuscumbia railroad company to transfer their powers, privileges, and subscriptions, to the New Orleans, Jackson, and Northern railroad company, upon the condition that they locate the road on the route mentioned in the charter of the Canton, Aberdeen and Tuscumbia railroad company, and this convention in like manner recommends to the New Orleans, Jackson and Northern railroad company to receive such transfer and subscription, and locate on the route by way of Aberdeen and Canton.

The convention also recommended the system of city and county taxation along the entire route of the proposed line of road; and that it urge upon Congress the propriety and justice of donating to the enterprise a portion of the public lands yet to be appropriated for purposes of internal improvement, and that the respective Senators and Representatives from the States of Mississippi, Alabama, and Tennessee, be requested to bring this matter before Congress at as early a day as possible.

The convention was ably addressed in support of the resolutions by Chancellor Cocke, of Miss.; Thos. Jones, Esq., of Tennessee; and Mr. Kendrick, of Alabama.

A committee of seven, consisting of the following gentlemen, E. H. Foster, Jr., Stephen Cocke, L. P. Walker, Thos. Martin, S. E. Rose, James Irvine, and Russel Houston, and the chairman, was appointed to prepare and publish an address in support of the object which had called the convention together.

After a complimentary resolution to the President, and directing the publication of the proceedings, the convention adjourned *sine die*.

The proceedings throughout were such as to afford the opinion that this enterprise is enlisting the influence and enterprise of able parties determined upon its success.

Canada.

Quebec and Richmond Railroad.—The following gentlemen have been recently chosen directors of this road for the current year, viz:

Wm. Price, D. R. Steuart, G. H. Simard, Capt. Rhodes, J. B. Forsyth, T. W. Lloyd, Henry LeMesurier, the Hon. R. E. Caron, H. Atkinson, F. X. Paradis, F. R. Angers, F. Baby, and George Beswick, Esquires.

To the Editor of the American Railroad Journal.

Ventilation of Cars.

Dear Sir: A correspondent in your last Journal puts some queries as to the cause or source of dust on our railroads.

The writer of this has devoted years of thought and observation to the subject, and has come to the conclusion that the dust from the road bed is not disturbed by the mere rotating action of wheels and axles, but by the volume of air which the bottom of the car and the trucks force along between the rails. A strong current of air is always forcing itself up between the platforms of the cars, *in the direction that the train is travelling*, and every one who has made the subject one of observation, has noticed that the rear platform of every car in the train is covered with dust and gravel.

There is no vacuum formed between the cars by the motion of the train. When the train is at rest—the space between the cars is of course filled with air,—when under weigh, as a general thing, the pressure of the latteral currents which have been opened by the engine, are equal, and merely compress the air in the space between the cars, and cause it to break up into whirling eddies. The prime cause of dust inside of the car, is to be found in the system of ventilation generally adopted, the ventilators being constructed so as to exhaust the air *out through the top*, and feed *it in through the window*. A more perfect method to fill a car with dust, and subject passengers to strong draughts of air could not be devised. Our eastern roads are now reversing this order of things, and making the window the exhauster and the top the feeder, under Pain's patents, an advertisement of which I notice in your Journal. This simple alteration has entirely remedied all inconvenience from dust or cinder, and enables the traveller to enjoy in the hottest weather a pure cool atmosphere. P. M. H.

Cincinnati, Wilmington and Zanesville Railroad.

The annual meeting of the stockholders, for the election of directors of this road, was held on Thursday the 18th of May, at Cincinnati. A good evidence of the efficiency of the old board of directors, is afforded in the fact, that the same was unanimously re-elected for the current year; about twenty-one thousand votes being cast. The board was re-organized with its former officers. Messrs. Means, President of the S. & I. railroad, and Col. Collier, were in attendance to urge the importance of a connection with their road at Newark, via Lancaster, terminating the Wilmington road at the latter point. Their views and opinions were listened to attentively, and respectfully considered, but not concurred in; the board expressing a determination to prosecute its own work to the chartered terminus at Zanesville, as speedily as the means within its control will justify, believing such a course in accordance with the true interests of the stockholders concerned. The following resolution was passed relative to the prosecution of the work from Lancaster to Lexington:

"*Resolved*, That as soon as the responsible subscriptions in Perry county shall amount to one hundred and fifty thousand dollars, and the right of way from Lancaster to the east side of Perry county obtained, this board will locate and let for construction, the line from Lancaster east to a point at or near Lexington, in Perry County."

The lowest estimate upon any of the three routes yet surveyed between Lancaster and Zanesville, exceeds the present resources of the company. The engineers estimate the cost of preparing the road bed for the superstructure upon each line as follows:—Somerset, $801,677; St. Joseph's, $665,317 Lexington, $575,184. The cost being decidedly in favor of the route via Lexington, the board feel justified in determining on that route, above all considerations urged in favor of either of the others. If Perry county comes up to the requirement of the resolution, that part of the road will be completed without embarrassment to its finances or credit.

The extension from Lexington to Zanesville, comprising the most difficult part of the work, will be the subject of future action at an early day, when the citizens of Muskingum will be called upon to sustain the work, which, when completed, will prove greatly to their interest.

The next meeting of the board will be held at Zanesville early in July, or previous to that time.

Savannah versus New Orleans.

The people of Savannah, Georgia, are about to extend aid to the Columbus and Opelika railroad for the purpose of securing a continuous line of road from that city, to the Mississippi river. This being accomplished, they claim that the cotton of those portions of Alabama and Mississippi traversed by this line of railroad will be taken to Savannah for shipment, instead of New Orleans. The following, copied from the Savannah Republican, are the arguments put forward to sustain the assumption.

We believe that a nice calculation for frieght and insurance down the river to New-Orleans, the incidental expenses there which are know to be more than in Savannah, and the extra charges for freight and insurance over what they would be from an Atlantic port, would show that cotten could be sent from Vicksburg by railroad to Savannah and thence to Liverpool, cheaper than it could by way of New Orleans. But we do not propose to contend with New Orleans or Vicksburg; we are content to fall back to Jackson, the place to which a railroad from New Orleans is being constructed for the avowed object of securing the trade of northern Alabama and Mississippi, of Tennessee and Kentucky.

The distance from Jackson to New Orleans, on the route now proposed by the directors of the New Orleans and Jackson railroad, is two hundred and eighteen miles. The distance from Jackson to Savannah will not exceed six hundred and fifty miles. If we deduct one of these numbers from the other, the excess of railroad to Savannah over that to New Orleans will be about four hundred and thirty-two miles. Against the expense of railroad transportation four hundred and thirty-two miles, there will be an additional freight from a gulf port, with the increased amount of insurance over an Atlantic port, as well as the interest on the value of the goods during the increased time required to reach their destination.

The actual cost of transportation by railroad is influenced by so many contingencies, that no definite rate can be assumed as the mimimum by which to be governed in making estimates. We know, however, that flour is carried from Albany to Boston over a road that has some very high grades for 1¼ cents per ton per mile. The Reading road transports coal for 1¼ cents per ton per mile. The Charleston and Hamburg road frequently carries cotton one hundred and thirty-six miles for 50 cents per bale—about 1¼ cents per ton per mile—and recently the Baltimore and Ohio road have made a contract to haul coal from Cumberland to Baltimore, one hundred and seventy-seven miles, for $1.75 per ton or *a little less than one cent per ton per mile.*—As these are actual prices, it would be safe to assume that where large quantities of freight are to be transported, a road could afford to carry it at 1¼ cents per ton per mile, or for $6.48 for the four hundred and thirty-two miles to Savannah.

The last quotation of freight for cotton from New Orleans to Liverpool is 1¼d., or $20 per ton. At Savannah, the present frieght is ¼d., or $10—making the difference in freight much more than the cost of railroad transportation from Jackson to

Savannah. Insurance from New Orleans to Liverpool is one per cent. more than from Savannah, on account of the increased length of the voyage, and the great dangers of the Florida coast. The difference in the length of the voyage we estimate at four-fifths of a month. The interest on merchandize valued at $200 per ton for that time, at 7 per cent. would be 92 cents. New Orleans cotton is worth (upon an average) $200 per ton, and as that exceeds all other articles of export, we make the estimate upon its assumed value, for the following comparison of the expense of the two routes:

Freight from New Orleans to Liverpool,	$20 00	
Extra insurance, 1 per cent., on $200,	2 00	
Interest on $200, 4-5 of a month, at 7 per cent.	92	
		$22 92
Freight from Savannah to Liverpool,	$10 00	
Do " Jackson railroad, to Savannah,	6 48	
		$16 48
Difference in favor of Savannah routes		$ 6 44

It may be objected that the freight per railroad is put too low. If so, we will carry out the comparison by taking the actual cost by railroad as now charged for the same distance from Chattanooga to Savannah or Charleston:

New Orleans route as above		$22 92
Savannah to Liverpool, as above	$10 00	
Chattanooga to Savannah, same distance as from Jackson railroad to Savannah,	11 00	$21 00
Difference still in favor of Savannah route		$ 1 92

It will of course be understood that the above estimates for cost from Jackson railroad to Savannah, are for the cost from a point on that road 218 miles east of Jackson, that amount being deducted, because that distance by railroad has to be overcome before the cotton can be placed in New Orleans. We have not taken into account the items of drayage, storage, commissions, etc., because these charges are common to both cities.—There is however, a difference of about three dollars per ton in favor of Savannah, as the commissions for selling, are here but 50 cents per bale, while in New Orleans the charge is 2½ per cent on the amount of sales, In one instance the charge (say four bales to a ton) would be two dollars, and in the other ($200 per ton) five dollars.

The above shows that New Orleans has southern as well as northern roads that are aiming to draw from her the business she now possesses. Notwithstanding all she has suffered, and the still greater losses with which she is threatened, she seems to be doing nothing to avert the evil.

The Republican quotes long extracts from the New Orleans papers showing that that city is yearly becoming more difficult of access from the shoaling of the water in the outlets of the Mississippi, as an additional argument in favor of the southern Atlantic pass.

Rabun Gap Railroad.

The Knoxville Register states that Gen. A. H Brisbane, with a corps of cadets from the Military Academy at Charleston, S. C., arrived at Augusta, Ga., on the 30th ult., and left the next day for the Rabun Gap to make a survey of the route for the proposed railroad through that place.

The Chief Engineer of the Greenville and Columbia railroad, W. Spencer Brown, Esq., is at present making a survey of the route through South Carolina up to the line of that state.

Notice is given that books will be opened at Franklin, Macon county, N. C., on the 15th of June for the subscription of stock in that road. It is said the people of that county feel a very lively interest in the success of the proposed road, and it is believed they will subscribe liberally to the stock of the company.

Ohio.

Dayton and Michigan Railroad.—As your Journal is devoted principally to the interest of railroads, and railroad companies, perhaps a short sketch of the doings of this company since its organization, and prospects for future business, may not be uninteresting to your readers.

This company was incorporated in March, 1851, by the Legislature of Ohio; it has power, by its charter, to construct a railroad from Dayton, Ohio, to the Michigan State line, by way of Sidney, Shelby county, Simcoe, Allen county, Toledo, Lucas county, on the most practicable route towards Detroit, to the Michigan State line.

Although a year has not elapsed since the organization of this company, it has a subscription to its capital stock of about $200,000, and has under contract (to H. Doolittle, a very enterprising and energetic contractor,) twenty miles of said road from Dayton (where it intersects the Cincinnati, Hamilton and Dayton railroad) to Troy, the county seat of Miami county, where it is to be finished, and made a first class road by the first day of October next.

Further subscriptions to the capital stock are being rapidly made, which will enable the company to put under contract, and complete, their road to Sidney, seventeen miles further, at a very early day, where it will connect with the Bellefontaine and Indiana railroad, which at once will secure to this road a very large amount of business. A deep interest is now felt along the line of said road in the northern counties through which it must pass; and from the very favorable grades and surface of the country through which this road will run, it will be of easy construction, and can be built with great rapidity; and when completed to Detroit, must necessarily command a very large part of the Canada business, connecting, as it will, with the Canada road at Detroit, and being the shortest line of road from that point south to the Ohio river at Cincinnati. This road is now being made, and perhaps under as favorable auspices for business as any road made, or now being made, north and south in the State of Ohio.

MIAMI VALLEY.

For the American Railroad Journal.

H. V. POOR, Esq.,

DEAR SIR: As a constant reader of your excellent Journal, I have seldom met with anything so *amusing* to the practical railroad man, as two articles lately copied from the N. Y. Journal of Commerce, signed T. A. R. We Yankees are therein informed that we are *all wrong* on the subject of railway curves. That, as regards our universal practice of raising the outer rail of a curve, "it is difficult to imagine how such an erroneous principle ever found advocates."

If, as a Yankee, I should venture a guess, it would be, that T. A. R. had worked his "*simple mathematical proposition*" in some "quiet, snug and comfortable office" with a treatise on *level gearing* for his monitor. If he will take a few rides "in the open air," seated upon the "*cow-catcher*" of an engine, and occasionally vary his position to the "*Compass*" of the cars in different parts of the train, he will, no doubt, soon conclude that this department of railway practice is less a mathematical proposition than a *system of compromises, many of which are necessarily "in defiance of mathematical principles.*"

For instance, a car *pushed* along a curve will run towards the outer rail, and turns the curve from the larger portion of the conical wheels, being thus brought to run upon the longest rail, on the contrary, a car *drawn* along a curve at slow speed, will be forced towards the inner, or shorter rail, and consequently "a slip" must result, and thereby torsional strain upon the axle. If, however, the speed be greatly increased, centrifugal force is generated, and the car runs against the outer rail.

In a long train, the centrifugal force of the forward cars is counteracted by the tendency of the train to assume a straight line, and they will consequently be forced toward the inner rail in inverse proportion to the distance from the engine.

From the foregoing, it must appear that it is proper to place the rails on a curve, in that position which will meet the most important liabilities to run off the track. The engine, being the important part of the train, and, from its position, most liable to accident, attention must first be given to the relations existing between it and the rails. Being impelled by its own power, it is acted upon precisely as a car *pushed* along a curve, and therefore requires some provision to counteract the tendency to run against the outer rail. This is accomplished by raising the outside rail of a curve above the inner one, and even here, the degree of elevation must be the result of compromise, a different elevation being required for every variation of speed.

Until a road can be maintained within adjustments of "one-eighth of an inch," and the various relations between the rails and the rolling stock are brought within the limits of his "single mathematical proposition," T. A. R. may rest easy, as regards his claim for a "patent right," for no one will be likely to dispute it.

Respectfully, G. W. J.

York, Pennsylvania, May 19, 1852.

Knoxville and North Carolina Junction Railrord.

The commissioners for Knox and Blount counties of the above proposed road, met at Maryville on the 18th of May, and by resolution invited the commissioners of the proposed Knoxville and Charleston road to meet them at Maryville on the 24th of May for the purpose of examining, consulting, and determining, if practicable, which of the charters should be adopted for the neutral and harmonious action of both companies.

Remarks were then made by Gen. Wallace, Maj. Campbell Wallace and by O. P. Temple on the necessity of action and harmonious cooperation on the part of the citizens of Knox and Blount counties in the prosecution of the magnificient enterprise in which they are alike interested.

Knoxville and Charleston Railroad.

We learn from the Knoxville, Tenn., Register, of May 10, that one hundred and five thousand dollars had been subscribed in Knoxville, within a few days previous, to the stock for building a road from that place to intersect, via Maryville, with the road from Charleston, S. C, through the Rabun Gap. The charter, which was granted by the Legislature of Tennessee, is thereby secured. The company was formally organized on the 18th of May, by the election of a board of fifteen directors, Dr. J. G. M Ramsey, President; Joseph L. King, Secretary; and James H. Cowan, Treasurer.

The Register says the citizens of its State will do their part, and calls upon its neighbors of South Carolina to come to their aid, which will secure a continuous line to the teeming north-west at an early day. It is proposed to locate the route with as little delay as possible.

Illinois.

Mississippi and Rock River Junction Railroad Company.—The capital stock in the above company having been subscribed according to the requirements of their Charter, the stock holders in said incorporation met at Union Grove, Whiteside county, on Monday, the 10th inst., to elect directors for the ensuing year.

The following gentlemen were chosen said directors, viz:

Charles Dement, of Dixon, Ill., Van. J. Adams, Abram W. Benton, of Sterling, Ill., Royal Jacobs, Joshua T. Atkinson, of Union Grove Ill., James McCoy, John Phelps Jr., of Fulton, Ill., Benjamin Lake, Elijah Buel, of Lyons, Iowa.

Immediate measures are to be taken to survey and locate the road.

The Mobile and Ohio Railroad.

The Mobile Tribune says: The directors have closed contracts for the graduation, etc., of forty-five miles more of the Mobile and Ohio railroad, excepting a few light sections, extending from Citronelle to Winchester, Mississippi. Early in July, eighty miles more will be let out, reaching to the south line of Kemper county, and in August following one hundred miles more, between Lauderdale and Pontotoc, will be offered for contract.—These different divisions, including the distance from the city to Citronelle, make two hundred and eighty-five miles. All this will be completed within a couple of years.

Albany and Susquehanna Railroad.

The city of Albany has, by a vote of 6,061 to 1,427, agreed to subscribe $1,000,000 to the Albany and Susquehanna railroad, which ensures the construction of this important work. It will be recollected that the city loaned its credit to an equal amount, to the Western railroad, to which it owes no small portion of its present prosperity. The railroad company pays the interest on the bonds, so that the city has never been called upon for a cent, and there is no probability that it ever will be in either of the above cases.

Ohio.

Hillsboro' and Cincinnati Railroad.—The following gentlemen have been chosen directors of this road for the present year:

James M. Trimble, Benjamin Barrere, D. J. Fallis, of Hillsborough; Lewis Worthington, Reuben R. Springer, Cincinnati; William Ramsey, of Lovelands; John Benner, of Bainbridge.

Rhode Island.

Providence and Bristol Railroad.—A survey which has just been completed of this proposed road, makes the length of line 1286 miles, and the estimated cost $292,039, or $22,726 per mile. The estimated gross income of the road $48,536 45.

New-York.

The Utica and Schenectady railroad, 78 miles long, costing $1,500,000, for fourteen years cleared 18¾ per cent per annum over total expenses, beside reimbursing its original cost.

Georgia.

State Railroad—The Savannah Republican of the 19th May says;

Mr. Superintendant Wadley, who returned Tuesday evening from the north, purchased twenty new locomotives for the State road, as follows: eight from Messrs. Anderson and Souther, of the Tredgegar iron works, of Richmond, Va.; four from Messrs. Rogers, Ketchum & Grosvernor, of Patterson, New Jersey; three of M. Baldwin, of Philadelphia; and two of S. Wilmarth, of Boston—the whole to be delivered between July and December.

Lake Superior Railroad.

Mr. Heman B. Ely, President of the Green Bay and Lake Superior railroad company, left here for Lake Superior yesterday, with a corps of engineers, to commence the surveys of the work. We understand that that part of the road between Lake Superior and the Jackson Iron Mountain, will be pushed forward rapidly this season; and, if possible, to completion, so as to render the iron there available.

Mr. William E. Ferguson, of the Cleveland and Toledo road, has been appointed Cheif Engineer of the work, and Mr. William Hall, assistant. Both are gentlemen of experience, and favorably known to the public.

With the ship canal completed at Saut Ste Marie, the facilities will be opened for getting the iron to market. The field is probably the most extensive of any in the United States; the quality of the iron has no superior, and the quantity is inexhaustible. Not many years can elapse before railroad iron will be supplied to the Western States, extensively from this source.—*Cleveland Herald.*

Dissolution of Copartnership.

THE Copartnership heretofore existing between the subscribers under the firm of CHOUTEAU, MERLE & SANFORD, is this day dissolved by its own limitation. Either of the partners will sign the name of the firm in liquidation.

PIERRE CHOUTEAU, JR.,
GUILLAUME MERLE,
JOHN F. A. SANFORD.

New York, May 1, 1852.

N.B. The Iron Department of our business, and the concerns relating thereto, are assumed and will be continued by P. CHOUTEAU, JR., SANFORD & Co., and we ask reference of our friends to the following notice of that firm.

CHOUTEAU, MERLE & SANFORD.

May 7, 1852,

COPARTNERSHIP NOTICE.

The undersigned have this day formed a copartnership, under the firm of P. CHOUTEAU, JR., SANFORD & Co., for the transaction of a General Iron Commission and other business.

P. CHOUTEAU, JR.,
J. F. A. SANFORD,
U. A. MURDOCK.

New York, May 7, 1852.

The Iron Business heretofore conducted by the late firm of Chouteau, Merle & Sanford, is assumed and will be continued by us.

P. CHOUTEAU, JR., SANFORD & CO.

Steam Engines and Tools.

ONE Horizontal Steam Engine, of superior workmanship and material—12 in. cylinder, 3 feet stroke, on heavy bed frame of 4,600 pounds weight, well finished in all respects.

One Steam Engine finished as above—10 in. cylinder, 3 feet stroke.

A sample of the above Engines may be seen at Bogardus' Iron Buildings, corner Centre and Duane sts., and at Platt & Brother's, Maidenlane, N.Y.

Two 6½ feet Planing Machines, of the most approved pattern, strong and heavy, will plane 31 in. wide, and fitted up in the very best manner.

Six 2 feet 4 in. Planers, will plane 12 in. wide, and work with quick motion, well adapted to locomotive tools and engine work.

One 12 foot Lathe 25 inch swing, with counter shaft, etc., complete.

Also, Boiler Punches, Power Shears, Presses, and other Tools, Shafting, Pullies, Hangers, and Machinery of all kinds fitted up in the best style.

Apply to the MATTEAWAN MACHINE CO., Matteawan, Dutchess Co., N. Y.; near the Hudson River Railroad Depot, at Fishkill.

4t21 A. L. ACKERMAN, Agent.

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

UNITED STATES CAR-SPRING COMPANY.

OFFICE 25 CLIFF ST., NEW YORK.

HAVING purchased Fuller's Patent for the United States for manufacturing INDIA RUBBER CAR SPRINGS, and erected an extensive Factory, with the most improved machinery, we are prepared to furnish to Railroad Companies and Car Builders, *Rubber Springs* of as good quality as ever before offered, and at the reduced price of *Fifty cents* per pound for *Cash*.

Only the *best quality* of Rubber is allowed to be used, and the manufacture of our Springs is under the supervision of one of the most experienced Rubber manufacturers in the United States.

We also manufacture all kinds of HOSE, not only for Railroad, but all other purposes, to which it can be applied; PACKING of all qualities and thickness, and BUCKETS of every size, of a superior quality. Terms favorable, and prices such as to offer great inducements to the public.

All orders promptly filled by addressing either the Selling Agent, D. S. DODGE, No. 25 Cliff street, or GEO. T. M. DAVIS, Secretary and General Agent.

DIRECTORS:

Anson G. Phelps, of N. Y. Wm. E. Dodge, of N. Y.
Alfred Kelley, of Ohio, Edmund Burke, of N. H.
Horace H. Day, of N. J. Geo W. Pratt, of N. Y.
David S. Dodge, of New York.

DAVID S. DODGE, President.
GEORGE W. PRATT, Treasurer.
GEO. T. M. DAVIS,
Secretary and General Agent.

New York, May 18th, 1852. 3m

Notice to Bridge Builders.

OFFICE OF CENTRAL OHIO R.R. Co.,
Zanesville, May 14, 1852.

SEALED PROPOSALS will be received at this Office until Monday, June 7th, 1852, for the Superstructure of a Double Track Railroad Bridge, with a foot passenger way attached, across the Muskingum River, at Zanesville. The whole length will be 528½ feet, divided into four spans of 124½ feet each in the clear. The Bridge seat on the abutments will be four and a half feet; and upon the four piers six and a half feet each.

Proposals will also be received for building a Draw or Pivot Bridge of forty-six feet span, in the clear, across the canal at Zanesville.

Bids are solicited for either Iron or Wooden Bridges, and may be made upon plans submitted by builders.

ROBERT MAC LEOD, Chief Eng.

To Mining and Civil Engineers, Surveyors, etc.

A YOUNG MAN, who has been engaged for the last six years with eminent Engineers in Scotland, is desirous of a situation. Has had considerable practice in the working of mines—being a good draughtsman, and in possession of engineering instruments.

Address ENGINEER, care D. H. ARNOT,
1m20* 50 Wall st., New York.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

Railroad Iron.

THE undersigned are now prepared to enter into contracts to deliver Railroad Iron free on board at shipping ports in Great Britain, or at ports in the United States.

P. CHOUTEAU, JR., SANFORD & CO.,
May 17, 1852. No. 51 New st.

To Engineers.

A YOUNG MAN of collegiate education, who is a good Draughtsman, wishes to obtain a Rodman's situation, or some other in which he can acquire a practical knowledge of Engineering.

Address RODMAN, at this office. 2t21

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

ARTIFICIAL LIGHT
FOR RAILROADS.

LANTERNS FOR LOCOMOTIVE ENGINES with argand burners and Reflectors of a true parabola, were introduced by the subscribers in May, 1840, since which time we have supplied the following named Railroad Companies with them, viz:

Androscoggin & Kennebec,	Michigan Central,
Albany and Schenectady,	Mad River and Lake Erie,
Auburn and Syracuse,	Manchester and Law'ce,
Boston and Providence,	Mansfield and Sandusky,
Boston and Worcester,	Macon and Western,
Boston and Lowell,	Nashua and Lowell,
Boston and Maine,	Newburyport,
Buffalo and Rochester,	N. Hampshire Central,
Columbia and Philad.,	N. York and N. Haven,
Columbus and Xenia,	Norfolk County,
Cheshire,	Northern, N. Hampshire,
Connecticut River,	" New York,
Conn and Passumpsic,	Norwich and Worcester,
Cocheco,	N. Orleans & Carrollton,
Cuba,	N. London, Willimantic
Eastern,	and Palmer,
Erie,	Old Colony,
Essex and Manchester,	Port., Saco and Ports'th,
Fitchburg,	Rutland and Burlington,
Fall River,	Richmond and Petersb'g,
Great Falls and Conway,	Saratoga & Washington,
Hartford and New Haven,	Stonington,
Hart., Prov. and Fishkill,	Syracuse and Utica,
Hudson River,	South Reading Branch,
Kennebec and Portland,	Vermont Central,
Lowell and Lawrence,	Vicksburg and Jackson.

In all cases our Lanterns have given satisfaction. The reflectors are made with great care, are heavily plated with pure silver, and every part of the work is strong and substantial.

The reflectors are similar to those used in the United States Lighthouses as now furnished by us. The United States Commissioners for running the North Easterly Boundary line, procured of us a small parabolic reflector with an argand burner of ¾ inch diameter, and Major Graham, in his report to Congress, says the light was distinctly seen thirty miles, and was used in establishing the lines.

Having heard complaints of the artificial lights used for lighting Railroad Passenger cars, we made experiments to obtain a superior light to any then in use. In November, 1847, we introduced a double parabolic reflector to an argand burner, which reflects the rays of light in a direct horizontal line parallel with the sides of the car and over the heads of the passengers, thus avoiding the inconvenience of a concentrated light. These lamps are esteemed the best in use, and are sold at moderate prices.

Samples of our Locomotive and Car Lamps may be seen at Messrs. Bridges & Brothers, 64 Courtlandt street, New York.

HENRY N. HOOPER & CO.,
No. 24 Commercial St. Boston.

May, 1852.

To Contractors.

OHIO AND MISSISSIPPI RAILROAD, EXTENDING FROM CINCINNATI TO ST. LOUIS.

SEALED proposals will be received at the offices of the undersigned in the cities of Cincinnati and St Louis, until the 15th day of June next, for the grading, masonry and bridging, of the following portions of the above road.

First—From Cincinnati, extending 72 miles westerly, to the intersection of the Madison and Indianapolis railroad.

Second—From Illinoistown, opposite St. Louis, extending 50 miles easterly, to a point near the town of Carlyle.

Maps and profiles of the line will be ready for exhibition and all the necessary information will be given at the above offices on and after the 24th inst.

For the remaining 213 miles, proposals will be received from such parties as desire to bid for the work upon their own examinations and such information as the Engineers will be able to give, the character of the country being uniform and preliminary surveys in progress.

Co-partnership firms bidding for the above work will please give the full name and Post-Office address of each member of the firm.

H. C. SEYMOUR & CO.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fitings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALE.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, Jr.,
Chief Engineer.

Steubenville, April 26, 1852.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India-rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

Notice to Contractors.

SEALED proposals will be received at this office until sunset on Monday, the 30th inst., for the graduation and masonry required on 26 miles of the Pittsburgh and Steubenville Railroad, from Campbell's Run to the Virginia Line. Plans and profiles will be exhibited, and the necessary information respecting the work given by the Engineer at his office for five days prior to the letting.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer P. and S. R. R. Co.

Engineer's Office, Pittsburgh,
May 6th, 1852,

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

Ogden & Martin's
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our Cement for public works or other purposes. We warrant the cement equal in every respect to any manufactured in this country. It attains a great degree of hardness, setts immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength.

For sale in tight barrels, well papered, at their office by OGDEN & MARTIN, 104 Wall st.

February 16, 1850. 1y*

The above cement is used in most of the fortifications building by government.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road, side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

—

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad Iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
29 Central Wharf.

Boston, June 1, 1851.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st

FILES.

THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make.

WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms.

RICHARD MAKIN,
April 22, 1852. 65 Broad st., second floor.

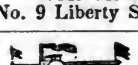
TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch.

WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

1852.  1852.
PEOPLE'S OSWEGO LINE,
New York and Oswego,

ARE prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.
LEWIS & BEARDSLEY, Oswego.
JAMES W. CAMPBELL, New York.

AGENTS.
James W. Campbell, 111 Broad st., New York.
W. H. Clark, 60 Quay st.. Albany.
Lewis & Beardsley, Oswego.
Smith & Hunt, Toledo, Ohio.
C. W. Bissell, Detroit, Mich.
C. Walker & Son, Chicago, Ill.
H. H. Hurlbut, Western States.
May 15, 185

Bowling Tire Bars.

40 Best Flange Bars 5½x2 inches, 11 feet long.
40 " " 5½x2 " 7 feet 8 in. long.
40 " Flat " 6x2 " 11 feet long.
40 " 6x2 " 7 feet 8 in. long.

Now in store and for sale by

RAYMOND & FULLERTON,
45 Cliff street.

BOARDMAN'S PATENT
Steam Boiler and Furnace,

FOR LOCOMOTIVES, STEAMBOATS, AND STATIONARY PURPOSES. It is fully demonstrated that this Boiler effects a saving of 50 per cent of the fuel used by the best flue boilers, and 40 per cent of the amount required by locomotive boilers. Its form and construction insure great strength and durability. It is convenient in use, its flues never clog, and no sparks nor smoke can escape from it.

Pamphlets of certificates will be sent to persons desiring it. Single and territorial rights are sold on reasonable terms. For further information, apply to

H. BOARDMAN, 128 Fulton-st., N. Y.

Railroad Commission Agency,
166 PEARL ST., NEW YORK.

THE subscribers are prepared to furnish Railroad Companies with the most approved patterns of Railroad Iron. Also, Chairs and Spike, Passenger and Freight Cars, Locomotive Engines, and Railroad Track and Depot Scales, at manufacturers prices.

Orders are Solicited.

JOHN STRONG. WM. T. PINKNEY, JR.

REFERENCES:
Simeon Draper, New York; John Bradley, Burlington, Vt.; Duryee, Forsyth & Co., Rochester, N. Y.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD—TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction—India-rubber springs. For sale, to be delivered immediately.

ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Ager

CHILLED RAILROAD WHEELS.—THE UNdersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the ubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St., below 13th,
Philadelphia, Pa.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK. Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

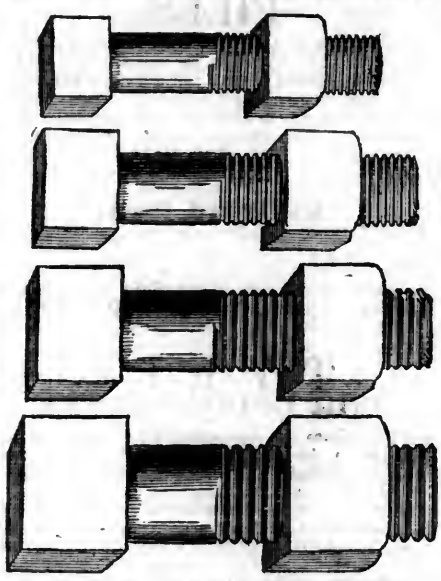
The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc., etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Slide Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

N. A. BARRETT, Agent,
75 State Street, Boston.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JKE, CARMER & CO.,
6m*14 75 Broad st., New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS

HAVE FOR SALE

Plain Garnet Plush.		Fig. Garnet Plush	(Butterfly pat.
" Crimson "		" Crimson "	(Elegant.
" Scarlet "		" " "	(Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold.	These goods can be furnished in any dimensions req'd.
" " Silver.	
Do. Silver ground velvet printed.	

CURLED HAIR

Of every description and quality.

New York, 1850. 1y16

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.

Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York

Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr, Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late SUP't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself.* Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

RAILROAD
India-rubber Springs.

IF any Railroad Company or other party desires it, the NEW ENGLAND CAR SPRING CO. will furnish India-rubber Car Springs made in the form of washers, with metalic plates interposed between the layers, or in any other form in which they can be made; in all cases guaranteeing the right to use the same against any and all other pretended rights or claims whatsoever.

F. M. Ray, 104 Broadway, New York.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 23] SATURDAY, JUNE 5, 1852. [WHOLE No. 842, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Vermont Central Railroad....353
Free Banking Law of Indiana....354
Louisville and Covington Railroad....354
Statistics of the General Post Office....354
Memphis and Charleston Railroad....355
Hudson River Railroad....355
Androscoggin Railroad....356
Ohio and Mississippi Railroad....356
Chester Valley Railroad....360, 356
Covington and Lexington Railroad....357
East Tennessee and Virginia Railroad....357
Ohio County Subscriptions....357
Wilmington and Manchester Railroad....357
Michigan Central Railroad....358, 357
Quebec and Richmond Railroad....358
Pacific Railroad....358
Boston, Concord and Montreal Railroad...359, 358
Hempfield Railroad....358
Ogdensburgh Railroad....359
New Castle and Richmond Railroad....359
Chicago and Rock Island Railroad....359
Railroads in Indiana....359
Marietta and Cincinnati Railroad....359
New Orleans, Jackson and Northern Railroad.359
Influence of Railroads upon the Trade of cities.360
Western Transportation....360
Stock and Money Market....362
Social Influence of Railroads....362
Montgomery and West Point Railroad....362
Penobscot and Kennebec Railroad....363

American Railroad Journal.

Saturday, June 5, 1852.

Vermont Central Railroad.

A meeting of the stockholders of this road, was held on Tuesday, the 24th ult., at Northfield Vt., Gov. Paine presiding. Mr. S. O. Mead of Boston, called up the report of the committe appointed at Cochituate Hall, relative to an investigating committee, and Mr. Charles Torrey, of Boston, made a report which was adopted, recommending the appointment of a committee of three to make a thorough investigation of all the business, property, concerns, debts and credits of the road—examining everything which pertains to it, and report hereafter. The report ended—

Voted. That Wm. Sohier, Wm. Raymond Lee, and Isaac Hinckley, be, and they hereby are, appointed the committee, and in case any vacancies shall at any time or times occur in their number, may be filled by the member or members who then be acting under these votes.

The treasurer in making his report, stated that his connection with the road had been so short, that he should confine himself to a simple statement of the indebtedness and requirements of the company as they appear from the schedules and from estimates made by Mr. Onslow Stearns, who is about to take charge of the road as superintendent, leaving the account of cost, past earnings, and losses, to be explained by the committee of investigation. Two millions of mortgage bonds have been issued, as authorized by the stockholders at their last meeting, which were considered at that time sufficient to meet all the liabilities of the company, which should fall due prior to 1856.

Since that time, demands to the amount of nearly half a million dollars not appearing on the books of the company, and entirely unknown to the directors, have been made by the personal friends of Mr. Quincy; a disastrous fire at Northfield has occasioned the failure of Mr. Quincy to pay his large indebtedness for purchase of stock, the depreciation in the value of the stock of the company still belonging to the road, and the impossibility of realizing many assets immediately, which may ultimately become available, makes a large deficiency, which must be provided for, to prevent the failure of the company. The following are the figures:

Liabilities.

Notes payable		$238,312 40
Bonds due July, 1852	$578,500	
do do do 1856	277,400	
Interest on dividends	28,652 88	
Rent and interest	77,345	
		$961,897 88
All other claims		51,230 00
Estimated to finish road		389,139 00
Josiah Quincy's notes secured by company's bonds as collateral to the amount of $488,200 given for his private debts, for which a dividend may be realized from his assets		220,000 00
Total		$1,900,579 00

Assets.

Cash	$54,142 00	
Due for insurance	20,000 00	
Belknap's securities	82,923 00	
Notes receivable	458,000 00	
Mortgage bonds	34,425 00	
Total		$649,490 00

Leaving $1,311,089 28 to be provided for.

The company have the following items of property which are not now available:—

Grand Junction railroad stock $115,000; Vermont valley railroad stock $13,500; Telegraph stock $6000; Plank road $3000; 3637 shares in Vermont Central railroad.

In this state of affairs the treasurer proposed that the directors be authorized to issue second mortgage bonds to an amount sufficient to pay all the debts of the company, and that the creditors of the company be allowed to exchange their demands for an equal amount of bonds bearing interest at seven per cent, upon such terms as shall be hereafter agreed upon.

Mr. John L. Coffin, of Boston, the accountant appointed to examine the books at Northfield, reported that he had examined the books so far back as 1850, and had discovered nothing wrong. His report was ordered to be printed and distributed.

A resolution was passed to issue new bonds not to exceed one million five hundred thousand dollars to meet contingencies alluded to.

H. H. Hunnewell, G. Howland Shaw, and Wm. H. Gregerson, all of Boston, were chosen trustees of the new bonds.

The corporation holds in its own right and as collateral security for the note of the late treasurer, about 15,000 shares of the stock at the average of $50, which it is proposed to cancel, and thus reduce the capital stock in the sum of $750,000 leaving the issue but 86,000 shares, instead of 100,000, as it now is.

Location of the Eastern Railroad in Chelsea.

The plans of the location of the Eastern railroad in Chelsea, were last week filed with the commissioners for the county of suffolk. The line commences on the present tracks in the vicinity of the Chelsea Beach road crossing, and passing easterly of the Spice mills on the Cary estate, goes through that section of this estate which is between the arm of the sea and the Eastern avenue, thence over the Eastern avenue, through another section of the same estate, to intersect the Grand Junction railroad, upon the same estate, northerly of Mount Bellingham, and where the latter railroad passes under the Salem turnpike; whence it continues along the route of the Grand Junction, through another portion of the same estate, in a direction so as to enter Boston upon or at the west of the Maine railroad and its depot in this city. The distance of the Eastern railroad thus located through the Cary property, is about a mile, or a mile and a quarter.

Free Banking in Indiana.

The bill authorizing free banking in Indiana, which recently passed the lower House in the Indiana Legislature has passed the Senate and become a law. Bank issues are to be secured by Government, and Indiana, New York, Kentucky, and Pennsylvania stocks, with a specie basis in addition of 12½ per cent.

The following abstract of the Law we find in the State Journal, Indianapolis:

The first four sections authorize the state Auditor to furnish sufficient blank bank notes, with his countersign, and of the usual denominations from one to five hundred dollars, to associations wishing to do business under this act; such banking association may, however, furnish their own plates, dies, etc., all of which are to be kept in the Auditor's custody; and the third section has a provision that any such bank shall not pay out nor receive notes less than five dollars, issued by banks out of the state; nor shall it issue bills less than five dollars to an amount exceeding one-fourth of its whole issue. The 5th section provides that when such bank shall transfer to the Auditor any portion of certain stocks which shall form its basis, said bank shall receive from the Auditor an equal amount of the abovenamed countersigned and registered bank notes for circulation. Section 6th defines the stock for such basis to be any United States indebtedness, or Indiana, as pay interest semi-annually or oftener, and except as to that of Indiana, the same shall produce at the rate of six per cent, per annum, and that of Indiana five per cent.; nor shall the Auditor take any such stock at a rate above its par nor market value. By section 7, such bank (after signing and executing such blank notes as to make them obligatory promissory notes payable on demand at its place of business in the state,) is authorized to loan and circulate the same as money, according to the usual rules of banking. Section 8th prescribes the manner of protesting notes of such bank as shall fail to redeem its notes in United States money when demanded during business hours; and authorizes the auditor in such case to redeem all notes of said bank out of stocks held in trust by him. Section 9th authorizes the Auditor to give such banks powers of attorney to receive interest or dividends on stock transferred to him in trust, to be applied to their own use—revoking such powers when their notes are failed to be redeemed, or when the principal of such stocks becomes an insufficient security. By section 10, all such bank notes must bear on their face, "Secured by the pledge of public stocks." Section 11 gives further remedy on failure to redeem bank notes on demand. Section 12 exempts the state from liabily to pay any such bank bills, beyond the proper application of securities pledged with the Auditor for their redemption. It also limits the bank to a certain place for carrying on its business—where its bills are made payable. Section 14 allows the Auditor to draw on the treasury for the expense of printing the blank notes, and to charge and receive from the banks receiving such notes an amount sufficient to reimburse the treasury, the amount to be just and reasonable. Section 15 provides for destroying plates, etc., of broken banks. By section 17 any number of persons may associate to establish a bank under the provisioas of this act; but the aggregate of their capital stock shall not be less than $50,000; and section 22 gives them the power to increase their capital and the number of their associates from time to time. Section 18 requires a certificate to be filled by su h bank, designating its name etc. Section 20 embraces the various powers of such banks, of discounting, receiving deposits, buying and selling gold, etc., of loaning money on personal security at a rate not over six per cent per annum, (which they may discount and take in advance of the sum loaned.) The shares are deemed personal property and are transferable, etc. Every shareholder, by section 25th, shall be liable in his individual capacity for any contract of such bank, to an amount over and above his stock equal to the amount of his shares of such stock. Section 26 authorizes such bank to hold, purchase, and convey real estate for its use in transacting business; or such as shall be mortgaged to it in security for moneys due it; or conveyed to it in satisfaction of debts previously contracted in the course of its dealings; or such as it shall purchase at sales, under judgments, decress, or mortgages held by such bank. Section 27 provides for a semi-annual newspaper publication of a full statement of the affairs of the association, under oath of the president and cashier, each item of which is specified in the section mentioned. Section 28 defines the penalty for violation of the preceding section. By section 30 a list of the shareholders of such bank shall be filed in the clerk's office, in the county in which the bank is situated, and also in the State Auditor's office semi-annually. By section 31, no bill of less denomination than $500 will be made payable elsewhere than at the bank's usual place of business. Section 33 provides for 12½ per cent in specie to be kept on hand, on the amount of the bills in circulation. Section 34 makes the act in orce from and after the 1st of June.

Louisville and Covington Railroad.

We have received a copy of the survey of this proposed road from Louisville to Covington, following what is termed the river, or shore route.—The survey was made by E. F. Lee, Esq. The following is a summary of the estimated cost of the road:

	1st division. 46 miles.	2d division. 21 miles.	3d division. 28 miles.
Bridges and culverts.	$102,000	$15,000	$102,200
Land, damages, and fencing	32,200	16,800	19,600
Grubbing and clear'g	2,900	1,050	2,240
Earth work at 20c	348,749	103,622	351,988
Rock at 50c	61,513	8,612	69,429
Tunnels at $30 per foot	72,000	....	39,000
	$619,452	$145,284	$584,454
Total	$1,349,190; per mile,		$14,202.
Superstructure—iron, 110 tons per mile, at $45; timber, 140,000 feet, at $12; bolts and spikes, 12,600 pounds, at 6c; hauling, laying, and gravel, $1,300			8,686
Cost per mile			22,888
Total for 95 miles			2,174,360
Add for 5 miles of sidings, at $9,000			45,000
Depots, stations, and shops			150,000
Engines and cars			300,000
Engineering, agencies, etc			50,000
			2,719,360
Discount and interest, 10 per cent			271,936
Cost of the road, complete and in operation			$2,991,296

By the route followed. the maximum grade is 58 feet to the mile. The report states, however, that all tunnelling, and 32 miles of 58 feet grade, may be avoided, by an increase of line of a little over 3 miles.

After stating the connections which the road will make, and the probable income from these sources, the report goes on to say:

But, after all, this road will depend for its chief support on taking a share, and not the lion's share either, of the present existing and rapidly increasing business of the Ohio river.

The value of this business may be approximatively estimated from a report made to the Treasury Department, which states that, in the year 1851, the number of steamboats owned and enrolled in Pittsburg, Wheeling, Cincinnati, and Louisville, was 330, having an aggregate tonnage of 64,297 tons, of which 24,985 tons belonged to Cincinnati, and 15,180 to Louisville. The insurance on the boats and cargoes amounted to $32,811,440—in Cincinnati $17,038,439, and in Louisville $10,185,855.—The losses amounted to $437,434, or one and a third per cent.

In the course of the year, 42 of these boats, or about 13 per cent., were destroyed, and in these several disasters 482 lives were lost.

The total number of passengers to and from the four cities named above, chiefly carried on these steamers was, for the year, 3,050,026. (During the same year about 2,000,000 passengers were carried on the New Jersey railroad, without the loss of a single life.)

Now if we suppose one-quarter, or 762,500, of these passengers to have travelled between Louisville and Cincinnati, and that one-half of this number would prefer the railroad, we shall have for the passage traffic 381,250, and if we add a proper per centage for equivalent way traffic proportional to the local population of 250,000 persons who will use this road in their mutual intercourse, the total number may be stated at 400,000 through passengers, which at $2 would produce an income of $800,000

The income from the mail and expresses will be	30,000
And if we estimate for freights only	170,000
The total income of the road will be the round sum of	$1,000,000

The amount, which is a minimum, after deducting one-half for expenses, and reserving $140,000 would pay a dividend of 10 per cent on $1,000,000 of stock and 8 per cent on $2,000,000 of bonds, at which rate of interest they could be readily sold at a premium. The Little Miami road paid last year 10 per cent dividend, and there was reserved out of the surplus profits $134,121. The annual increase of net earnings was over 33 per cent.

The item of receipts from freight will prove to be much below a true estimate, as it is evident that if properly constructed this road must be a great freight road as well as a great passenger road.

It will always of course take the light merchandize of great value, but during the seasons of low water and ice in the Ohio river, averaging three or four months in the year, when freights are either very high or the navigation is suspended altogether, much of the heavier merchandize which cannot wait will also go by the railroad.

An incidental advantage which this railroad will possess on account of the location should be well considered. Whenever 28 miles from Covington to Sugar Creek are completed, saving 60 miles of river distance, or 46 miles from Louisville to Carrollton, saving 62 miles of river distance, the regular lines of passenger boats will be compelled by the wants of the public to connect with the road, and it will then begin to pay.

The General Post Office.

An official statement of the business of the General Post Office, has been published at Washington. The whole amount of postage received at several of the principal cities during the fiscal year is given. In New York it amounted to over half a million dollars; in Philadelphia to $197,019 08; Boston $176,756 63; New Orleans $117,886 85. These are the only places where the sum reached a hundred thousand dollars. The number of dead letters received during the year, is estimated at 2,750,000. Of these letters, 6458 contained money to the amount of $40,336 73. There were delivered of those containing money 5347, and $36,090 61—and there remain unclaimed 1106 letters, containing about $4,246 12. Other letters contained papers of value, such as bonds, notes of hand, drafts, bills of exchange, checks, certificates, etc. The value of these is estimated at $1,292,125. A large portion had been delivered to claimants. The whole number of letters that have passed through the Post Office during the year, exclusive of California, foreign and dead letters, is put down at 71,185,285.—The number of paid letters is estimated at 19,207,471, unpaid 50,707,726. The number of foreign letters is computed at 3,909,186; California letters 1,323,667. Amount due on dead letters $165,125. Newspapers 82,695,872. Free printed matter 3,460,050. Exchange papers, documents forwarded by Governors, etc., 5,000,000.

The following table shows the amounts actually credited for the transportation of mails, by State and differs slightly from the amounts actually pa It also shows the amounts by postage collecte the several States;

	Transportation.	Postages collected.
Maine	$47,690 25	$161,891 57
New Hampshire	27,662 00	100,784 21
Vermont	48,643 93	103,700 63
Massachusetts	132,164 84	540,686 65
Connecticut	62,176 19	177,592 38
Rhode Island	12,088 20	59,220 44
New York	321,251 60	1,351,373 63
New Jersey	56,813 37	106,049 71
Maryland	143,150 97	174,290 72
Delaware	8,717 85	20,503 45
Pennsylvania	146,105 64	595,070 86
Virginia	169,425 21	244,229 13
North Carolina	154,126 10	84,288 34
South Carolina	107,281 74	113,918 30
Georgia	144,262 86	170,054 59
Florida	31,701 55	23.831 58
Alabama	139,349 30	133,391 63
Mississippi	81,189 93	99,388 23
Tennessee	74,142 59	115,441 97
Missouri	101,303 23	138,623 31
Arkansas	61,244 90	32,528 72
Iowa	24,850 05	48,787 90
Louisiana	66,546 80	165,802 16
Texas	107,977 20	50,162 35
Minnesota	1,192 89	3,550 36
Kentucky	87 121 70	148,404 67
Indiana	76,225 92	154,269 77
Illinois	156,685 71	209,063 20
Ohio	138,543 88	485,758 78
Michigan	36,720 22	116,799 50
Wisconsin	34,434 77	102.540 74
California	111,515 87	302,247 33
Oregon	9.875 80	6,847 95
New Mexico	350 00	441 03
Utah	.....	1,171 48
Nebraska	.....	42 96
District of Columbia	.....	42,039 86
N. York to Bremen	166,416 68	.....
New York to Havre	73,550 00	.....
Bremen postage	.....	19,308 76
Miscellaneous countries	.....	274 25
Charleston to Havana	50,000 00	19,308 76
Across the Isthmus of Panama, under treaty with New Grenada	45,318 86	
		$6,404,373 65

Memphis and Charleston Railroad.

We clip the following from the Tuscumbia North Alabamian of the 9th May:

"The iron for relaying the Tennessee valley road from this place to Decatur, is arriving at the Tuscumbia landing, and we learn that the contractors for furnishing the cross ties, have them all, or nearly all, ready. After the first of June, when the M. and C. company take possession, the work of reconstruction may be expected to progress rapidly. In addition to preparations for the re-construction of the old road, we learn that operations have been commenced west of Tuscumbia, the contractor for the bridge over Spring creek, or the western line of the corporation, being actively engaged in blasting stones for the abutments and preparing the foundation.

Anthracite for Naval Steamers.

The engineer-in-chief of the navy, (Mr. Stewart) has made a report to the navy department, in which he recommends the use of anthracite coal for naval steamers fitted with iron boilers, as being more economical, and entirely free from smoke and accident by spontaneous combustion. His conclusions are founded upon actual experiments in our war steamers; and he intends, with the permission of the department, to continue these experiments, to see whether anthracite may not be used advantageously under copper boilers, bituminous coal being generally considered less injurious to such boilers, and therefore used in the service in preference. He further recommends to the bureau of yards and docks the use of anthracite in the several navy-yards, and especially for the engines of the dry-dock at the New York navy-yard. This recommendation is important to the interests of Pennsylvania, and the day is probably not far distant when anthracite will be used exclusively for purposes of locomotion in our steamers and upon our railroads. An interesting experiment is now being made with anthracite upon the Reading railroad, on a locomotive which has been built, especially adapted to the use of that kind of coal.

Hudson River Railroad.

Balance sheet of the books of the Hudson River railroad company, April 1, 1852:

Dr.		
Cash on hand		$85,489 27
Due from United States for mail service		8,100 00
Forfeited stock, 79 shares at par		7,900 00
Advances for purchase of property on College Place, Chambers and Warren streets		84,342 90
Cost of steamboat Essex, for Albany ferry		6,797 59
Advances for purchase of lots on Albany pier	13,790 00	
Do. to disbursing agents and on account of unsettled claims	11,376 79	
Instalments due on stock subscriptions, but which will be mostly or wholly offset by unsettled claims for lands	16,260 00	
		41,426 79
Construction and equipment accounts		10,111,748 68
		$10,345,805 23
Cr.		
Capital stock:		
Original subscription	$3,016,500 00	
Issued since, for payment of interest on stock	707,674 85	
Do. in payment otherwise	15,800 00	
		3,739,974 85
Bonds, under first mortgage, payable 1869-70		4,000,000 00
Do. second do. do., Dec., 1860		2,000,000 00
Bonds issued in payment for land and otherwise due, from 1852 to 1859		45,689 08
Bills payable:		
Acceptances of the company in payment for grading materials, and other demands falling due from April to Dec., 1852		454,961 57
Due on unadjusted claims		17,863 07
Amount retained therefrom, towards meeting payments of interests on bonds, payable 16th June and 1st August next, being the amount of interest accrued to this date, on $6,000,000, since last semi-annual payments		87,316 66
		$10,345,805 23

Particulars of Construction and Equipment Account.

FOR LAND AND ROADWAY.		
City and county of New York	$101,967 81	
County of Westchester	196,713 22	
" Putnam	20,226 13	
" Dutchess	203,004 94	
" Columbia	134,253 24	
" Rensselaer	86,804 15	
Agents, commissioners, legal services, etc	69,184 13	
		812,119 62
FOR CONSTRUCTION.		
Grading and fencing	4,604,449 99	
Bridges and piling	222,896 29	
Iron rails	1,249,834 39	
Cross ties, chairs, spikes and laying track	569,069 72	
Engineering, salaries and expenses	260,217 27	
		6,906,417 66
For lands for stations and buildings, and contingent charges on the same		428,925 88
FOR EQUIPMENT.		
33 locomotive engines	239,635 80	
66 passenger, and 14 baggage and express cars	148,666 14	
415 freight cars, and six sprinklers	273,355 62	
103 gravel, and 33 hand-cars	25,272 26	
Machinery in workshops	24,407 17	
Patent rights for machinery	2,250 00	
		713,586 99
Salaries of officers and office rents	71,001 45	
Contingent expenses	24,220 51	
		95,221 96
Total of ordinary expenditures		$8,956,302 06
EXTRAORDINARY CHARGES ON CONSTRUCTION.		
Interest paid to stockholders	741,130 19	
Agencies and expenses negotiating bonds for $6,000,000, and discount on sales of 2d mortgage bonds	196,307 85	
Discount on $110,000 1st mortgage bonds issued bearing 6 per cent int.	9,166 68	
Interest on bonds, and otherwise, during construction—less net earnings, till 1st October last	214.841 90	
		1,155,446 62
Amount per balance sheet		$10,111,748 68

COST OF ROAD AND EQUIPMENT.

	As per Report dated Oct. 1, 1850.	Oct. 1, 1851.
For graduation and masonry	3,127,630 08	4,249,990 91
Bridges	121,279 73	174,345 11
Superstructure, including iron	1,336,445 51	1,777,524 66
Passenger and freight stations, buildings, and fixtures; Engine & car houses, machine shops, machinery and fixtures	349,804 99	444,433 45
Land, land damages and fences	572,241 80	796,216 50
Locomotives & fixtures, and snow plows	107,525 57	163,926 06
Passenger and baggage cars	103,921 96	146,651 14
Freight and other cars	67,775 05	77,811 09
Engineering & agencies	289,064 05	416,021 34
Interest on stock and account and all other expenditures not enumerated above	691,012 81	1,058,630 83
Total	$6,666,681 55	9,305,551 09

We publish the above for convenience of reference.

The admitted liabilities of the company for the present year are as follows:

Acceptances of the company falling due prior to December 1, 1852	454,961 57
Due on unadjusted claims	17,863 07
Interest on funded debt (6,045,689 08) payable June and August and December and February	423,198 23
Interest on new loan	70,000 00
Admitted liabilities, all of which excepting $70,000 will fall due on or before February 1, 1853	966,022 87
To meet this sum the company have on hand	85,489 27
Leaving to be provided for	$880,533 60

To the above amount a very large sum should undoubtedly be added for increase of construction

account. This account on the first day of October last, the date of the opening of the road, was stated by the company at $9,305,551 09. Increase in six months, $1,040,254 14. We know of no reason why the construction account, independent of the double track, should not increase as rapidly for the next six, as the past six months.

Maine.

Androscoggin Railroad.—We learn from the president of this company that such arrangements have been made with capitalists in New York, as will ensure the early completion of the line to Livermore Falls. Contracts have been closed for the purchase of an engine of sixteen tons weight, to be in readiness to run by the middle of August. It is to be manufactured by the Amoskeag company. A contract has also been closed with the same concern for another engine, to be in readiness shortly after the first one is placed upon the road. The cars which are to be furnished by Messrs Davenport and Bridges, of Cambridgeport, Mass., are to be of beautiful style and finish, to be in readiness as soon as the road is in running order. The contracts for engines and cars have been made on very favorable terms. It is the design of the directors to have the rails laid forthwith, so that before the cold weather commences, everything connected with the road may be in a state bordering on completion, if not fully up to the mark.—Nearly the whole line is in readiness to commence the work of laying the rails and gravelling, and contracts for the work have already been closed.

Much credit is due the board of directors for their unflinching perseverance in overcoming the one predominant and almost insuperable obstacle in the way of the completion of this road—*want of funds.* But the impediment is at last removed, and the horse with brazen lungs and nerves of steel may soon be expected to be heard in the valley of Androscoggin. The cost of the road when completed and in running condition, with station houses, wood houses, first class engines, cars, and other furniture will not exceed thirteen thousand dollars per mile, rendering it one of the cheapest roads that has ever been built in the country, and commanding as it must the entire business of the greater portion of Franklin county, together with much from Oxford and Somerset, it cannot fail to pay a handsome dividend upon its cost.—*Lewiston Falls Journal of the 29th.*

Ohio and Mississippi Railroad.

The time has come, when we are about to commence the great road to St. Louis, in earnest. An advertisement will be found in our columns for the sub-letting of about 170 miles. At this end the grading bridging &c., will be let to the junction with the Madison and Indianapolis railway, some 65 miles. This will connect the city with a large part of Indiana, by means of the Madison road. It is the intention of the company to proceed as quickly as possible to the intersection with the Jeffersonville and Indianapolis railway, by means of which a railway connection with Louisville will be made.

We understand an arrangement has been made with the White Water canal company, and with the proprietors of property on the line, by which all local difficulties are obviated. The contractors are men of character, with ample means, and the lettings will afford a favorable opportunity for those who are seeking employment of that nature.

We learn that two or three latteral lines of railway in Kentucky and Indiana are about to be commenced, which will afford immense aid to this work, and open new avenues of trade to the city. Of these, however, we will speak hereafter. In the meanwhile, the company, and especially this city, may be congratulated on the prospect of the speedy completion of the Trunk railway from Cincinnati to St. Louis, to be followed by results important to the prosperity of this community. When we reflect that the entire states of Indiana and Illinois may be traversed by a train of cars in *fourteen hours*, and contrast that with the present laborious mode of reaching our customers in these great states, we shall see that this work is one of no common interest to the business, growth, and stability of this city.—*Cincinnati Gazette.*

Pennsylvania.

Exhibit of the Chester Valley Railroad.—The Chester Valley railroad extends from its intersection with the Philadelphia and Norristown and the Reading railroads, at Norristown [17 miles from Philadelphia,] through the "*great valley*" of Chester county, 22 miles to Downingtown, on the Columbia railroad, a distance of 37 miles from Philadelphia.

This road was commenced in 1837, and *eight hundred thousand dollars* actually expended on its construction, under the name of the "Norristown and Valley railroad," but not having means enough to complete it, the monetary crisis of that year compelled its friends to stop the work, and in that situation the time allowed by the charter for its completion expired. In 1850, the Chester Valley railroad company was chartered, providing for the consolidation of the debts and stocks of the old company, in such proportions that what actually cost more than $800,000, without the addition of interest, is now represented by a stock of $600,000, free from all incumbrances.

Such is the confidence of the stockholders in the earnings of the road, that they have obtained from the Legislature the authority to issue $500,000 of twenty years, seven per cent mortgage bonds, which are convertible at any time into an *eight per cent. preferred stock*; which stock is *perpetually* entitled to an eight per cent. dividend before the other stock shall receive any.

To secure the payment of the bonds and the interest thereon, the corporation have issued a mortgage of all their rights, property and franchises, acquired and to be acquired, to Shepherd Knapp, Alfred C. Frazer, and Daniel S. Miller, of the city of New York, Trustees, with all the usual and proper guarantees that the avails of the bonds shall be expended in the completion of the road. The interest is payable semi-annually, and the principal at maturity, in the city of New York. As a further guarantee that the bonds will be used for the completion of the road, and for that purpose only, the corporation have contracted with Messrs. Strong and Bradley, of Vermont, for the entire completion of said road, ready for the running of the cars, by the first day of December next, payable in the above bonds, only so fast as the work shall progress and the materials shall be purchased. The contractors have entered on the vigorous prosecution of their work. They have purchased the iron rails, chairs, spikes, and ties; and having a large force of men on every unfinished portion of the road, there is no doubt from the character of the work to be done, that it will be completed within the specified time.

It will be seen from the annexed certificate of Messrs. Wm. A. Porter and Wm. Rawle, that the corporation have the requisite authority to issue the bonds and to make the mortgage, and that in so doing they have complied with the laws of Pennsylvania; and from the certificates of the proper officers of record, that there is no previous incumbrance or lien upon the road, excepting some unsettled land damages, amounting to less than five thousand dollars, the money for which is already deposited, and will be paid as soon as the final award shall be made.

That the Chester Valley railroad is not only to be a good security for the bonds to be issued, but is to be a good investment for the stockholders, a careful investigation of its merits will satisfy every candid person. It most fully and perfectly accommodates the richest part of Montgomery county, and the largest part of Chester county, [one of the richest and most productive mineral and agricultural regions of Pennsylvania] with marketing facilities, and will in effect make that beautiful valley one entire market garden for the 400,000 inhabitants of Philadelphia. Chester county contains a population of 60,000; an area of 486,000 acres, with an assessed value of $22,000,000; or nearly an average of $50 per acre, and $360 for each soul, for the entire county. The average value of the lands on the line of the road is not less than $100 an acre.

Its mineral resources are scarcely second to its agricultural wealth. The route of the road abounds in quarries of marble and limestone, and in beds of iron ore. Much of the marble used in the construction of the Girard college, United States bank, and other public buildings of the city, was quarried on the line of this road; and it is believed that the completion of the road will greatly increase the demand for these marbles for architectural purposes, as it will make them the cheapest as they are now admitted to be the best and most beautiful of building stone. A large quantity of anthracite coal is now consumed along the line of this road, and upon the Columbia road, and in the valley of Brandywine, for manufacturing purposes, burning lime, and domestic use, which is now either hauled in wagons across from Schuylkill valley, or brought around by the Reading and Columbia railroad, through the city of Philadelphia, an additional distance of 35 miles. This article must immediately on its completion pass over the Chester valley railroad at much reduced charges, and in greatly increased quantities; and it is estimated that it will amount in the first year to one hundred thousand tons.

In addition to all the local business of the route, the road must become an important avenue for the immense business which is to pass over the "Pennsylvania Central," and the "Sunbury and Erie" railroad; the former running through Pittsburg and Wheeling, and extending onward, by various routes to Cincinnati and St. Louis: and the other striking Lake Erie at the town of Erie, at a less distance from New York city than by way of the Erie railroad.

Although the Central road is yet incomplete, such was the press of business upon it during the present spring, that the company was compelled to refuse a large amount of freight offering. When all its connexions shall be completed, the freight and travel west will be fully equal to the capacity both of the Columbia and Chester Valley roads. The *Chester Valley*, in connection with the Philadelphia and Norristown and the Reading roads, will become much the most convenient entrance into and outlet from the city, as over these roads the locomotive runs to the Deleware river and to the Camden and Amboy railroad.

The importance of having two outlets from the city for the enormous western trade, to avoid the confusion and interruption resulting from too great an accumulation of freight and passengers at one depot, will be readily understood. It was for this reason that the Legislature reserved in the charter the right to purchase the road (the Columbia road being a State work) upon the payment of the cost of the road, with eight per cent interest upon such sum.

The amount of freight and travel to and from the west will be vastly increased by the construction of the Sunbury and Erie railroad. To all this business the Chester Valley road must form the proper outlet, as it has a more convenient entrance into the city, and the river route from Downingtown to Philadelphia follows the *natural* route for a railroad, and avoids the heavy grades which have proved such serious obstacles to the business of the Columbia railroad. Another very important fact in favor of the Chester Valley railroad is, that over this, merchandise from New York and the north sent to Philadelphia to be transported over the Central road, can be forwarded without the cost and inconvenience of drayage through the city. The Pennsylvania Central road must be very extensively used by the city of New York as one of its avenues to the west, as it will be the shortest, and consequently the cheapest. The Chester Valley railroad will offer just the facilities necessary for this trade.

A very careful estimate made by those most acquainted with the local business of Chester valley, and which is believed to be perfectly reliable, makes an aggregate annual income of..... $120,580
Deduct 40 per cent of above for expenses. 48,230

Leaves a net income of..... 72,350
7 per cent interest on bonds ($500,000)... 35,000

Leaving 37,350
Which is sufficient to pay 6 per cent dividends upon the capital stock ($600,000.)

This estimate is based upon the local business alone. When to it is added a proper proportion of the stream of western traffic—already immense, and augmenting daily—this road gives assurance to the stockholders of large dividends.

By reference to sections 3 and 4, copied here-

with, of the Act of the Legislature, passed February 24th, 1852, full authority is given to issue these bonds and to make them convertible into the eight per cent preferred stock, and to create a mortgage to secure them; so that the security in all respects is legal, as will be seen by reference to the opinion of Messrs. Wm. A. Porter and Wm. Rawle, well known lawyers of Philadelphia.

By reference to the previous statement, it will appear that a property costing $1,100,000, is mortgaged for $500,000, and that the estimated net earnings are put at $72,350, an amount largely exceeding the 7 per cent interest on the bonds agreed to be issued. WM. E. MORRIS, President.

Philadelphia, May 20, 1852.

Covington and Lexington Railroads.

These two roads have recently come to a mutual understanding. The work on each is now to be vigorously prosecuted with the intention of having everything complete and ready for use within a year from next November. A contract has already been closed for a large amount of iron rail, partly American and partly English, the latter to be delivered in New Orleans some weeks hence. If an arrangement can be satisfactorily made with the Louisville and Lexington roads it is the intention to transport the English iron to Lexington via railroad, and commence laying the same at the Lexington end at the same time they shall commence laying the iron on the Paris end. The President of each company is now engaged in securing the right of way for the whole extent of both lines. For the purpose of avoiding collisions and accidents, the cars of both companies will run upon the same track in going in one direction, and upon the other track in travelling the opposite direction.—This is an admirable arrangement, being equivalent to a railroad with a double track. It is believed that the business between Lexington and Paris will require a double track, in view of the divergence of the two roads at the latter point.

East Tennessee and Virginia Railroad.

Contracts were concluded on the 8th of May for the erection of four bridges on the line of this road upon terms favorable to the company.

The contractors are Mr. Thomas Fossick of Lynchburg, Va., for the lower Holstein; Mr. Martin of Va., for Lick Creek; and Mr. Bibb of Lynchburg Va., for Watuga and the upper Holstein.

Four miles of the contracts on the eastern end of the line surrendered by the original contractors, have been re-let to a gentleman who will soon place one hundred well equipped hands upon the work.

Mr. Fergusson, who is on the line below New Market, is driving on his work most energetically and successfully. In a few weeks more he will be at New Market. His force is now increased to from 150 to 200 hands.

Another engineer is to be placed on the road with a view to greater expedition in the work. It is confidently expressed by the board, that with the State bonds, no further interruption will take place until one or both of the connecting lines shall be finished, when they can commence laying down the iron and hasten the work to completion. A belief is also expressed that two-fifths of all the iron required in the superstructure, including the duty on the same, can be secured from English capitalists when they are ready to close contract, which if realized will prove of great advantage to the company.

The financial condition of the company is sound, and it is claimed that there is no road which presents a safer or more lucrative investment to the stockholder.

Ohio County Subscriptions.

The question of the validity of the county subscriptions, made after the new Constitution went into effect, is attracting considerable attention in Ohio. The clauses in the Constitution bearing upon this point, are as follows:

"The General Assembly shall never authorize any county, city, town or township, by vote of its citizens, or otherwise, to become a stockholder in any joint stock company, corporation, or association whatever, or to raise money for, or loan its credit to, or in aid of, any such company, corporation, or association."

"All Laws of this State, in force on the first day of September, one thousand eight hundred and fifty-one, *not inconsistent* with this Constitution, shall continue in force, until amended or repealed."

The first clause is evidently intended to be prospective in operation, as it applies to the *future* action of the Legislature.

If the subscriptions referred to are void, they are so under the second clause voted.

There are several reasons urged in favor of the validity of these subscriptions which appear very plausible. In the first place, it is admitted that the new Constitution does not repeal charters. And in many cases, such for instance as in the charter of the Ohio Central railroad, the right to subscribe to the stock of the company by counties is *made a part of the charter*. Clearly a *portion* of a charter cannot be repealed without a repeal of the whole.

Again the new Constitution provides, that "the General Assembly shall pass no special act conferring corporate powers." On the 8th day of February, 1847, the General Assembly passed an act to incorporate the Ohio Central railroad company.—This was "a special act conferring corporate powers." No one supposes the charter of the Ohio Central railroad company to have been repealed by the new Constitution. This law, authorizing Muskingum to subscribe to the stock of the road is a part of the charter, and *no more repealable than the rest of the charter.*

For these reasons we think that the clause respecting all laws inconsistent with the new Constitution, refers only to general laws, which were necessarily superceded by that instrument as a matter of course, and not to special or particular acts the repeal of which would work a private or personal injury. A great many acts or laws of this nature had been previously passed by the Legislature, and which still remain in force, though they are in direct conflict with the letter and spirit of the new Constitution.

Notwithstanding the above appears to us to be the correct view of the matter, we would suggest to our Ohio friends the expediency of having this matter precisely settled before affirming their securities. Such decision, if favorable, would enable them to realize a much higher price for their bonds. If adverse, it will save them from all the consequences of a false step.

North Carolina.

Wilmington and Manchester Railroad.—The work on this road is progressing at about the rate of a quarter of a mile per day. The trains are now running regularly to McIntosh or Lynchburgh station, on the Sumpter side of Lynch's creek.

The receipts at Maysville for freight and for travel going down the last month, amount to about $190.

The road will probably be completed to the Great Pee Dee, by the first of January next. Operations on the bridge over that river have been commenced, and the structure will be completed so as not to delay the work on the entire line.

Sandusky, Ohio.

A friend writing from this place gives us the following notice of the business prospects of that city:

Sandusky is going ahead firmly, her two old railroads are taxed to their utmost capacity to do the freight business that has opened on them with the season of navigation. The work of re-laying the road from Sandusky to Springfield and Dayton, is nearly complete, and the month of September will give us 34 miles of the Sandusky and Indiana road, as far as Tiffin. Mr. Durbin, has just returned from a survey of the remaining portion of the line, from Tiffin to the Indiana line, and Fort Wayne. This road runs through a heavy timbered and highly productive country, almost a dead level, and will prove a "great freight road," the kind of road, by the way, that we of the Bay city want. This new track from Sandusky to Tiffin, is almost an air-line, and what is rather remarkable, it passes six fine flouring mills, all turned by water from underground streams or springs, and all lying close alongside, or very near the rail. These mills are at Venice, Castalia, Rockwell Springs, and Green Springs.

Our Junction railroad is under contract, and constructing from Cleveland to Sandusky, and the iron bought for the whole road.

The line extending along the lake shore, from Cleveland to the Maumee river, about 100 miles, is in the hands of Judge Lane of Sandusky, formerly Chief Justice of Ohio, who with the directors at Cleveland, Elyria, and Maumee city, have sold a very large amount of bonds for cash, and are confident of opening the road from Cleveland to Sandusky, by the 1st of January 1853.

Michigan Central Railroad--Two Trains a Day.

The Michigan Central railroad having been completed, hereafter two trains a day will be run between this city and Detroit—the first at half past eight o'clock in the morning, and the second at nine o'clock in the evening. The morning train will connect at Detroit with the steamers Key Stone State and Niagara, running to Dunkirk, where passengers will arrive in time for the cars for New York, thirty hours after leaving here. It will also connect at Detroit with the steamers Forrest City and Cleveland for the city of Cleveland, where passengers will arrive eight hours after leaving Detroit.

The evening train will connect at Detroit, with the North Shore line of steamers—the Mayflower, Ocean and Atlantic, all magnificent floating palaces—running to Buffalo in time for the five o'clock Express train to New York and Boston. By this train, passengers will reach Buffalo in thirty, New York in forty-eight, and Boston in fifty hours, after leaving Chicago.

At Detroit, passengers for Sandusky, will take the steamer Arrow, which runs through in six hours.

The Superintendent, Mr. Brooks has arranged the trains and prepared the accommodations on the cars, so as to avoid any delays, and, for the convenience and comfort of travellers. The road is in first rate condition, and the public may be assured the company will not fail in any of its engagements, where human foresight can control them.—*Chicago Tribune.*

Railroad from Toledo to Goshen.

John B. Jervis, Esq., Chief Engineer of the Northern Indiana railroad writes to the Toledo Republican, "that arrangements are in progress, and a party of engineers will commence the surveys for the line of the Northern Indiana and Ohio railroad in a few days. The design will be, first, to survey the most direct line from Toledo to West Unity, in Williams county, and thence to Goshen, Indiana. Also with a view to a line down the Wabash."

Canada.

Quebec and Richmond Railroad.—It is stated in the Quebec papers that Messrs. Jackson, Thompson, Peto, Brassey, and Betts, English capitalists, will undertake, after an examination, by their engineer of the country and places of the projected line of railway from Quebec to Richmond, and on the approval of their estimate and tender by the company and Provincial Government, to execute bonds to the extent of £500,000 sterling and receive in payment thereof.

£75,000 in the shares or stock of the company.
£250,000 company's bonds, guaranteed by the government of Canada, and bearing interest payable half yearly in London, at 6 per cent.
£150,000 company's debentures bearing interest at 6 per cent., payable in London half yearly.
£50,000 bonds to be issued by the corporation of the city of Quebec, payable in London at 6 per cent. are to be the representative of £50,000 of stock taken by that community.

The excess of £25,000 to be applied to the payment of interest on the bonds issued by the company until the line is opened.

The land to be purchased by the company out of funds provided for by the stock taken in the *locality.*

On the acceptance of the proposition an engineer will forthwith proceed to Quebec to examine the line.

The contract will be tendered for, subject to the approval of the Provincial Government, and the figures named in the memorandum do not necessarily imply that the bonds will amount to that sum.

This circumstance may possibly lead to some modification in the amount of stock proposed to be taken by the corporation of Quebec.

The contractor's offer, to take the whole of the bonds at par, which will save the expense of negotiation and their undertaking to provide out of the same for the payment of interest on the £250,000 and £150 000 bonds, issued by the company, is a consideration of no small importance.

Pacific Railroad.

The following are the resolutions passed at a recent meeting of the directors of this road.

1. Resolved, That the President of the Pacific railroad company be, and he is hereby directed to have the proper surveys made as soon as practicable, for a branch road from the main trunk of the Pacific railroad, through Washington county to the Iron Mountain, in St. Francois county; said surveys to be made from such point in the line of the main trunk as may be thought best to attain the object intended, and to sustain the best interests of the community at large, and those of the stockholders of the company; it being understood, however, that it is not the intention of this company to apply the proceeds of their present stock subscription to the construction of the branch contemplated, but by additional subscriptions raised for that purpose.

2. Resolved, That the President is hereby authorized and directed to order further necessary surveys of the Pacific railroad, from the present termination to the western line of the State, by the most direct and practicable route, with the view to a final location; and to accompany said surveys with the necessary agency to procure the right of way throughout the entire line on each survey.

3. Resolved, That the directors of the Pacific railroad company are of opinion, that it will be to the interest of the stockholders to build the proposed branch road to the Iron Mountain, as soon as one-half of the amount of additional stock, necessary to build the same, shall be subscribed; and books shall be opened to obtain subscription, in the counties of Washington, St. Francois, Madison and St. Louis, under the direction of such commissioners as the President of the company shall select.

The President appointed the following commissioners to open books, to receive subscription made under the third resolution:

Thomas C. Johnson, Ferd. Kennett, A. Desloge, at Potosi, Washington county.

Corbin A. Alexander, John Cobb, V. C. Peers, at Farmington, in St. Francois county.

From the proceedings of meetings in Washington county, and other portions of the State immediately interested, an anxiety is evinced for the construction of the proposed branch, and there is every reason to believe that the additional subscriptions required will be promptly made. The future importance of this connection with the richest iron district in the State, or in the world, is obvious, and the favorable action of the directors will be received with general satisfaction.

Boston, Concord and Montreal Railroad.

The sixth Annual Report of the Boston, Concord and Montreal railroad, just issued, gives a very encouraging and satisfactory account of the condition and prospects of the road. The whole line, about 93 miles, from Concord to Wells River on the Connecticut, will cost about $2,400,000, being $200,000 below the original estimate. Of the whole track, 71 miles from Concord to Warren have been open since June last only. The remainder is in rapid progress, and will be in running order by November 1st of the present year. It will thus be seen that the road has not yet reached its terminus, and that its earnings have been entirely from local business. Nevertheless, the net income for the year ending February 1, 1851, was $48,600; for the year ending February 1, 1852, $60,000 and for the fourteen months ending April 1, 1852, $69,321 08, or an average of between four and five per cent of the cost of the track in operation. At the rate at which the earnings have increased in the first quarter of 1852, the net income of the present year will increase in a much greater ratio that the last, but at the same per centage it will be $72,000 from local business only. When the road is extended to Wells River, the directors expect an income the first year of $144,000, or 6 per cent on the whole outlay. The contracts for the 20 miles now in progress, have been made on very favorable terms, and including the bridge at Wells River and all damages, will come within the original estimate of $500,000. The present floating debt of $151,429 95, is to be immediately liquidated by the sale of the balance of the old issue of mortgage bonds. The cost of the 20 miles now under way is provided for, chiefly by preferred stock, and the only floating debt owed by the corporation after its five or six years' work, will be for a portion of the outlay for the last division of less than $200,000. The balance, it should be observed, includes the expenditure of $80,000 for new equipment.

This road is well managed, and the future looks bright. It should, as it will undoubtedly, be classed among the best of New England railroads.

Georgia.

Business of the State Road.—We find in the Milledgeville *Recorder*, of Tuesday, a statement of the business of the Western and Atlantic railroad for the month of April, from which we condense the following items:

Total from freight	$33,152 58
Income from passengers	8,734 93
" " mail	1,000 00
Total income	$42,887 51
In the same time last year	$27,487 22
Total increase	$15,400 29
Increase on freights	$12,302 06
" " passage	3,098 23

Connecticut.

The New London and New Haven road will be completed in June. A meeting of the directors of that road and of the Norwich and Worcester road in regard to a connection, was held in this city last week.

Hempfield Railroad.

We copy the following resolutions adopted by the Philadelphia board of trade, in reference to the Hempfield railroad, for the purpose of showing the feeling entertained toward that project in that city:

Mr. Hand, from the Monthly Committee, reported the following on the subject of the Hempfield railroad.

The Committee of the month respectfully report, that they have had presented to their consideration the importance of the Hempfield connection with the Pennsylvania railroad, and beg to submit the following resolutions for the favorable consideration of the Board, viz:

Resolved, That the Board of trade view with interest, but, (if proper efforts be exercised by Philadelphia) without alarm, the approaching contest for the trade of the Ohio river, and the States west and south-west thereof.

Resolved, That the Pennsylvania railroad, extending from Philadelphia to Pittsburgh, with the Ohio and Pennsylvania railroad, leading from Pittsburgh into northern Ohio, and connecting with the Lake shore road and those of northern Indiana and Illinois, will ultimately secure to Philadelphia her due share of the commerce of the northwest.

Resolved, That the Hempfield railroad, when completed to Wheeling, will assure to Philadelphia full protection against the Baltimore and Ohio road in the contest that will speedily take place at that point for the trade of the Ohio river, and that of the railroads which are approaching Wheeling from the direction of Lexington and Nashville, Cincinnati and St. Louis.

Resolved, That Philadelphia needs one arm of the Pennsylvania railroad passing through Pittsburgh, and leading hither the trade of the northwest, for the possession of which New York and Boston, are striving; and another arm passing through Wheeling, and commanding the trade of the west and southwest, which Baltimore, by the rapid and vigorous prosecution of her line, is aiming to intercept that point on the Ohio.

Resolved, That in this struggle it should be the policy of Philadelphia to push forward a line reaching as far south on the Ohio river as the nature of the country and the legislation of Virginia will permit, and thus spread her southern arms as far as practicable in the direction of Tennessee and Kentucky.

Resolved, That it is of great importance that the Hempfield railroad should now be pressed rapidly to completion, and that it is the duty of Philadelphia, if true to the promotion of her western and southwestern commercial advantages, to furnish without needless delay, the assistance that is necessary to enable the company to enter promptly upon the grading of the whole line of that road. Therefore

Resolved, That the Board of Trade recommend to the citizens and capitalists of Philadelphia generally, and to those engaged in commerce particularly, a cordial and vigorous effort to increase the subscription to the stock of the Hempfield road, with a view to its early and prompt completion.

Michigan.

Central Railroad.—The receipts of this well conducted road, passing through the heart of the state of Michigan, have shown a steady and almost unparalleled increase since its completion. The months of February and April of this year are exceptions, as will be seen by the following comparative statement; but it is readily accounted for, by the fact that in 1851 Lake Erie was open in March, and in 1852, it was not fairly opened on the 1st of May. The receipts of the first four months show an increase in '52, of about $10,000:—

1851.		1852.	
December..	$57,481 39	December..	$66,503 25
January....	30 796 03	January....	36,074 25
February...	16,857 97	February...	17,527 90
March.....	37 325 33	March.....	30,683 88
April.....	78,388 95	April.....	40,975 87
	$220,855 67		$191,765 15

To the Stockholders of the Hudson River Railroad Company.

I consider it due to you, as well as to myself, to submit to you the subjoined copy of a communica made this day to the board of directors of our company.

The importance to the public, of the question, to what extent this work ought to be operated on the Sabbath, and the peculiar position in which circumstances have placed me in relation to it, will I trust, be deemed a justification of its being submitted to you in this way.

A candid consideration of the case, under a spirit of mutual forbearance where differences of opinion exist, will produce a proper result.

While declining further agency in the management of the work, I assure you it is with unimpaired confidence in its success as a remunerative property,—but at a somewhat later period than I formerly calculated on. The present reckless competition from some quarters, and the insiduous opposition from others, may be mostly traced to combinations to depreciate the market value of your stock. A reasonable patience, and more effectually, firmness in the stockholders in holding their stock, will counteract these efforts,—and you will do well to recollect that several of our most productive roads have in the early stages of their operation, suffered a greater depreciation in their stock than has been on this. JAMES BOORMAN.

New Hampshire.

Boston, Concord and Montreal Railroad—The annual meeting of the Boston, Concord and Montreal railroad, was held at Meredith bridge, N. H. on Monday. The attendance was large. Hon. Josiah Quincy of Rumney, President of the corporation; made a few remarks to the stockholders upon the present prosperous condition of its affairs, and the probability of an immediate completion of the road—the work on the last division being now in progress at a rate so satisfactory, that it was fully expected to be finished by the time (October 20th) specified in the contract. The annual report was unanimously accepted. The old board of directors was re-elected without opposition; certain alterations were made in the bye-laws pursuant to notice; and a vote passed instructing the directors to complete and equip the residue of the line as speedily as possible, consistently with due economy, and authorizing them to raise the small amount of means still wanting, and then the meeting dissolved, after a session of less than an hour. The best feeling prevailed and much satisfaction was manifested in respect to the conpition of the company as developed in the annual report.—*Boston Traveller.*

New York.

Ogdensburg Railroad—The Boston Post, in giving a statement of the business and prospects this road, says that from the opening of navigation in the latter part of April to May 10, there had arrived at Ogdensburg, 37 vessels, bringing 1,283 barrels of pork, 1,735 barrels of beef, 4,334 bushels of corn, 19,133 bushels of wheat and 69,588 barrels of flour. Between the 4th and the 10th of May were thirteen arrivals of sail vessels: seventeen Canadian, and twenty American. It is supposed that near 100,000 bbls of flour must have been received at Ogdensburg up to the present time. In order to give some idea of the local freight of the Ogdensburg road, the Post says that the shipments eastward from Champlain landing, *in the first week of May*, were 2,098,111 feet of lumber, 1,252 m of shingles, 777, 450 m of hoops, 9,100 m of staves, and 66 tons of potatoes.

Indiana.

Sub-letting of the Ohio and Indiana Road.—Messrs. Mitchell & Co., the contractors for the Ohio and Indiana railroad have re-let the grubbing and grading 28 miles on the east end of the line from Crestline to Upper Sandusky, in mile sections. The work has been mostly taken by experienced contractors from the Ohio and Pennsylvania railroad, and is to be completed by May, 1853.

The remainder of the work is to be let in the same manner next month. That portion from Upper Sandusky to Lima will be let at Lima on the 19th May; from Lima to Van Wert at Delphos, on the 21st; and from Van Wert to Fort Wayne, in this place on the 25th.

The directors will meet at Fort Wayne on the 26th, when the location of the depot, terminus of the road, etc, will be decided on.—*Fort Wayne Sentinel.*

Piasa Foundry.

The rapid increase of business at this establishment, affords gratifying evidence of the general prosperity, and is at the same time a well merited compliment to the skill of its enterprising proprietors. A lot of twenty coal cars for the Alton and Sangamon railroad are now being completed at this foundry, for which they will receive $5,500 from the company. They are calculated to carry from 100 to 125 bushels of coal each, and with the exception of the axles and gutta percha springs, are the workmanship of this establishment, and a very creditable specimen, too—the wheels and other castings comparing favorably with those manufactured at the East.—*Alton Telegraph.*

Indiana.

Newcastle and Richmond Railroad.—By reference to the advertisement of the President of this company in to-day's paper, it will be seen that an excellent opportunity is offered to contractors who may be out of employ, to secure good jobs. The company we are reliably informed have the funds on hand, and at order, to finish the earth-work of the road this fall, and desire to get it into the hands of energetic and responsible contractors, who can command forces to push the work as fast as possible. The portion of the road to let embraces about twenty miles, between Newcastle and Richmond. The whole line of road west from Newcastle to Logansport is now under contract and being vigorously prosecuted. This road forms an important link in the great chain of railroads between Cincinnati and Chicago, and is destined to be a good paying road.—*State Journal.*

Illinois.

Chicago and Rock Island Railroad—Sale of Bonds.—We understand that the Bonds issued by the cities of Peru, Rock Island and Davenport, for the payment of the stock in the Chicago and Rock Island railroad, have been sold in New York city to the amount of $50,000, and that about $90,000 more have been contracted to be sold. They brought from *par to 2¼ per cent. premium.*—This sale of bonds enables the company to fulfil promptly all their engagements with the contractors, who are pushing forward the work upon the road as fast as men and money can drive it.—*Argus.*

New Hampshire.

The Ashuelot Railroad Company held their annual meeting at Winchester, N. H., on the 11th May, and elected the following board of directors for the ensuing year, viz:—John H. Fuller of Keene, John Stratton of Swanzey, A. H. Bennett of Winchester, Wm. Haile of Hinsdale, Cephas Root of Greenfield, Mass.; A. Boody of Springfield Mass.; Phillip Ripley of Hartford, Ct., John H. Fuller was re elected president, and J. H. Elliot of Keene, clerk and treasurer.

Maryland.

Point of Rocks Railroad.—A bill has been reported in the Senate of Maryland to incorporate a company for the construction of a railroad from the Point of Rocks to the dividing line separating Maryland from the District of Columbia—the ultimate design being to extend it to the cities of Washington and Georgetown. The bill also confers the privilege of conveying water in pipes from the Potomac river to the District.

Tennessee.

County Railroad Subscriptions.—The County railroad subscriptions, authorized by a recent act of the Tennessee Legislature, are to be provided for and paid in direct taxes, levied by the counties without the agency of bonded indebtedness, but not over 33⅓ per cent. to be called for in one year.

Items of Indiana Railroads.

The Madison company are doing a heavy business.

The Lafayette company are putting down their iron rapidly.

The Evansville company are progressing with their road towards Vincennes.

The Terre Haute company are doing well.

The graduation of the Central road is progressing finely.

The Jeffersonville road will soon be completed to Columbus.

Mr. Brooks is pushing on the New Albany road.

The Lawrenceburg company have a heavy force on their work.

The Richmond New Castle and Logansport road is being pushed forward with energy.

A new and beautiful passenger car for ladies has been put upon the Madison road within a day or two, built by the company, at their works at North Madison.

Capt. Oglesby, conductor of the Terre Haute road, arrived at Indianapolis with a splendid car intended as a ladies car, recently from Columbus.

The Bellefontaine company are rapidly receiving the iron for the completion of their road.

New York.

Troy and Greenfield Railroad.—The North Adams Transcript says that a public railroad meeting and also a meeting of the directors of the Troy and Greenfield railroad, was held in that village last week. The prospects of the road were represented to be quite flattering, more so than for a long time. Subscribers to stock were paying up their assessments, and everything was shown to be in a promising condition.

Lockport and Buffalo Railroad.—A company has been formed for the purpose of constructing an independent line of railroad from Lockport to Buffalo, connecting with the road from Rochester to Lockport.

The Plattsburgh and Montreal Railroad.—The Plattsburgh Republican says rapid progress is made in finishing up the work on the line of the Plattsburgh and Montreal railroad, especially on the bridging and other work through the village of Plattsburgh. The Republican understands that the bridging will be completed in a few days. The laying of the track commenced at Plattsburgh last week.

Ohio.

Marietta and Cincinnati Railroad.—The bill authorizing the city of Wheeling to subscribe to the capital stock of the Marietta and Cincinnati railroad, has passed both branches of the Legislature of Virginia; also, a bill authorizing the North Western (Parkersburg) Virginia railroad company to construct a branch thereof from Clarksburg to Weston.

New Orleans, Jackson, and Northern Railroad.

The citizens of New Orleans have alone taken stock sufficient to organize this company. At first the stock was taken slowly, but when $350,000 was subscribed, a public meeting was called, and in two days afterwards the subscriptions ran up to $600,000. The stock was divided among 800 subscribers.

The stockholders held a meeting on the 19th ult, and elected the following directors until the 1st Monday in May, 1853, and the company will now go into operation:

James Robb, A. C. Kelly, J. P. Benjamin J. P,

Harrison, Isadore Labutut, W. S. Campbell, John Slidell, W. P. Converse, E. W. Moise, Emile La Sere, H. S. Buckner, Charles Pride.

American Railroad Journal.

Saturday, June 5, 1852.

The Effect of Railroads in Enlarging the Circle of Business of Cities.

The city of New York is now accessible from every part of New England (with the exception of the eastern part of Maine,) and the State of New York, by one day's journey on railroads. A traveller may leave Waterville, Me., which is 430 miles distant from New York; Montreal, Canada, which is 400; and Dunkirk and Buffalo, which are about 470, in the morning, and reach this city the same evening by continuous lines of railroad, at an average charge of two cents per mile. Light articles of freight, newspapers, etc., are forwarded to, and received from the same points with equal despatch; so that the six millions of people residing within the States named, are within one day's time of this city. And in the evening, the most remote parts of it are, in the ordinary course of the mail, put into possession of our morning news; and on the other hand, our shops and the stands in our markets display the dellicacies and dainties which the morning light shone upon some 400 miles distant. The whole country within this distance, by means of railroads, is made the market garden of the city, and every inhabitant is brought into as intimate relation to it, as was the person who lived within 30 miles a few years since. A trip of a day is now sufficient to bring nearly every inhabitant of New York and New England to this city, and who may, if they choose, return home the next.

These facts will serve to show the influence that railroads are exerting, in the facilities they give in the movement of persons and property. To a city they increase the area of country tributary to it in a much greater ratio than the length of their lines. To give a clearer idea, we will briefly illustrate this proposition. We will assume that the speed of the ordinary loaded team on common roads is 2½ miles per hour, for 12 hours, which will give 30 miles as the extent of a day's travel, and 60 miles as the diameter of the circle from which a city without railroads could draw its *daily* supplies of food, etc. This would give an area of country of not far from 2700 souare miles.

The freight train on a railroad moves at an average rate of 12 miles an hour, or 288 miles in 24 hours. The circle within daily reach of a city by freight trains on railroads would be 576 miles, embracing an area of 124,416 square miles, or more than 46 times greater than the circle within reach of the same point by the ordinary wagon! By the use of railroads, therefore, a city increases its capacity for business, as well as its supplies of food, and all the articles used in the economy of life, 4,600 per cent!

It will be found upon calculation that the difference in cost of the two modes of carriage supposed, is in about the same ratio as the above distances.

The above statements are a most striking, as well as correct illustration, of the value of railroads, and demonstrate most clearly their importance in increasing the business of commercial, or trading points, and proves how necessary they are to farming communities, in creating a value for their products, in opening a market for them. They explain the rapid growth of cities, that are the terminii of a large number of railroads, and the rapid appreciation in the value of the country they traverse. With an ordinary road, a farmer living sixty miles from a city may be without a market for many of his most important articles of produce from the cost of transportation, while another living upon a railroad but 400 miles from the same point, finds a ready sale for all he can raise at remunerating rates.

Chester Valley Railroad.

We give in another column the exhibit of the Chester Valley railroad, to which we invite attention. One object of the road is to furnish railroad accommodations to a very rich and productive section of Pennsylvania, and to open a new avenue into the city of Philadelphia for the Pennsylvania railroad, a matter of vital importance to the interests of the road, and to the trade of the city. The road is now far advanced towards completion, and will be opened for the fall business. The above project presents an excellent opportunity for safe investment, in a road which is close at hand. The convertible clause in the bonds secures a perpetual 8 per cent dividend, which will undoubtedly carry the bonds to a premium as soon as they shall become known. We know of no more inviting security of the kind, which fulfils all the conditions of safety, of a large return upon the investment, and based upon a work which comes almost under the daily observations of capitalists.

The Northern against the Southern Route.

We met in this city a few days since, an intelligent planter and tobacco manufacturer from Hopkinsville, in the western portion of Kentucky, who had brought on with him an invoice of 180 hogsheads of tobacco, for the purpose of making an experiment of the northern route and the New York market, instead of the old route via New Orleans. The tobacco was carted from his plantation to Clarksville, on the Cumberland river, in Tennessee. From thence it was forwarded by steamboat to Cincinnati; thence by railroad to Cleveland; thence by lake craft to Buffalo, and thence by the Erie canal to New York. The entire transportation from Clarksville to New York was contracted for at $16 per ton. The total distance by this route cannot fall much short of 1500 miles, which is about one cent per ton per mile.

The result in the above case was entirely satisfactory. The prices obtained were fully two cents per pound greater than could be had at New Orleans, and the net proceeds of sale at least one and a half cent per pound greater.

It is believed that contracts can be made to transport tobacco from Clarksville to New York, by way of the Wabash and Erie canal, when that shall be completed, which will be in a few months, at a cost not exceeding $10 per ton.

Another strong inducement to the northern route is the more favorable nature of the climate than by way of New Orleans, from the effects of which the staple is often seriously injured.

The gentleman referred to was so well pleased with his experiment, that he expressed the opinion that it would result in gradually changing the entire Kentucky crop from the southern to the northern route.

For the purpose of effecting this object, the tolls upon the public works of New York and Ohio upon tobacco, have been reduced to a merely nominal sum, and there can be no doubt that they will be entirely removed, if necessary. Upon the New York canals, commercial considerations, not revenue, are beginning to fix the rate of tolls; and where an article of western produce cannot be secured to the northern route without the entire remission of tolls. this will in future be done without hesitation. New York is aiming to secure the entire trade of the west, and will remove as far as possible, every burden upon that trade that shall have any tendency to prevent its taking a northern route.

Massachusetts.

Amherst Railroad.—The Amherst Express states, that the New London Railroad company have determined to extend the line of railroad from Amherst to Montague forthwith. Contractors have been over the line, with a view to bidding for the work. The construction of the Amherst and Belchertown railroad is progressing rapidly.

Kentucky.

Lexington and Big Sandy Railroad.—Sixty thousand eight hundred and fifty dollars have been subscribed to the capital stock of the Lexington and Big Sandy railroad company.

Hudson River Railroad.

The fare on this road was reduced to $1.50 from New York to Albany, on all the trains on the first instant.

Western Travel.

Chicago, by way of Dunkirkand Toledo, is now forty eight hours from our city—all railroad except a fine steamboat ride midway on Lake Erie.

Railroad Subscription.

The Councils of Wheeling Va., have resolved to subscribe for $350,000 of the stock of the Cincinnati, Marietta and Hempfield railroad.

Illinois Central Railroad.

The attention of contractors is called to the advertisement of the Illinois Central railroad,

The company are wanting 100 laborers at Lasalle, Illinois, to whom they offer one dollar per diem.

Ohio.

Junction Railroad.—We call attention to the advertisement of the Junction railroad company, inviting proposals for their bonds. The section of the road, upon which the bonds offered are based, extends from Cleveland to Sandusky. The through business between two such important points as Sandusky and Cleveland must afford a lucrative traffic to a railroad, as both points are the termini of important lines of road. The local business of the proposed road must also be very good. Both combined, they promise to yield a good income, and to furnish every security for a safe investment. The company is in good hands, and Judge Lane, its President, is well known to be one of the most experienced and efficient railroad men in the U. States.

Stock and Money Market.

Money continues in the same abundance that we have noted for some time past, with great activity in the various kinds of railroad securities. The demand for *investment* for the best kind of railroad bonds continues to rapidly absorb all that are offered, and the supply of these at previous rates is by no means equal to the demand.

The leading sale since our last issue, are of the *Indiana Central* bonds. These brought on an average 95½, which is the highest price ever paid for western bonds of an unfinished road.

Below we annex a list of the successful bids,

Clark, Dodge & Co	4	97·72
Clark, Dodge & Co	2	95·92
Clark, Dodge & Co	4	95·52
Clark, Dodge & Co	4	95·30
Clark, Dodge & Co	3	95·10
Nowich Savings Society	5	96·75
Clinton Gilbert	5	96·56
Clinton Gilbert	5	95·86
Clinton Gilbert	5	95·56
Clinton Gilbert	5	95·26
Charles S. Francis	5	96·35
Charles S. Francis	5	95·35
Wm. & John O'Brien	1	95·91
Wm. & John O'Brien	2	95·81
Wm. & John O'Brien	4	95·51
Wm. & John O'Brien	5	95·31
Mervin & Gould	5	95·81
Mervin & Gould	5	95·67
Mervin & Gould	5	95·56
Mervin & Gould	5	95·31
De Coppet & Co	5	95·80
De Coppet & Co	5	95·55
De Coppet & Co	5	95·30
Nowich Savings Society	5	95·75
John Ferguson	20	95·65
Peter McMartin	5	95·56
Peter McMartin	5	95·26
John Thompson	30	95·52
A. Wylie Jr	5	95·50
C. T. Cromwell	5	95·10
C. T. Cromwell	20	95·25
Thomas McKenzie	1	95·25
Chubb Brothers	5	95·15
Total	200	bonds

This project is looked upon as a very strong one, and has a large amount of cash stock subscription. The affairs of the company are under able management and the road every way ranks as a first class western project. Since the company's sale, private sales have been made at 97½.

The advices from London in regard to American stocks are favorable. The demand is fair and the tendency of prices upward. The extremely low rate of interest in London must attract still greater attention to our securities. Baring's circular says:

American stocks are unchanged. Prices are steadily supported, with a fair amount of business doing. We quote: U. S. 6 per cent. bonds, 110 *a* 110½; inscriptions, 108 *a* 108½; New York State 5s, 95 *a* 96; Pennsylvania 5s, 85 *a* 86; Ohio 6s, 1860, 101 *a* 102; Virginia 6s, 95 *a* 96; bonds. 100 *a* 101; Maryland sterling 5s, 95 *a* 96; Massachusetts sterling—.107 *a* 107½; South Carolina sterling 5s, 95½; Canada 6s, 103; Boston City—,95.

Messrs. D. Bell, Son and Co. report as follows:

	Redeemable.	Prices.	
United States 6 per cent. bonds	1862	104	105
United States 6 per cent. bonds.	1868	110	110½
United States 6 per cent. stock.	1867-1868	108	108½
United States 6 per cent stock.	1862	103½	104
New York State 5 per cents.	1850-1860	95	96
Pennsylvania 5 per cent. stock.	——	85	86
Ohio 6 per cents.	1860	101	102
Ohio 6 per cents.	1870-1875	107	107½
Massachusetts 5 per cent. sterling bonds	1868	107	107½
Maryland 5 per cent. sterling bonds	——	95	96
Virginia 5 per cent inscribed stock	1854	95	96
Virginia 6 per cent. bonds	1857 1875	100	101
Canada 6 per cent. bonds	1874	113	113½
Boston City 5 per cents.	1858-1862	93½	94½
Montreal City 6 per cents.	1857-1865	85	86
Philadelphia and Reading railroad 6 per cent. mortgage bonds	1860	80	81
New York and Erie 7 per cents. 1st mortgage	1868 1869	107	108
New York and Erie 7 per cents. 2d mortgage	1852	99	100
New York and Erie 7 per cents. Convertibles	1862	88	——
Ohio Central 7 per cents	1861	90	——

Consols were firm at 99½.

The following statement of the receipts of tolls on the canals of this State for the weeks ending May 22, and for the seasons thus far of several successive years:

	Third week in May.	Total to May 22.	Days of navigation.	Average toll per day.
1846	$105,070	$482,744	36	13,409
1847	173,690	514,215	23	23,373
1848	149,215	483,028	22	21,955
1849	137,461	478,138	31	15,101
1850	113 673	476,933	31	15,062
1851	121,471	643 929	38	16,945
1852	119,061	437,494	33	13,251

A comparison for the two years to the 22d of May, (38 days in 1851, and 33 days in 1852), showing the general course of trade, is as follows:

	1851.	1852.	Decrease.
New York Albany, West Troy, (on merchandize)	$225,419	$147,959	$77,460
Buffalo, Black Rock, Tonawanda and Oswego, [on produce from other States]	221,010	150,587	70.423
All other offices on *produce* of this State	197,500	138,948	58,552
Total	$643,929	$437,494	$206,435

	1851.	1852.	Increase.
Merchandize cleared at New York. Albany, and West Troy,	137,466,600 lbs.	156,466,600 lbs,	18,865,000 lbs.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JUNE 5, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100⅝
U. S. 6's, 1856	106½
U. S. 6's, 1862	111½
U. S. 6's, 1862—coupon	——
U. S. 6's, 1867	115½
U. S. 6's, 1868	115½
U. S. 6's, 1868—coupon	120⅝
Indiana 5's	97
Indiana 2½	51
" Canal loan 6's	90
" Canal preferred 5's	46½
Alabama 5's	——
Illinois 6's, 1847	77½
Illinois 6's—interest	48
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	100⅜
Maine 6's, 1855	——
Maryland 6's	106½
Michigan	——
Mississippi	——
New York 6's, 1854-5	——
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	116
New York 6's, ½ y., 1866	116½
New York 5½'s, 1860-'61	107
New York 5½'s, 1865	107
New York 5's, 1854-'55	——
New York 5's, 1858-'60-'62	104
New York 5's, 1866	106
New York 4½'s, 1858-'59 '64	——
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	105½
Ohio 6's, 1860	108½
Ohio 6's, 1870	114½
Ohio 6's, 1875	115
Ohio 5's, 1865	104
Ohio 7's, 1851	——
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	——
Pennsylvania 6's, 1879	108
Tennessee 5's	90
Tennessee 6's, 1880	108
Virginia 6's, 1886	101½

CITY SECURITIES—BONDS.

Brooklyn 6's	107
Albany 6's, 1871-1881	107
Cincinnati 6's	99½
St. Louis	95½
Louisville 6's 1880	95½
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	108½
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	103½
New York 5's, 1890	——
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	107
Baltimore 1870-'90	105½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116
Erie 2d mortgage, 7's, 1859	109
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	97½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	106
Reading 6's, 1870	83½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	106½
Michigan Southern, 7's, 1860	98
Cleveland, Col. and Cin. 7's, 1859	106½
Cleveland and Pittsburg 7's, 1860	——
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	May 26.	June 2.
Albany and Schenectady	104½	108½
Boston and Maine	107½	109½
Boston and Lowell	108½	107½
Boston and Worcester	106½	106½
Boston and Providence	94½	93½
Baltimore and Ohio	75	76
Baltimore and Susquehanna	32	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	117	117
Eastern	103½	103½
Erie	86	87½
Fall River	99½	99½
Fitchburgh	105	106½
Georgia	—	—
Georgia Central	103	—
Harlem	71	72½
" preferred	114½	112
Hartford and New Haven	128	125
Housatonic (preferred)	35	35
Hudson River	62	62
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	101	103
Michigan Central	99½	100
Michigan Southern	118	118
New York and New Haven	112	111½
New Jersey	136	138
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	55	55½
Ogdensburgh	28½	29
Pennsylvania	—	43½
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	77½	78½
Rochester and Syracuse	116½	117½
Stonington	52	55
South Carolina	—	—
Syracuse and Utica	128	129
Taunton Branch	115	115
Utica and Schenectady	134	133
Vermont Central	16½	17½
Vermont and Massachusetts	22½	23½
Virginia Central	—	—
Western	107½	109½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Social Influence of Railroads.

A prominent feature in the extension of railroads in this country, is the social influence engendered. Whatever tends to create and strengthen social intercourse among a people governed by the same laws, and largely participating in the same interests, is worthy of high consideration; for whatever promotes such intercourse strengthens the bond of political union and equality, and renders more permanent the established institutions of a free people.

The destiny of the United States is onward. The questions which divide parties, and sometimes agitate whole communities or even states, will not seriously interfere with the fulfillment of what is inevitably the destiny of this country. The people throughout its length and breadth are walking up to the interests upon every hand which so much concern them. They are calmly considering their duty to themselves at this present, and to those who are to come after them in the future. Out of their abundance they are providing for the stability of the institutions which have been founded after a long and patient struggle, and laying broader and deeper the foundations of individnal, state, and national wealth and happiness.

Just in proportion as the social qualities and intercourse of a people are promoted and extended, the soil, the true source of wealth, becomes increased in value; the skill of the artizan more sought after; education and the higher attainments in science guaranteed; the rights and privileges of religion in its various forms, freely practised and enjoyed; in a word the science of human government becomes practically demonstrated. In a country like ours, under a republican form of government, the social intercourse of the people is entirely unrestricted; each portion of this broad Union is deeply interested in whatever concerns the social or political well-being of the whole, hence we see those in the east and west, the north and south, combining in the same enterprises and sharing in the same benefits or losses. Wherever a railroad is opened, time and distance becomes shortened between its extremes, and a medium afforded (which thus far has never been neglected,) through which not only the social but business intercourse of the people can be freely indulged in to the mutual pleasure and advantage of all concerned.

The various roads now under construction, and in contemplation, extending through various states of our Union from north to south, will, when completed, serve as an additional bond of union to the confederacy, if indeed one were wanting, and become new and important channels for the enjoyment of social intercourse, and the exchange of the productions of an already fruitful and wealthy nterior; besides develop other resources and enterprizes now little thought of.

In whatever aspect the subject is viewed, that of railroad extension and enterprize is one worthy of careful consideration by the American people, without reference to geographical position or lines. The population is increasing with wonderful rapidity, and the resources of the country in every element necessary to a condition and eminence hitherto unattained by any government or people, are inexhaustible, waiting only for development.

*

Atlantic and St. Lawrence Railroad.

Mr. Galt, who left for Europe but a short time since, to secure funds to complete the above road, has succeeded in negotiating $400,000 of seven per cent. securities at a premium of two per cent.

Ohio.

Tariff of Railroad Freights.—The law relative to railroad freight tariff, recently enacted by the Legislature of Ohio, has been published. It provides that every railroad company whose line extends or shall hereafter be extended to any place in the vicinity of, or to a point of intersection with any of the navigable canals or other works of internal improvement belonging to that State, shall establish a tariff of rates for the transportation of merchandize, etc., consigned to or from such place or point of intersection; and that it shall be unlawful to charge or receive any higher rate over a shorter distance of road than is charged and received according to the established tariff for transportation to and from such places of intersection aforesaid.

Every railroad company shall publish its tariff of rates, and cause the same to be kept conspicuously posted up at the several business stations on its road; and it shall be unlawful for any company, its officers or agents, to charge or receive, directly or indirectly, any less rate than is designated on such printed card, until the same shall have been changed by an order of the board of directors of such company, and at least ten days notice of such change given by bill or card, to be posted up as aforesaid; and it shall be unlawful to evade or attempt to evade in any manner, the payment of full freightage, according to the printed tariff of rates.

The board of public works is authorized and required to permit every railroad company in the State, adopting and adhering to such rate of freight prescribed, to construct suitable bridges across any navigable canal and feeder, slackwater improvement, navigable river, stream, lake or reservoir, with which any of the canals of the State may be united or connected, where the line of such a road necessarily crosses the same, under the supervision of said board, and in such manner as will not interrupt or impede the free use of the same, provided however that previous to the erection of any bridge the company desiring to construct the same, shall cause a complete diagram and plan of such bridge, designating the point or place of crossing such canal, feeder, slackwater improvement, river, stream, lake or reservoir, to be filed in the office of the board of public works of the State, the same to be approved by said board, or by the acting commissioner in charge of the division of the public works in which said bridge shall be proposed to be built, acting by authority of said board, which approval shall be in writing, and endorsed on said diagram.

It is further provided that all bridges erected under this act shall be subject to such changes or alterations as may become hereafter necessary by any improvement, alteration or enlargement of the level of such canal, feeder, or slackwater bridges already erected, which do not interfere with navigation, or the free use of the State works, are permitted to remain undisturbed, provided that they shall be not less than two feet in the clear above the top water line. The act does not interfere with the construction or use of draw bridges which shall not interrupt navigation.

Pennsylvania.

Sunbury and Erie Railroad.—A proposition to authorise a subscription by the city of Philadelphia to this road, passed the Common Council by a vote of three to one, but was defeated in the Select Council by a vote of seven to five. The North American expresses regret at the decision of the latter.—The pressure of public opinion will probably yet lead to favorable action.

Montgomery and West Point Railroad.

The directory, under date of March 1, have submitted their annual report of the first year's business and present condition of this road to the stockholders. The entire receipts have been as follows, viz:

From passengers		$91,229 84
From freight		61,206 29
From mail transportation		21,106 32
		$173,542 43

Expenditures have been as follows, viz:

Department of repairs, etc.	$44 582 08	
Car construction and repairs	7,834 38	
Machine shop	9,879 69	
Running Engines	14,586 40	
Paid for stock killed	2,905 00	
Salaries and printing	14,520 74	
Incidental expenses and taxes	2,552 57	
Cartage of mails	317 50	
Iron rail, switches and masonry	281 89	
Interest account	24,790 73	
		$122,253 92
Nett income		$51,288 51

Under the circumstances this exhibit must prove very satisfactory to the stockholders, for after renewing almost the entire superstructure of the road from Notasulga to Montgomery, a distance of forty-seven miles, the nett dividend on the entire capital stock equals 8¼ per cent.

Since the 1st of July last, double daily mail service has been performed, for which $24,337 is paid, being an increase of $8,737 per annum over that received for the performance of the old service, which, however, does not pay for the extra train.

The net profits of the road for the past three years have amounted to $160,776 07, which upon a capital of $623,800 is equal to 25 5-6 per cent., within which time twenty-two miles of road, from Opelika to West Point, have been built and put

in operation costing		$196,017,85
Three first class locomotives purchased, costing at the depot in Montgomery,		23,750,00
New cars built to replace old ones, making the present force 7 passenger, 4 baggage, and 87 freight cars, showing an increase of 3 passenger, 1 baggage and 38 freight cars since 1849, increase in value		25,035,00
Stationary Engine, with the necessary machinery for repairs		6,758,00
Materials on hand in Machine shop and car factory	$19,829,31	
Deduct materials on hand, 1st March, 1849	6,000,00	
Increased value		$13,829,31
Substantial brick buildings erected at the Montgomery depot, costing		8,600,00
4,926 acres of land purchase in Macon and Chambers counties, guaranteeing a supply of timber for the road for 20 years to come, at a cost of $1,30 per acre		6.488,48
Showing a total increase in the value of the road and property of		$280,478,64

Which has been provided for

By cash on hand 1st March, 1848	$22,657,56	
By sale of company's bonds, on 1st April, 1849, payable 1st April, 154, for	50,000,00	
Nett earnings of road for three years	160,776,07	
		233,433,63
Leaving a balance yet due of		$47,015,01

The increasing number and weight of trains to be passed over the road, demands that early preparation should be made for a re-construction of that part between Montgomery and Notasulga, with

a new and heavy rail, whenever the superstructure now being laid down shows signs of decay. To provide for this, without embarrassment to the company, has been a subject of deliberation with the Board, and they have instructed the president to purchase from the South Carolina railroad Co., 4000 tons of their old iron, which has been offered at $27 per ton, delivered on ship-board in Charleston, or $30 per ton delivered in Philadelphia, payable in the 7 per cent bonds of the company redeemable at twelve years, provided he can make a satisfactory arrangement with some responsible iron house in the United States, to re-roll it into a T rail, and have it delivered in Mobile during the next winter and spring.

The directory urge upon the stockholders the passage of such resolutions as shall enable the Board to provide for the building of the branch road, from Opelika to Columbus, as speedily as possible, being a work required as a protection from rival roads, and which will add greatly to the revenue of the main road.

The government and working of this road is under an able Board and superintendent, and everything connected therewith managed with a view to the proper service of the public, and to handsome permanent dividends to stockholders.

Maine.

Penobscot and Kennebec Railroad.—A large meeting recently assembled at the City Hall, Portland, to hear the report of the committee from Bangor, in reference to plans for providing means for constructing the Penobscot and Kennebec railroad.

The meeting was called to order by J. S. Little, Esq., on whose nomination, Mr. Mayor Parrs was chosen chairman. On taking the chair, the Mayor stated in brief the object of the meeting, and heartily welcomed the Penobscot gentlemen to the city.

Charles Holden and Henry Carter, Esqrs., were chosen secretaries; Mr. Carter gave a history in detail of the causes which led to the defeat of the Bangor loan bill in the last Legislature; and was followed by Hon. Wyman B. S. Moore, of Bangor, who stated that the people on the Penobscot expected the citizens of Portland to subscribe $200,000 towards the construction of the proposed road, and then went on to give some cogent reasons why they should do so, &c.,

Hon. M. L. Appleton, of Bangor, was next called to the floor, and adduced further arguments, showing how deeply the prosperity of Portland was concerned in the subject.

The meeting was continued in the evening, when all present seemed to manifest a lively interest in the objects of the meeting, which was addressed by J. B. Brown and others.

Phineas Barnes, J. B. Brown, and J. A. Poor, Esqrs., were chosen a committee on resolutions.

Fishkill Railroad Meeting.

We learn from the Fishkill Standard, of May 10th, that a public meeting was held in Fishkill village on the 8th, in favor of the speedy construction of the Hartford, Providence and Fishkill railroad. The citizens of many of the neighboring towns attended, and the merchants and capitalists of Fishkill and Newburg expressed great interest in the completion. A committee was appointed to confer with the friends of the enterprize in Newburgh, for the purpose of organizing a company to construct the Providence, Hartford and Fishkill railroad from the line of the State of Connecticut to the Hudson river, and to raise the necessary money to make a preliminary survey of the route.

Hudson River Railroad.

Trouble among the Laborers.—Dissatisfaction having arisen among the laborers on the Hudson River road, in consequence of the removal of Mr. Houston, roadmaster, and the appointment of Mr. Barrett in his place, it became necessary on Thursday evening of last week to employ a strong police force to suppress threatened disturbance on that section of the road lying between Thirty-first street, in this city, and Spuyten Devil Creek. The laborers refused to work or to allow others to do so. On Wednesday and Thursday nights large rocks were placed on the track, with the evident design of throwing the cars off the road, but discovered in time to prevent damage. By request of the superintendent to the Chief of Police, Capt. Stephenson, at the head of an efficient police force, took charge of the matter, and finally succeeded in securing three men named, James Allen, Richard Lannegan, and Michael Mullehan, supposed to be the ringleaders in the difficulties. They were taken before Justice Stuart, and after a thorough examination committed to prison, in default of $2000 bail each. Much credit is due Capt, Stephenson for the energy displayed in the discharge of his duties in this matter, as also to Justice Stuart.

It is believed that no further obstructions will be attempted to be placed upon the road, still, a watch night and day will be continued as long as may be deemed necessary.

A Specimen of Ohio Farming.

The following table, taken from reliable sources, shows the number of bushels of wheat and corn raised, and acres planted, in Muskingum county for the year 1851. The county contains about 40,000 inhabitants.

	Wheat.		Corn.	
	Acres.	Bush.	Acres.	Bush.
Adams	2282	30767	956	40981
Blue Rock	1858	33038	748	23638
Brush Creek	1954	25245	571	12745
Clay	767	9065	262	6110
Falls	2614	45695	1109	71459
Harrison	969	14268	504	18148
Highland	2084	28182	683	25572
Hopewell	3188	43240	1660	52610
Jackson	1711	22783	1319	37231
Jefferson	1977	33736	2605	134184
Licking	1579	22740	1525	56260
Madison	2018	28981	1718	81049
Meigs	3033	49918	1598	57594
Monroe	1969	25634	981	24520
Muskingum	2638	41204	1842	81166
Newton	3438	55231	1708	52259
Perry	2024	29417	1152	33020
Rich Hill	2641	44407	1663	58997
Salem	2337	34531	893	25710
Salt Creek	1874	26371	1058	32285
Springfield	1238	19472	937	28496
Union	1247	22581	712	22750
Washington	2335	29285	1231	45359
Wayne	2278	35103	1067	37161
Zanesville				
3d Ward	69	1265	34	1610
4th Ward	101	2030	53	2600
Total	50,213	754,189	29,197	1,013,614

Missouri State Bonds.

It is stated in a St. Louis paper that the Pacific railroad company have recently made a sale of $50,000 of the Missouri State six per cent. bonds to a firm in that city at five per cent. premium. The State has comparatively a small debt and abundant resources. Ninety-five, interest not included, has been declined for St. Louis city bonds.

Memphis and Louisville Railroad

Engineers have commenced the examination and surveys of this road, which will, it is said, be pushed to completion with all vigor.

Illinois.

Terre Haute and Alton Railroad.—The Alton Telegraph of May 20, congratulates its readers on the confirmation of the news received in that city previously by telegraph, that the President of the above company had succeeded in concluding a contract for the construction of the road, and in disposing of about two-thirds of the stock; it says, a competent corps of engineers, will immediately proceed to the discharge of their duties; and that it is expected the work will be commenced early in June. A meeting of the directors was immediately called for the 27th.

Illinois.

The Central Railroad—Location of the Chicago Branch.—The point of divergence of the Chicago Branch, on the main trunk of the Central railway, has been fixed in Marion county, in section six, township one North, about eight miles southwest from Salem.

Notice to Contractors.



Office of Illinois Central R. R. Co.
Chicago, 26th May, 1852.

THE Illinois Central Railroad Company having decided to make payments in cash on all contracts for grading, masonry and superstructure, are prepared to receive proposals for divisions Nos. 1, 2, 6, 8, 9 and 10, if made immediately, to be addressed to the Chief Engineer. Plans, profiles and forms of proposal may be seen at 35 Canal street, New York, or at the office in Chicago.

A reply, definitely accepting or declining each proposal, will be forwarded by mail on or before the 15th day of June, 1852. Proposals should state the address and references of the party.

R. B. MASON, Chief Engineer
Illinois Central Railroad.

Notice to Bridge Builders.

Office of Central Ohio R.R. Co.,
Zanesville, May 14, 1852.

SEALED PROPOSALS will be received at this Office until Monday, June 7th, 1852, for the Superstructure of a Double Track Railroad Bridge, with a foot passenger way attached, across the Muskingum River, at Zanesville. The whole length will be 528½ feet, divided into four spans of 124½ feet each in the clear. The Bridge seat on the abutments will be four and a half feet; and upon the four piers six and a half feet each.

Proposals will also be received for building a Draw or Pivot Bridge of forty-six feet span, in the clear, across the canal at Zanesville.

Bids are solicited for either Iron or Wooden Bridges, and may be made upon plans submitted by builders.

ROBERT MAC LEOD, Chief Eng.

To Mining and Civil Engineers, Surveyors, etc.

A YOUNG MAN, who has been engaged for the last six years with eminent Engineers in Scotland, is desirous of a situation. Has had considerable practice in the working of mines—being a good draughtsman, and in possession of engineering instruments.

Address ENGINEER, care D. H. ARNOT,
1m20* 50 Wall st., New York.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

Railroad Iron.

THE undersigned are now prepared to enter into contracts to deliver Railroad Iron free on board at shipping ports in Great Britain, or at ports in the United States.

P. CHOUTEAU, Jr., SANFORD & CO.,
May 17, 1852. No. 51 New st.

Sale of Seven Per Cent. Mortgage Convertible Bonds of the

JUNCTION RAILROAD, IN OHIO.—This Company offer for sale FOUR HUNDRED AND FIFTY THOUSAND DOLLARS SEVEN PER CENT FIRST MORTGAGE BONDS, due 1st of April, 1867, with Interest Coupons attached, due April and October, principal and interest payable in New York, and convertible into Stock at any time before maturity of the Bonds.

The Junction Railroad begins at Cleveland, and following the Lake shore closely, passes through Sandusky to Port Clinton—whence it will connect with the Southern Michigan Road, at Toledo, and will extend by Perrysburg and Maumee City, through Williams County, to the west line of Ohio, toward Fort Wayne—the whole distance of the road with branches will be 203 miles. The distance from Toledo to Dunkirk by this road is the shortest possible.

For the purpose of construction, the road has been divided into three sections. The first extends from Cleveland 70 miles, to a point a little west of Sandusky; the second, 53 miles in length, will reach beyond the Maumee river; the remainder of the line constitutes the third section.

The first section passes through a fertile and well settled country and over a very level surface, following the Lake shore as nearly as possible. This is by far the most expensive part of the road by reason of crossing the streams.

The engineer's estimate of costs is $14,600 per mile; the whole is under contract at prices within the estimates, the iron purchased—part of the road ready for superstructure—and it is expected to open this section of the road no later than the first of January next. It will at once come into use as an extension of the Mad River and Lake Erie Railroad to Cleveland, that Company having agreed to provide the necessary machinery. The estimated cost of the Eastern section is $875,000.

Stock subscribed and paid in	$325,000
Stock paid to contractors	100,000
Bonds now issuing	450,000
	$875,000

These $420,000 Bonds now offered for sale are secured by a first and only mortgage on the first section of the road—extending from Cleveland and Sandusky, 60 miles. The trustees of this mortgage are GEORGE S. COE, DANIEL S. MILLER, of New York, and EBENEZER LANE, of Sandusky, Ohio.

The second section, fifty-three miles, will extend from Sandusky to a point a little beyond the Maumee River, and will include the stations at Toledo and Maumee. This part of the line is nearly a dead level. The engineer's estimate of this section of 53½ miles is $9,292 per mile. The subscriptions applicable to this division exceed $175,000, and more are expected. An offer has been received from a responsible contractor to execute this work and receive payment from means now within the power of the company; the acceptance of his offer is suspended, in the hope that better terms can be obtained.

The western or third section, including a branch in Williams County, is ninety miles in length. No survey has been made, but, from sufficient examinations, the engineer estimates that the entire cost of this division except iron will not exceed $3,000 per mile. A subscription of $100,000 has already been obtained, and a larger additional sum is confidently expected.

The Junction railroad received its name because it is intended to connect and form into a continuous line the terminating stations of six different railways, viz.—Three at Columbus, (the Cleveland Painesville and Ashtabula Railroad company, the Cleveland and Pittsburgh railroad company and the Cleveland, Columbus and Cincinnati railroad company,) two at Sandusky, (the Mad River and Lake Erie railroad company, and the Mansfield and Sandusky city railroad company,) and one at Toledo, [the Southern Michigan railroad company.]

A railroad connecting the principal stations of so many important routes, and forming a necessary link of the great channel of communication between the East and West, would seem to leave no room to distrust the productive character of the stock.—Besides a large local traffic, it will enjoy the immense travel and freight passing from New York over the Erie railroad to Dunkirk, Erie, Cleveland to Toledo, and thence over the Michigan, Southern and Northern, Indiana railroad to Chicago.—Some judgment of the probable value of this series of railways may be formed from the fact that the stock of the half finished road between Cleveland and Erie is already above par, and that of the Southern Michigan is daily selling from 118 to 119.

Sealed proposals for any amount of these Bonds, not less than $1,000, will be received until SATURDAY, the fifth day of June, at 5 o'clock, P. M.—Proposals to be directed to Messrs. DE LAUNAY, ISELIN & CLARKE, No. 63 Wall-st., and indorsed "Proposals for Junction Railroad Bonds."

Twenty per cent. of the purchase money to be paid on accepting the bid—the remainder in equal monthly instalments of twenty per cent each. The takers of the bond to be at liberty to pay at any time in full. Interest on the bonds to run from date of payment.

The above $450,000 Bonds will be sold absolutely to the highest bidder.

Pamphlets and Maps, and any further information relating to these securities, can be had by application to

DE LAUNAY, ISELIN & CLARKE, No. 63 Wall-st.

To Contractors.

PROPOSALS will be received at the office of the Steubenville and Indiana Railroad Company in Newark, from the 1st to the evening of the 8th day of June, 1852, for the Grubbing, Clearing, Grading and Masonry of that portion of the Steubenville and Indiana Railroad between Coshocton and Newark, being about 35 miles in length, and comprising some heavy cuts and fills, and a Bridge across the Muskingum River.

Bids will be received in sections of about one mile each, or for the entire division.

Profiles and specifications, with approximate estimates of quantities, can be seen at the Offices in Steubenville and Newark after the first of June.

J. BLICKENSDERFER, Jr.,
Chief Engineer.

Steubenville, April 26, 1852.

Railroad Commission Agency,

166 PEARL ST., NEW YORK.

THE subscribers are prepared to furnish Railroad Companies with the most approved patterns of Railroad Iron. Also, Chairs and Spike, Passenger and Freight Cars, Locomotive Engines, and Railroad Track and Depot Scales, at manufacturers prices.

Orders are Solicited.

JOHN STRONG. WM. T. PINKNEY, Jr.

REFERENCES:

Simeon Draper, New York; John Bradley, Burlington, Vt.; Duryee, Forsyth & Co., Rochester, N. Y.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway, New York. 7tf.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston.

Dissolution of Copartnership.

THE Copartnership heretofore existing between the subscribers under the firm of CHOUTEAU, MERLE & SANFORD, is this day dissolved by its own limitation. Either of the partners will sign the name of the firm in liquidation.

PIERRE CHOUTEAU, Jr.,
GUILLAUME MERLE,
JOHN F. A. SANFORD.

New York, May 1, 1852.

N.B. The Iron Department of our business, and the concerns relating thereto, are assumed and will be continued by P. CHOUTEAU Jr., SANFORD & Co., and we ask reference of our friends to the following notice of that firm.

CHOUTEAU, MERLE & SANFORD.

May 7, 1852,

COPARTNERSHIP NOTICE.

The undersigned have this day formed a copartnership, under the firm of P. CHOUTEAU, Jr., SANFORD & Co., for the transaction of a General Iron Commission and other business.

P. CHOUTEAU, Jr.,
J. F. A. SANFORD,
U. A. MURDOCK.

New York, May 7, 1852.

The Iron Business heretofore conducted by the late firm of Chouteau, Merle & Sanford, is assumed and will be continued by us.

P. CHOUTEAU, Jr., SANFORD & CO.

Steam Engines and Tools.

ONE Horizontal Steam Engine, of superior workmanship and material—12 in. cylinder, 3 feet stroke, on heavy bed frame of 4,600 pounds weight, well finished in all respects.

One Steam Engine finished as above—10 in. cylinder, 3 feet stroke.

A sample of the above Engines may be seen at Bogardus' Iron Buildings, corner Centre and Duane sts., and at Platt & Brother's, Maidenlane, N.Y.

Two 6½ feet Planing Machines, of the most approved pattern, strong and heavy, will plane 31 in. wide, and fitted up in the very best manner.

Six 2 feet 4 in. Planers, will plane 12 in. wide, and work with quick motion, well adapted to locomotive tools and engine work.

One 12 foot Lathe 25 inch swing, with counter shaft, etc., complete.

Also, Boiler Punches, Power Shears, Presses, and other Tools, Shafting, Pullies, Hangers, and Machinery of all kinds fitted up in the best style.

Apply to the MATTEAWAN MACHINE CO., Matteawan, Dutchess Co., N. Y.; near the Hudson River Railroad Depot, at Fishkill.

4t21 A. L. ACKERMAN, Agent.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

FILES.

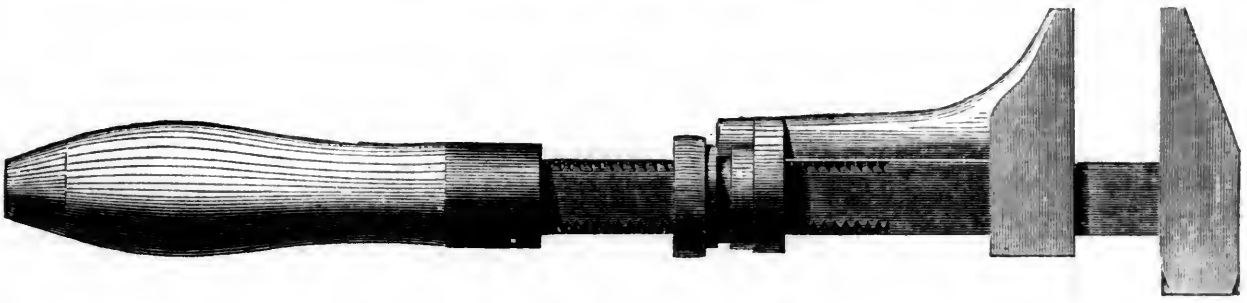
THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make. WM. BAILEY LANG,

3t 18 No. 9 Liberty Square, Boston.

M. B. Hewson, *Civil Engineer,*
(Open to a New Engagement,)
Memphis, Tenn.

TAFT & GLEASON'S IMPROVED SCREW WRENCH,

MANUFACTURED BY LOGAN, VAIL & CO., 9 GOLD ST., NEW YORK.



THE Manufacturers desire to call the attention of the HARDWARE TRADE to the above article, as they believe it to be in all respects superior to any Wrench made in this country. The inventor has been engaged for several years in perfecting improvements in this Wrench, and he is warranted by the annexed certificates in saying, that it is the only kind that has been practically tested in Machine Shops and on Railroads without a single failure. The importance of having a tool of this kind, of the very best quality, is best understood by those who use them, and the trade will see the necessity of keeping goods of this kind that can be fully relied on by the Mechanic and Engineer.

The improvement in Taft & Gleason's Wrench, (the patent for which is applied for,) consists in the main bar being left square, the thread being cut on the four corners. This plan leaves the bar much stronger than by having circular edges, or a round bar, while, at the same time, the nut is as strongly secured as by any other mode of connection, and is as easily managed. The Wrench will be seen at once, by any mechanic, to unite in the highest degree, simplicity with strength and durability.

Sizes Nos. 6, 8, 10, 12, 15, 15 extra, and 21 inch.

The following certificate was given by a committee appointed by the Society of Master Mechanics and Locomotive Car Builders' meeting in Boston once in each month, for the purpose of examining new and useful inventions appertaining to their different kinds of business, and which are calculated to be of use to the public generally.

—

BOSTON, March 1, 1852.

Having examined the Screw Wrench invented by Geo. C. Taft and John Gleason, and compared it with other wrenches formerly used by us, we entertain the highest opinion of its superiority over any other wrench now before the public, and do not hesitate to give the following opinion:

The Wrench is stronger than any other we have ever examined, from the fact that the thread being cut on four corners, leaves the bar much stronger than when cut on two circular edges, or on a round bar, for, in the two last cases the bar must be very much reduced to allow it to pass through the sliding jaw, thereby weakening the main bar very much.

A. S. ADAMS, Sup't Locomotive Power,
B. and W. R.R.
G. S. GRIGG, Sup't Boston and Prov. R.R.

—

The following vote was passed at a monthly meeting of the Association of Master Mechanics of New England. It was voted that the report upon Taft & Gleason's Wrench be accepted. It was voted that the members of this Association encourage the use of Taft & Gleason's Wrench as the best in use.

JOHN B. WINSLOW, Secretary.

BOSTON, March 6, 1852.

BOSTON, March 23, 1852.

This is to certify, that I have used Taft & Gleason's Improved Screw Wrench for the last year, and I find it the best wrench I have ever used, both for durability, convenience, strength, and style of finish.

A. S. ADAMS,
Sup't Motive Power, B. & W. R.R.

—

BOSTON LOCOMOTIVE WORKS, April 1, 1852.

This is to certify, that having used Taft & Gleason's Improved Screw Wrench for the past year, I find it to be the best wrench in point of strength, durability and convenience, that I have ever used.

EDWARD T. TROFFITER,
Agent for Hinckley & Drurys.

—

BOSTON AND FITCHBURG R.R. Co.

This is to certify that we have used Taft & Gleason's Improved Screw Wrench for the last year, and find them superior to any screw wrench we have ever used, for convenience, strength and durability.

OLIVER AYRES, Master of Loco've Shop.
JOHN. A. KIMBALL, " Car "

—

This is to certify, that we have used Taft & Gleason's Improved Screw Wrench for the past year, and feel bound to say that it is superior to any wrench we have ever used for convenience and durability. W. H. SCOVILLE & SONS,
Chicago, Ill.

BOARDMAN'S PATENT Steam Boiler and Furnace,

FOR LOCOMOTIVES, STEAMBOATS, AND STATIONARY PURPOSES. It is fully demonstrated that this Boiler effects a saving of 50 per cent of the fuel used by the best flue boilers, and 40 per cent of the amount required by locomotive boilers. Its form and construction insure great strength and durability. It is convenient in use, its flues never clog, and no sparks nor smoke can escape from it.

Pamphlets of certificates will be sent to persons desiring it. Single and territorial rights are sold on reasonable terms. For further information, apply to

H. BOARDMAN, 128 Fulton-st., N. Y.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch. WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st

UNITED STATES CAR-SPRING COMPANY.

OFFICE 25 CLIFF ST., NEW YORK.

HAVING purchased Fuller's Patent for the United States for manufacturing INDIA RUBBER CAR SPRINGS, and erected an extensive Factory, with the most improved machinery, we are prepared to furnish to Railroad Companies and Car Builders, *Rubber Springs* of as good quality as ever before offered, and at the reduced price of *Fifty cents* per pound for *Cash*.

Only the *best quality* of Rubber is allowed to be used and the manufacture of our Springs is under the supervision of one of the most experienced Rubber manufacturers in the United States.

We also manufacture all kinds of HOSE, not only for Railroad, but all other purposes, to which it can be applied; PACKING of all qualities and thickness, and BUCKETS of every size, of a superior quality. Terms favorable, and prices such as to offer great inducements to the public.

All orders promptly filled by addressing either the Selling Agent, D. S. DODGE, No. 25 Cliff street, or GEO. T. M. DAVIS, Secretary and General Agent.

DIRECTORS:

Anson G. Phelps, of N. Y. Wm. E. Dodge, of N. Y.
Alfred Kelley, of Ohio, Edmund Burke, of N. H.
Horace H. Day, of N. J. Geo. W. Pratt, of N. Y.
David S. Dodge, of New York.

DAVID S. DODGE, President.
GEORGE W. PRATT, Treasurer.
GEO. T. M. DAVIS,
Secretary and General Agent.

New York, May 18th, 1852. 3m

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Ogden & Martin's ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our Cement for public works or other purposes. We warrant the cement equal in every respect to any manufactured in this country. It attains a great degree of hardness, setts immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength.

For sale in tight barrels, well papered, at their office by OGDEN & MARTIN, 104 Wall st.

February 16, 1850. 1y*

The above cement is used in most of the fortifications building by government.

ARTIFICIAL LIGHT
FOR RAILROADS.

LANTERNS FOR LOCOMOTIVE ENGINES with argand burners and Reflectors of a true parabola, were introduced by the subscribers in May, 1840, since which time we have supplied the following named Railroad Companies with them, viz:

Androscoggin & Kennebec,	Michigan Central,
Albany and Schenectady,	Mad River and Lake Erie,
Auburn and Syracuse,	Manchester and Law'ce.
Boston and Providence,	Mansfield and Sandusky,
Boston and Worcester,	Macon and Western,
Boston and Lowell,	Nashua and Lowell,
Boston and Maine,	Newburyport,
Buffalo and Rochester,	N. Hampshire Central,
Columbia and Philad.,	N. York and N. Haven,
Columbus and Xenia,	Norfolk County,
Cheshire,	Northern, N. Hampshire,
Connecticut River,	" New York,
Conn and Passumpsic,	Norwich and Worcester,
Cocheco,	N. Orleans & Carrollton,
Cuba,	N. London, Willimantic
Eastern,	and Palmer,
Erie,	Old Colony,
Essex and Manchester,	Port., Saco and Ports'th,
Fitchburg,	Rutland and Burlington,
Fall River,	Richmond and Petersb'g,
Great Falls and Conway,	Saratoga & Washington,
Hartford and New Haven,	Stonington,
Hart., Prov. and Fishkill,	Syracuse and Utica,
Hudson River,	South Reading Branch,
Kennebec and Portland,	Vermont Central,
Lowell and Lawrence,	Vicksburg and Jackson.

In all cases our Lanterns have given satisfaction. The reflectors are made with great care, are heavily plated with pure silver, and every part of the work is strong and substantial.

The reflectors are similar to those used in the United States Lighthouses as now furnished by us. The United States Commissioners for running the North Easterly Boundary line, procured of us a small parabolic reflector with an argand burner of ⅞ inch diameter, and Major Graham, in his report to Congress, says the light was distinctly seen thirty miles, and was used in establishing the lines.

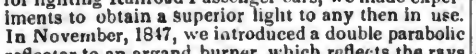
Having heard complaints of the artificial lights used for lighting Railroad Passenger cars, we made experiments to obtain a superior light to any then in use. In November, 1847, we introduced a double parabolic reflector to an argand burner, which reflects the rays of light in a direct horizontal line parallel with the sides of the car and over the heads of the passengers, thus avoiding the inconvenience of a concentrated light. These lamps are esteemed the best in use, and are sold at moderate prices.

Samples of our Locomotive and Car Lamps may be seen at Messrs. Bridges & Brothers, 64 Courtlandt street, New York.

HENRY N. HOOPER & CO.,
No. 24 Commercial St. Boston.

May, 1852.

To Contractors.



OHIO AND MISSISSIPPI RAILROAD, EXTENDING FROM CINCINNATI TO ST. LOUIS.

SEALED proposals will be received at the offices of the undersigned in the cities of Cincinnati and St Louis, until the 15th day of June next, for the grading, masonry and bridging, of the following portions of the above road.

First—From Cincinnati, extending 72 miles westerly, to the intersection of the Madison and Indianapolis railroad.

Second—From Illinoistown, opposite St. Louis, extending 50 miles easterly, to a point near the town of Carlyle.

Maps and profiles of the line will be ready for exhibition and all the necessary information will be given at the above offices on and after the 24th inst.

For the remaining 213 miles, proposals will be received from such parties as desire to bid for the work upon their own examinations and such information as the Engineers will be able to give, the character of the country being uniform and preliminary surveys in progress.

Co-partnership firms bidding for the above work will please give the full name and Post-Office address of each member of the firm.

H. C. SEYMOUR & CO.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides a free and perfect ventilation without unpleasant draughts; its use preserves the interior fitings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALE.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

—

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Obligo us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
29 Central Wharf.

Boston, June 1, 1851.

Rubber Springs.

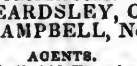
THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

1852.  1852.

PEOPLE'S OSWEGO LINE,
New York and Oswego,

ARE prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.
LEWIS & BEARDSLEY, Oswego.
JAMES W. CAMPBELL, New York.

AGENTS.
James W. Campbell, 111 Broad st., New York.
W. H. Clark, 60 Quay st., Albany.
Lewis & Beardsley, Oswego.
Smith & Hunt, Toledo, Ohio.
C. W. Bissell, Detroit, Mich.
C. Walker & Son, Chicago, Ill.
H. H. Hurlbut, Western States.
May 15, 185

Bowling Tire Bars.

40	Best	Flange	Bars	5½x2 inches,	11 feet long.
40	"		"	5½x2 "	7 feet 8 in. long.
40	"	Flat	"	6x2 "	11 feet long.
40	"		"	6x2 "	7 feet 8 in. long.

Now in store and for sale by
RAYMOND & FULLERTON,
45 Cliff street.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms. RICHARD MAKIN,
April 22, 1852. 65 Broad st., second floor.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Phila'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

—

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly. HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction.

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction – India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, *Agent*

CHILLED RAILROAD WHEELS.—THE UNdersigned are now prepared to manufacture their Improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the ubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St., below 13th,
Philadelphia, Pa.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

" Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

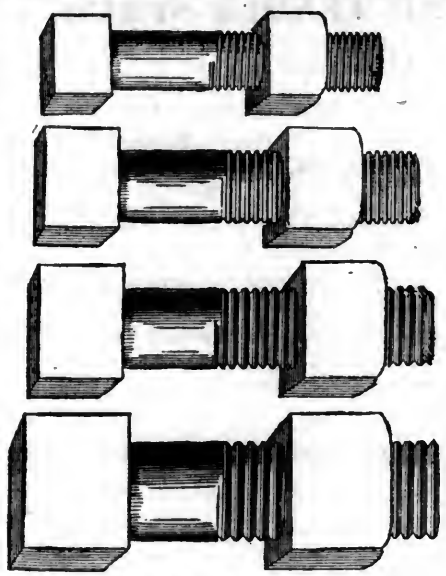
The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Slide Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

N. A. BARRETT, Agent,
75 State Street, Bosto .

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS

HAVE FOR SALE

Plain Garnet Plush.		Fig. Garnet Plush	(Butterfly pat.
" Crimson "		" Crimson "	(Elegant.
" Scarlet "		" " "	(Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold.	These goods can be furnished in any dimensions req'd.
" " Silver.	
Do. Silver ground velvet printed.	

CURLED HAIR

Of every description and quality.
New York, 1850. 1y16

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr, Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself.* Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

RAILROAD
India-rubber Springs.

IF any Railroad Company or other party desires it, the NEW ENGLAND CAR SPRING CO. will furnish India-rubber Car Springs made in the form of washers, with metalic plates interposed between the layers, or in any other form in which they can be made; in all cases guaranteeing the right to use the same against any and all other pretended rights or claims whatsoever.

F. M. Ray, 104 Broadway, New York.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 24] SATURDAY, JUNE 12, 1852. [WHOLE No. 843 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Milwaukee and Mississippi Railroad.....376, 369
Lieut. Maury's Memorial to Congress in reference to the River Amazon.....371
Statistics of cost of operating Railroads.....373
Mississippi River and its Tributaries.....373
Georgia Central Railroad.....374
Railroads in Massachusetts.....374
Terre Haute and Alton Railroad.....374
Railroads in Ohio.....374
New Albany and Salem Railroad.....374
Fox River Valley Railroad.....374
Internal Improvement Debt of Virginia.....375
Railroads in the British Provinces.....376
Syracuse and Binghamton Railroad.....376
Taft and Gleason's Screw Wrench.....376
Sherry and Byram's Clocks.....376
Henderson and Nashville Railroad.....376
Danville and Illinois Railroad.....376
Stock and Money Market.....377
Lexington and Big Sandy Railroad.....378
Bellefontaine and Indiana Railroad.....378
Louisville and Memphis Railroad.....379

American Railroad Journal.

Saturday, June 12, 1852.

Milwaukee and Mississippi Railroad.

JOHN CATLIN, ESQ.,

President M. and M. R. R. Co.,

Sir: In compliance with your request, I have passed over one of the proposed routes of the extension of the Milwaukee and Mississippi railroad from Milton, to which point it is now located, to the Mississippi river at Prairie du Chien.

The road, as you are aware, is now in operation to Eagle Prairie, a distance of 36¼ miles; thence to Whitewater, a further distance of 13¼ miles, the grading will all be completed in the month of June ready for the superstructure. From Whitewater to Milton, a further distance of 12 miles, the line is located, and the contractors are getting on a large force which will complete it by the first of August. The ties for the whole distance to Rock river are purchased and delivered along the line of the road. If therefore the iron is on hand in time, every thing else will be ready, so that the road can be opened to Milton by the month of August, a distance of 62 miles.

From Milton, the route which I followed crossed the Rock river at the Indian ford, thence through Fulton and Cookville and along the valley of Catfish creek to Madison, the capital of the State. From Madison, the route followed, is along the east shore of the fourth lake and one of its tributaries, to the head waters of the valley of Black Earth creek, which is reached in about 8 miles from Madison. The route thence is down this valley to the Wisconsin river at Arena. From this point I examined closely both sides of the Wisconsin valley to its junction with the Mississippi river at a point four miles below Prairie du Chien, and thence up the valley of the Mississippi to that place.

From Prairie du Chien, I returned across the county of Grant in a southeasterly direction to Galena, and thence to Chicago.

My object in pursuing this course was to embrace as much country in my examination that would be tributary to our road as my limited time would admit of; that I might speak as well of the probable amount of business which would come upon the road, as of the general character of the route.

First then as to its feasibility. On this point I have already stated that 62 miles of the road are located and nearly completed, and eight more under contract, in all 70 miles. In this distance the maximum grade is 34·3 feet per mile, of which there is only 4000 feet; and the radius of the smallest curve 3000 feet, excepting a curve of 1900 feet at the Whitewater depot.

From Rock river to Madison, a further distance of about 30 miles, a preliminary survey has been made, which shows the route to be as favorable in point of expense, grades and curves, as the average of the 70 miles preceding it. We therefore know to a certainty the physical characteristics of one hundred miles of the route, being about one half of the entire distance.

From Madison for eight or nine miles, examinations sufficient have been made to determine that this distance is entirely feasible and within a moderate expenditure. This brings the route into Black Earth valley, down this and the valley of the Wisconsin and up the valley of the Mississippi to Prairie du Chien, a distance of about eighty miles, there is one uniform level plain on which the road can be constructed. I have never passed over the same extent of country any where, either prairie or anything else, over which a road can be constructed as cheaply, besides the course will be exceeding direct. There is one section extending from a point two miles east of Arena, down the valley of the Wisconsin to Richland city, a distance of about 24 miles, which may be a straight line.

The soil is a coarse sand, well suited for ballasting the road, and ties are everywhere in abundance. The Wisconsin river is navigable for steamboats some 150 miles above its mouth, and there are now three of a small class running regularly upon it. But lumber is rafted 300 miles down it. The current from the point where the route first strikes the river to its mouth, in low water cannot exceed 1½ mile per hour. This fact fully demonstrates the favorable character of the grades, the maximum of which will not exceed, I think, 15 feet to the mile, but a large portion of the 80 miles must be level, or nearly so. The result of my examinations therefore is, that the maximum grade will not exceed 34·3 feet per miles, of which there will not be more than one or two miles; and that a large portion of the line will be straight, and the grades level, or nearly so. In regard to the cost of the route, it is somewhat hazardous to venture an opinion without a location and a careful estimate having been made. But as 70 miles of the route are about completed, and under contract, we can judge by comparison with some degree of accuracy. This 70 miles when completed ready for use, with the necessary equipments, station houses, etc., will cost $1,250,000, or at the rate of about $18,000 per mile. It must be kept in mind that this portion of the road was the first constructed in the State, before it had been demonstrated, too, that railroads could be made to pay in the new western States; and therefore the work has been done to some disadvantage; having in consequence of its being a pioneer work in the state of Wisconsin, cost some $2,000 per mile more than the same work could now be contracted for. From Rock river to Madison a distance of 28 miles, I think it may safely be said, can be completed with the necessary additional equipment and station buildings for $16,000 per mile, and from Madison to Prairie du Chien, some 90 miles, at the rate of $14,000 per mile. In fact, 80 miles of this distance can be graded nearly for the superstructure, except the bridge over the Wisconsin, at $4,000 per mile—this would make the average cost about $15,000 per mile. That the road can be completed and fully equipped for $15,000 per mile, with a reasonable degree of good management, I have no manner of doubt.

Before leaving this part of the subject, I would state, that some have supposed, who have casually examined this valley, that it would be necessary in grading the road to cut through the "Bluffs," as they are called—these points are composed of a pliable sand stone, so easily pulverized, that an excavation can be made thro' them without blasting. There are but three points where it might become a question whether it would be economy to encounter the bluffs, or not. One of these points is at the shot tower and the other two below it, and the three confined to the north side of the valley. On the south side, it would be going out of the way to encounter them. It only remains for me to speak of the probable amount of business which will come upon the road when completed. In doing this, I do not intend to go into details, for the reason that I have not the time to examine and prepare them, nor do I think it essential. It is sufficient for me to know from actual observation, in order to form my opinion as to the profitableness of the work, that the route passes through a highly productive country, diversified with the richest of *level* and rolling prairie land, and extensive "burr oak openings" in the midst of plenty of timber for fuel and fencing, and well supplied with pure water, and with all, in a healthy climate.

The soil and climate admit of raising all the varieties of farming products, which the western States are celebrated for producing, in great abundance. It is no disparagement of the country to say, that the wheat crop has failed for three years in succession. The result of grain raising in all the States shows that it is attended with like periodical failures. Up to within three years time, no State in the Union raised more bountiful crops and a better quality of wheat than was raised in this State; and these same results will again be produced.

All that can be said in regard to the failure of the wheat crop is, that it has produced a temporary embarrassment in the country, but out of which a benefit will result to the farmers. Up to the time when the wheat crop failed, no other kind of grain was so easily raised, and consequently nothing else was attempted. The farmers are now diversifying their crops, and turning their attention to the raising of stock, for which no State is better adapted.

The building of this road is to give a great stimulous to the farming interest of the State, and indeed to all other kinds of business: every acre of land which comes within the influence of this road will be doubled and trebled in value as soon as it is completed. In the spring and fall, when the farmers would most prefer to haul their produce to market, as the navigation is then open, the roads are literally impassible except in the few cases where plank roads have been built. The soil is a deep black vegetable earth, which makes it so productive, but which renders it the worst kind of material for common roads.

The route which I have described also passes through extensive beds of lead ore, from which large quantities of lead are annually transported by teams to the Mississippi or Milwaukee, and a considerable amount over very inferior roads from 100 to 120 miles to Milwaukee, for shipment. This must furnish an article of considerable freight upon the railroad. From Milwaukee to the Wisconsin river, the country must be supplied with pine lumber for building purposes, either from that river, or from Lake Michigan; and as the country increases in population, the demand for this article must also increase, which must at once, and is certain to be, a large item of freight for the railroad.

The Wisconsin river extends about 300 miles above the point where the road first approaches it, into one of the most extensive pineries in this western country; from which is sent down annually immense quantities of pine lumber in rafts to various points on the Mississippi river. I can see no reason why the supplies for this large population engaged in lumbering will not find its way over our road to the Wisconsin, and then up that river, instead of first coming to Galena, as at present, and then up the Mississippi and the Wisconsin, to the point where our road reaches the latter, 190 miles above Galena, which could not fail of making a large traffic.

I have enumerated some of the principal scurces of local business on which the road can rely, and although stated in general terms, yet it seems to me they must be sufficient to convince any one that they will afford an ample return for the investment in the road. But when I add that this road being about 190 miles in length, connects on the west with the Mississippi river, which is navigable for 1,800 miles below, and 800 miles above, the point where the road terminates, with 1,000 miles of lake navigation on the east, and that each floats a commerce almost unequalled, it does seem to me that the question of the profitableness of the investment in the road is put beyond a question.

There are now three roads in the course of construction from Lake Michigan to the Mississippi river; two radiate from Chicago, one terminating at Rock Island and the other at DuBuque; and the third from Milwaukee, and terminates at Prairie du Chien.*

These roads are practically about the same distance apart on the Mississippi, it being about 100 miles from Rock Island to DuBuque, and about 60 miles from DuBuque to Prairie du Chien; they are also about the same length, from 180 to 190 miles each. The cost of the Rock Island road will be about $25,000 per mile; the Chicago and Galena road, as far as Freeport, about $20,000 per mile; and from Freeport to DuBuque, a distance of 67 miles, about from 30 to 40,000 dollars per mile.

The grades and curves of the Rock Island road I am not informed of, but presume them to be very favorable. On that portion of the Chicago and Galena road, coming east from Galena, there are six miles in connection of 42 feet per mile, and the summit is 512 feet above Lake Michigan. On the Milwaukee and Mississippi road the maximum grade is 34·3 feet per mile, and the summit is 500 feet above the lake. Such briefly are the physical features of the several routes; and as between the Chicago and Galena, and the Milwaukee and Mississippi, the grades and height of summit are in favor of the latter. Now as the great bulk of the business which is to pass over the entire length of a railroad between Lake Michigan and the Mississippi river, is to pass to and from the Upper Mississippi, Northern Iowa and Minnesota, it becomes important to consider the position of each road with reference to it.

In the first place, for the business here claimed, I think the Rock Island road could not be said to be in a position to compete with either of the other two, as it is too low down the river. The competition, if there be any (certainly there will be no occasion for any, as each will have all it can do without attempting to draw from its neighbors,) will be between the two latter.

For the travel passing between the east and the Upper Mississippi, I propose to take Chicago as the common point, which is certainly giving the Chicago and Galena road all it can claim. From Chicago to DuBuque the distance is 187 miles; thence to Prairie du Chien by steamboat up the Mississippi, the distance is about 65 miles.

Again from Chicago to Milwaukee, by steamboat on Lake Michigan, the distance is 90 miles; thence by the Milwaukee road to Prairie du Chien the distance is about 190 miles—the two routes are therefore essentially equal in respect to the aggregate distance of each, and in their respective proportions, of railroad and steaming. Taking into consideration the superiority of the lake navigation over the navigation of the Mississippi river, and the fact that we have 100 feet less summit than the Chicago route, and much better grades, I am quite confident that we can make the distance between Chicago and Prairie du Chien, via Milwaukee, in less time than it possibly can be, by Galena. It is also important to consider the position of the terminus on the Mississippi river in respect to the surrounding country, and also in respect to the commerce of the river. Prairie du Chien, the point I have chosen as the terminus of our road for the present purpose, is a level tract of land, extending about eight miles along the river, about 1½ mile wide, and about equi-distant above and below the village. The approach to the river at this point is very favorable, and the shore is straight for some two miles, and presents a natural levee, so that an interchange of freight and passengers can, at all stages of the water, be made between the steamboats and railroad.

It is stated by those familiar with the Mississippi, that there are but two other points below this as favorably situated, to wit: Rock Island and St. Louis. Nearly opposite Prairie du Chien, is a valley running back into Iowa, which affords a natural outlet for the freight and travel of the northern portion of that State, and where a railroad may be constructed at a moderate cost. In fact it was the point selected by Mr. Whitney for his railroad to the Pacific. The northern portion of Iowa is settling rapidly, and will furnish a large business for a railroad. Minnesota is also settling rapidly, and is more accessible, as is all the Upper Mississippi country, to Prairie du Chien than any point below it. In fact, Prairie du Chien was settled as a trading post by the "American Fur Co.," on account of its ease of access to a large tract of country.—We therefore shall have at least an equal advantage with the other route for the *through travel* between the east and the country bordering the Upper Mississippi. But when the railroad along the lake shore, from Chicago to Milwaukee, is completed, the surveys for which are now being made, we shall be able to offer superior advantages for the through passenger business. It is also expected that a connection will be in a short time formed across Lake Michigan, from Milwaukee to the mouth of Grand river, with a railroad across the State of Michigan, either by the extension of the Detroit and Pontiac railroad through the capital of the State and down the valley of Grand river—an application for a grant of land to aid which is now before Congress—or by a branch from the Central, or perhaps by both. This will shorten the route

* In the present communication I have considered the road as terminating at Prairie du Chien. I would however state, that there are other points, and other routes, than the one I have described, which will require to be carefully examined before the final location is settled.

about 150 miles, and make it the quickest and pleasantest for the through travel between the east and the Upper Mississtppi.

In regard to freight and the great proportion of immigrant travel, this will be the route, as it will always be the cheapest and quickest. At all events it has 150 miles less water transportation. The great bulk of freight and immigant travei will always pass around the lakes to and from Buffalo, Dunkirk, etc. No railroad will ever be able to compete with the lakes in the transportation of freight, which may now be sent around the lakes, 1,000 miles, at the rate of $1 50 per ton.

By the comparison which I have made between this and the other two routes leading to the Mississippi, I have not intended to detract one particle from their just claims. They occupy important positions and will always have as much business as they can do, and will rank among the best paying railroads in this country. But I claim an equal importance for this route, and have endeavored by comparing it with those, and by stating its advantages and resources to show that the claim is well founded.

As soon as the Milwaukee and Mississippi railroad is in operation to Whitewater thirteen and a half miles beyond where it is now completed, it will need no further arguments to prove its profitableness. It will then be at a point where it can begin to command the business of the country and must pay a large interest upon its cost. This point will be reached in about six weeks time.

All of which is respectfully submitted,

EDWARD H. BRODHEAD, Chief Engineer.

Milwaukee, June 1st, 1852.

New Locomotive.

The Lowell News notices a large locomotive just built by the Lowell Machine Shop company for the Hudson River railroad.

It is a large and splendid thing, with somewhat of a new model, the connections being all on the outside, and the boiler being let down as low as the axle of the drivers. Its drivers are 7 feet in diameter—piston stroke 22 inches—18 inch cylinder—steam ports 18 inches long by 1 1-4 inches wide, and the exhaust port 14 by 3 1-4 inches wide—diameter of boiler 42 inches—with 139 copper tubes 12 feet long and 2 inches in diameter on the outside, running through the boiler. Weight, when equipped for the road, 55,275 pounds—empty 50,250.—The tender, when filled with wood and water, weighs 35,200 pounds—when empty, 16,565. This locomotive is intended for great speed, to compete with the boats on the Hudson between Albany and New York.

New Hampshire.

Northern Railroad.—At a meeting of the stockholders of this road, held at Concord, New Hampshire, yesterday, the following gentlemen were elected directors for the ensuing year:—Onslow Stearns, John R. Brewer, George W. Nesmith, William J. Walker, Joseph B. Walker, John A. Burnham, George A. Kettell.

Important Railway Consolidation.

It is stated upon reliable authority, that it is contemplated to unite the New York and New Haven and Hartford, New Haven and Springfield railroad companies, making one stock and one interest from the city of New York to Springfield. Both these companies have petitioned the Legislature of Connecticut now in session at New Haven, for the necessary powers to enable them to carry out this project.

The River Amazon.

THE MEMORIAL OF LIEUTENANT M. F. MAURAY,

(Presented in the Senate, by Mr. Hunter, of Virginia, May 10, 1852.)

To the Senate and House of Representatives in Congress assembled, respectfully showeth—

That he has for a number of years been engaged with investigations concerning the winds and currents of the sea, particularly as it regards their bearings upon commerce and navigation.

In the course of these investigations, many facts and considerations have been suggested which have a practical bearing upon some of the great interests of State, and your memorialist hopes, therefore, that he may be pardoned for spreading before your honorable body some of the results and conclusions to which he has been led.

On account of the currents which flow through, and the winds which blow over, the Gulf of Mexico, the Gulf of Mexico is, for many of the practical purposes of commerce and navigation, a closed sea. Hence commercial men and navigators have maintained that the real outlet of the Mississippi river to the ocean is not at Belize, but in the straits of Florida.

Similar agents have placed the commercial mouth of the Amazon, not where the river empties into the ocean, whi h is under the equator, but they have removed it far up into the northern hemisphere, and placed it near the commercial gateway of our own Mississippi.

If drift wood from the Andes, in the interior of South America, be set afloat upon the head waters of the Amazon, and if another log be felled from the Rocky Mountains, in the interior of North America, and cast upon the head waters of the Missouri, these two pieces of drift, taken to represent the currents of their rivers and of the seas into which they may empty, will each, obeying the force of the winds and set of the currents, be drifted out upon the broad ocean through the Florida pass.

The prevailing winds at the mouth of the Amazon are the S. E. trade winds, and no vessel coming out of the mouth of that river can stand to the southward on account of the winds and currents, both of which are directly in the teeth of all sailing vessels that attempt to steer such courses.

Passing a few leagues to the north, the outward bound Amazonian then enters the region of the N. E. trade winds, which compel her, unless she be bound into the Carribbean sea, to stretch off to the northward and westward until she has passed through the region of the N. E. trades, and gained the parallel of 25 deg. or 30 deg. north, by which time she finds herself off our own coast.

Now, this is the cause of all vessels under canvass from the Amazon, whether they be bound to Rio de Janeiro, in Brazil, to India, or to Africa, or any of the markets of the Pacific around Cape Horn, or to the commercial marts of Europe. Be their destination what it may, unless along the Spanish main, or through the Carribbean sea, they must first steer north to cross the belt of N. E. trades, and in doing so, they must pass by our own doors.

Therefore, for the peaceful and practical purposes of commerce and navigation, there is but one highway from the mouth of the Amazon. On that highway the southern Atlantic ports of the United States occupy the position of half-way houses on the great market way that is some day to lead from the valley of the Amazon to the rest of the world. That market way we overlook. The winds and the waves have placed the keys of it in our hands. Let us not, by non-use, suffer it to fall into the hands of others.

If we regard the whole continent of America at one view, we observe, that in the equatorial regions, it is nearly cut in twain to receive an arm of the sea, skirted on the east by the chain of islands, the Great and Little Antilles, which extend from the peninsular of Florida on the north to the mouth of the Orinoco on the South; that this land-locked arm of the sea is separated from the Pacific on the west by a narrow neck of continent called "the Isthmus." On the north this same arm of the sea receives the drainage from the valley of the Rio Grande, the Mississippi, and the Alabama rivers; on the south the surplus waters of the Amazon, the Orinoco, the Magdalena, and Atrato, are emptied into it also. This sheet of salt water may, therefore, be treated of as an expansion of the Mississippi on the north, and of the Amazon on the south.

Regarding this magnificent marine basin as a commercial receptacle, we may search the world in vain for another such feature in physical geography wherewith to compare it. It is unique. And for its commercial capabilities, it must forever remain unsurpassed and unequalled.

It has a semi-continent on the north, and another on the south. When it is seed time on one side of this continental receptacle of agricultural and commercial wealth, it is harvest time on the other.—Being between the two hemispheres, with their opposite seasons, it will have a round of crops always in the market. Six months after the first delivery of the new crop from the north, a fresh crop from the south will be in the act of coming forward.—The Mississippi river gives drainage and a commercial outlet to the largest and most fertile valley of the northern hemisphere. The river basin of the Amazon (for the Orinoco is connected with it by a natural canal, and therefore belongs to the system) is the largest and most fertile in the world.

The Mississippi, taking its rise near the parallel of 50 deg. north latitude, runs south. At every step it changes its latitude; with its latitude its climates are changed; with its climates the productions on its banks are also changed. Consequently, the trader, as he descends the Mississippi, beholds, at every turn, some new article of produce—some fresh variety of merchandize offering for commerce. And by the time he crosses the tropic of Cancer, and bounds out through the commercial mouth of this river upon the blue waters of the Atlantic ocean, he will have crossed the climate and the region for every agricultural staple; and ranged through all the capacities of field and forest in the northern hemisphere, from barley, furs, and peltries, down to the list of tropical productions.

The Amazon, on the other hand, runs east, and its navigable tributaries, flowing both from the north and the south, push the intertropical varieties from field and forest, far down towards the circle of Capricorn, in the other hemisphere.

The Mississippi has but reached the sugar producing latitude, where it expands out upon the Gulf of Mexico. The Amazon takes up the list where the Mississippi leaves it; and, commencing with sugar, it yields in great profusion, and of fine quality, coffee, cochineal, cocoa, cotton, tobacco, hemp, indigo, india-rubber, wax, gums, drugs, and resins. With cabinet woods and dye-stuffs of great beauty and of infinite variety, this splendid river basin completes the commercial round by the addition to the above list of many other articles from the field, the forest, and the mine, of rare value or great worth. In the commercial circle, these two river basins are the supplements of each other—when one lacks, the other has to spare.

The foundations of commerce rest upon diversity of climate; for without diversity of climate, there can be no diversity of productions, and consequently no variety of produce, which begets barter, and thus gives rise to commerce.

The continent of Europe, extending from the Polar basin, reaches no further to the south than the parallel of 36 deg. north; consequently, none of the climates due any of the parallels between 36 deg. north and the equator are to be found in Europe; and if not the climates, certainly not the productions.

Now, it is a fact in physical geography that is worthy of remark in this connection, where the continent of Europe ends, at that degree of latitude begin the river basins of India, which, extending from the parallel of 36 deg. north far down into the intertropical regions of this hemisphere, have enriched with their produce and their commerce every nation of Europe that has ever ventured abroad with her merchantmen in search of it. And why? Simply because the latitudes and the climates, and consequently the productions of India, were not to be found in Europe; and the Europeans wanting them, sent to India for them. In like manner, the people of India wanted the productions of Europe. Hence barter and the foundation of all commerce may be referred to difference of latitude and climate.

But to exchange the produce and the merchandize of the north frigid and north temperate for the north torrid zone, the European had to encounter a

tedious and dangerous navigation, and he had withal to compass such a distance, that the time taken for his vessel to go and to come once, occupied the full year.

On the other hand, we have at our very doors this great valley of the Amazon, with all, and more than all, in the climate and soils and agricultural capabilities of India twice told.

The distance under modern improvements of navigation, from our southern ports to the mouth of the Amazon, in not as many days as India used to be in months from Europe.

The valley of the Mississippi extends, according to the computation of physical geographers, over an area of 982,000 square miles, that of the Amazon and its confluents, with the Orinoco as one of them, embraces that vast area more than twice over. The great Amazonian valley is said by the same authority to cover an area of upwards of two millions of square miles in extent.

The Mississippi river is computed to afford a litoral navigation of 15,000 miles in length; some put it down as high as 20,000. But the Amazon and its majestic tributaries wind through an inland navigation to such an extent that, if stretched out in one line, its length would be enough to encircle the earth three times. It is set down as high as 80,000 miles. The Amazon is said to be navigable for vessels of the largest class up to the foot of the Andes. The *Pennsylvania* 71, may ascend that high.

And so traversed with navigable streams and water-courses is the great Atlantic slope of South America, that there are in it no less than 1,500 miles of "furos," or natural canals, through which it is practicable for vessels to cross from one river over into another.

Were this valley settled upon and subdued to cultivation, "the Indies," in a commercial sense, would thereby be lifted up and placed at our doors, for all the productions of the East flourish there; and so jealous and afraid of such a result was Portugal, in her day of East India possession and commerce, that by a royal ordinance it became unlawful to cultivate in the great Amazon basin a single drug, spice, or plant of East India growth or production.

The republics of Ecuador, Peru and Bolivia have large and rich provinces upon the head navigable waters of the Amazon, so that the free navigation of that river, or an exchange with Brazil, and the other powers concerned, of the free navigation of the Mississippi for that of the Amazon and its tributaries, would at once, and without more ado, give rise to a considerable commerce. As to its prospective value and importance it is useless to speculate.

The navigation of the Amazon would divert from the Pacific coasts of those republics a valuable portion of that trade which now goes around Cape Horn, and reaches this Amazonican water shed by transportation on the backs of sheep and asses, across the summits of the Andes.

A remarkable feature in the profile of the South American coast line is its want of articulation.

The shore-line of that part of the world is almost as stiff and rigid as the three sides of a right-angled triangle, which it resembles. It is without any considerable indentation; and nowhere among the southern continents do we find those jutting promontories and peninsulas, or those encircling arms and gulfs of the sea, which in the Northern hemispheres so increase the length of the shore-line and give that articulation to the continential profiles which enables ships, as in the Mediterranean, the Red Sea, the Gulf of Mexico; about the peninsula of India, and the northern seas of Europe, to sail up into the interior, and penetrate with commerce the very heart of countries, that, but for such indentation of shore-line, would be thousands of miles from the sea and its commerce.

At best trading vessels by sea can but fringe with commerce the outskirts of South America, for its shore-line, as already mentioned, is without indentation,—As yet, the heart of that country has never been touched; and unless its magnificent rivers and majestic sheets of fresh water be opened to navigation, the commercial enterprise of the world never can reach the great interior of South America. Naturally the whole of that continent, except the narrow strip between the summit of the Andes and the Pacific ocean, slopes down to the Atlantic. It is tributary to the Atlantic, and into the Atlantic it is destined to pour its commerce. The country drained by the Amazon and La Plata embraces an area larger than the continent of Europe. The navigation of those streams would divert a large portion of the Cape Horn trade, and throw it at our feet; for we perceive, from the statements already made, that on account of the winds and currents of the sea, the mouth of the Amazon is in close physical connexion with our southern ports—and to make that connexion one of business, profit and friendship, we have but to devise a plan which, by encouraging commerce and navigation there, shall, with the concurrence of the other powers concerned, give an impulse also to the settlement of that valley, and secure to our merchants the right of trade up and down that river on fair and liberal terms.

Bearing in mind, therefore, all these things, and taking into consideration the geographical position of that river basin, and our climate with regard to its outlet—considering its climates, its soils, its resources, and its capabilities; that the foundations of its prosperity are to rest on a liberal commercial policy, and that its industrial pursuits must receive a tone, character, and direction from those who conduct that commerce—considering that it is the policy of the United States to cultivate the relations of peace with all nations through the bonds of mutual interests and good will—considering also, that this river basin is for the most part a wilderness, and that it is, therefore, like wax, to receive impression from commerce—considering, too, that the laws of Brazil touching immigration into that valley are said to be of the most liberal character—considering, moreover, the toleration of those laws; and the classes of people who are already there;—considering all these things, let it be repeated, your memorialist is deeply impressed with the importance of the subject. He beholds in it a question of immense magnitude. The question of navigation and commerce with the Amazon, and up the Amazon—the greatest river, and the most fertile river basin in the world—is the greatest commercial question of the day.

The bearing and influence of such a question upon the future well being and prosperity of this country cannot, for their scope and extent, be taken in, unless by the most expanded view of the most far-sighted statemanship.

Your memorialist, therefore, prays for such constitutional and rightful legislation on the part of your honorable bodies as shall tend to encourage commerce and navigation with that magnificent water-shed. Among the collateral results incident to judicious course of legislation now upon such a subject, may be counted sooner or later, a tide of immigration there, followed by settlement and village, which in turn will lead to the developement of the boundless commercial resources of that unparalleled region, and to the establishment of those business ties, social relations, and happy connections which active commerce and frequent intercourse never fail to beget between nations.

Immagine an immigrant—a poor laboring man he may be—to arrive from the interior of Europe as a settler in the valley of the Amazon. Where he was, his labor could but support himself in the most frugal manner, and then he was no customer of ours. But in his new home, where, with a teeming soil and fine climate responding to his husbandry, and where the labor of one day in seven is said to be enough to crown his board with plenty, he works with his wonted dilligence, and out of his abundance he has wherewithal of his produce—coffee it may be, or drugs, or spices, or cocoa or rice, or tobacco, or some other of the great staples of that valley; but be what it may, he has enough to give largely in exchange with us for all the manufactured articles, whether of fancy, necessity, or luxury, that he craves the most. In the long list of what the immigrant there will require of us may be included that great assortment of goods known as "Yankee notions;" also pickled beef and pork, hams and flour, butter, lard, and the like, for the climate of the Amazon is not favorable to the production and stowage of any of these things. It is peculiarly unfavorable to the curing of meats and the grinding of flour; it is also unfavorable for all indoor occupations. And in the settling up of the valley of the Amazon, considering that New York and Boston are but eighteen or twenty days under canvass from the mouth of that river—considering that the winds are fair for going, and free for coming; and the Atlantic ports of the United States are the only market places for which the winds are thus propitious, considering all the physical advantages which we thus enjoy, and regarding this immigrant as the type of a class—it may be expected, whenevhr the tide of immigration, guided and sustained by American enterprise and energy, shall begin to set into that valley, that New York and Boston with the manufacturing states, will have to supply these people with every article of the loom or the shop, from the axe and the hoe, up to the gala dresses and river steamers.

The man, therefore, who in his native Europe, could not buy a cents worth of American produce, simply by being transferred as a settler in the valley of the Amazon, becomes at once a producer, and one of the best customers to American merchants that it is possible for a commercial people to have; and Europe is ready, as soon as American commerce backed by American energy, shall give the world tangible evidence of the riches and resources of that county, to pour forth its hordes into it.

Not only so would its settlement enrich us, but in other respects also it would add to our national greatness and prosperity; for it may be set down as an axiom in political economy, as true as is the Catholic proposition of geometry, and in order that communities of men may forsake the land, take to the sea, use it and become seamen, it must be easier to earn a living at sea than on the land belonging to such communities.

Hence we find the severe climates and barren soils of the north sending forth their young men in crowds down to the sea for a living; but never will men, and never have men been known to forsake cheap lands, rich soils, and fine climates, for the sea life.

The valley of the Kenebec and the Merrimac, and the shores of Cape Cod, may send forth of their yeomanry to make sailors of; but we have never yet heard of young men in any considerable numbers, forsaking their homes in the teeming valley of the Mississippi, for the dangers, the hardships, and the scanty fare of the common sailor at sea.

And neither will the immigrant or his son forsake the mild climate and kind soil of the Amazon, for the sea. American merchants, American ships, and American sailors, will therefore be the chief competitors for the fetching and carrying of all that trade to which, in process of time, two or three hundred millions of people in the valley of the Amazon, and which it is capable of sustaining, will give rise.

The commercial future of that valley is the most magnificent in the world.

It belongs mostly to Brazil, and our trade with Brazil is already greater than it is with any other country whatever, excepting only England and France.

From the United States to Rio the voyage is long and uncertain, and our merchants are falling into the habit of conducting their Brazillian correspondence through England. There is a monthly line of steamers thence to Rio; its time of going is 29 or 30 days; the average sailing passage from New York to Rio is from 40 to 50 days. Hence it is more convenient for the business man to send his letters via England.

Now, there is a line of steamers from Para, at the mouth of the Amazon, to Rio. A line from Norfolk to Para, equalling in speed the Collins line to Liverpool, would make the passage in eight or ten days. At the same rate the distance to Rio might be accomplished in another week or ten days, thus bringing that great commercial mart of South America within twenty instead of forty days of our business men.

All the lines of ocean mail steamers that have yet been directly encouraged by the United States government on the waters of the Atlantic have their terminus in New York.

No direct encouragement to steamship enterprise has been given by the government to any port south of New York.

Your memorialist is opposed to centralization, and therefore for this, as well as for other reasons, prays that Norfolk or Charleston, or some other southern Atlantic port, may be made the terminus

of a line of United States mail steamships to Para, touching at Porto Rico, and such other West India Islands as may be agreed upon.

Another reason why the preference in this enterprise should be given to a southern port, is the distance, for the southern ports are nearer than those of the north to the mouth of the Amazon. And to ask that these steamers should pass by southern ports with South American correspondence, to be landed at the north and sent back through the mails to the south, would seem both unfair and unreasonable to your memorialist.

Moreover, he has ventured to specify only one of a series of measures which it may be necessary to adopt, in order to develope, for the benefit of American navigation, the great commercial wealth of the Amazon. He contents himself with specifying this one, because in his judgment, it is highly expedient and of pressing importance.

And, as in duty bound, your memorialist will ever pray, &c.

M. F. MAURY.

Pennsylvania and Ohio Canal.

At a meeting of the Pennsylvania and Ohio canal company, held on the 21st inst., Francis Freeman, Frederick Kinsman, Samuel Quinby, Jacob Perkins, Seth Day, Hyman Gratz, and Thomas Webb were chosen directors. Henry W. Smith and Jas. F. Porter have been appointed State directors by the government of Ohio. Thomas D. Webb was elected president, and Saml. Quinby secretary and treasurer.—*Warren Transcript.*

Statistics of Railroads in Massachusetts.

Below we give an extract from a report of the committee of investigation upon the Western railroad, Massachusetts, which presents some interesting statistics in reference to the cost of transportation by railroad.

Cost of maintenance of way and of repairs of engines and cars, on each of the following roads, per mile run by trains, from 1846 to 1850 inclusive—five years.

Road.	Miles run by trains.	Maintenance of way. Dollars.	Ditto. per mile. Cents.
Western	3,696,713	600,049	18·66
Boston and Worcester	2,063,632	321,521	15·72
Boston and Me.	1,812,422	206,136	11·37
Fitchburgh	1,557,937	127,307	8·17
Boston and Lowell	1,202,088	269,440	22·41
Eastern	1,856,136	142,048	10·45
Boston and Providence	1,165,079	152,328	13·07
Old Colony	901,543	95,734	10·57
	13,755,550	2,004,536	14·57

Road.	Repairs of engines and cars. Dollars.	Ditto per mile. Cents.	Total per mile. Cents.
Western	547,651	14·56	33·22
Boston and Worcester	355,621	17·23	32·95
Boston and Me	191,209	10·55	21·92
Fitchburg	148,356	9·39	17·56
Boston and Lowell	296,380	24·65	47·06
Eastern	97,659	7·20	17·65
Boston and Providence	133,136	11·42	24·49
Old Colony	109,318	12·12	22·69
	1,879,330	13·66	28·23

The above table contains the cost of maintenance of way, and repairs of engines and cars, per mile run, in five years, (1846 to 1850 inclusive,) on the Western, Boston and Worcester, Boston and Maine, Boston and Lowell, Fitchburg, Eastern, Boston and Providence, and Old Colony railroads.

It will be seen by this table that, during the five years specified, the aggregate of miles, run by all the trains, on all the roads named, amounted to 13,755,550 miles; and that the aggregate sum expended by all for maintenance of way, was $2,004,563; and for repairs of engines and cars, $1,879,330; and that the total expenditure, for both these objects, was $3,883,893.

The table will further show the average amount expended by each road, per mile run, during the five years.

The general result furnished by this table is this:—

The average sum paid for maintenance of way by any one road, per mile run, by trains, during the five years, was 22·41 cents. The least average of the same was 8·17 cents; and the mean of the whole was 14·57 cents.

The largest sum paid for repairs of engines and cars, for the same time, per mile run, was 24·65.—The least average of the same was 9·39; and the mean of the whole was 12·66 cents.

The largest average sum paid by any one road, in any one year, for maintenance of way and repairs of engines and cars combined, was 49·8 cents; and the least sum paid by any one road for both 11·4 cents; and the mean of the whole was 28·23 cents per mile, run for both.

In the case of the Western, its maximum (1847) for both was 39·4 cents, its maximum (1850) was 30 cents, and its average for the five years 33·22 cents.

The following table exhibiting the quantity of work done in five years, [1846 to 1850 inclusive,] on each of the following roads, expressed in passengers carried one mile and in tons of freight carried one mile; also the gross expenses of each road for the same period. For the purposes of this comparison the cost of transporting a passenger one mile and a ton of freight one mile is assumed to be the same.

Roads.	No. of pass. and no. of tons carried 1 mile aggregate.	Gross expenses.	Cost per passenger or per ton per mile carried.
Western	213,925 952	$2,937,593	1.373 cents.
Bost. & Wor.	126,499,466	1 899,845	1.502 "
Bost. & Me.	92,997,700	1,237,515	1.330 "
Fitchburg	82,702,400	1,077,169	1.302 "
Bost. & L'ell.	82,227,452	1,258,519	1.535 "
Eastern	74,720,643	955,066	1.318 "
Bost. & Prov.	50,118,288	860,220	1.716 "
Old Colony	36,198,135	721,912	1.994 "
	759,390,026	10,977,839	1.445 cents.

The above table, it will be seen, contains a statement of all the work done on all the roads before named in five years, [1846 and 1850 inclusive.] It exhibits also the entire cost of doing the work; that is to say, all three classes of expenses are included, being the amount expended of every kind, except interest on capital.

The general result furnished by this table is as follows:—

759,390,026 passengers or tons of freight were transported one mile on all roads named, during the five years specified, at a gross cost of $10,977,839; and to do this work the trains ran 13,765,550 miles. The table will show that the maximum cost was 1,961 cents per passenger or per ton, carried one mile; that the maximum cost was 1.302 cents; and that the mean or average of the whole was 1.445 cents per mile. In the Western, its figures stand: 213,925,952 passengers or tons carried one mile, at a gross cost of $2,937,593; and the average or mean cost, 1.373 cents per mile.

The following table shows the useful effect produced—being the amount of available or paying work done for each mile run by trains in the five years, [1846 to 1850 inclusive,] expressed in passengers or in tons, carried one mile.

The general result is this:—

13,755,550 miles were run by trains, 759,390,026 passengers or tons of freight were moved one mile, and the average number of passengers or tons of freight carried for each mile run by trains was 54,-12. The maximum number was 68·4; the minimum 40·0; mean 54,12.

In the case of the Western 3,696,713 miles were run by trains; aggregate of passengers and tons carried, 213,925,952: average number carried for each mile run, 57·9.

It will be observed that no allowance has been made to compensate for the 2,000 feet and upward of elevation which the Western road has overcome between Albany and Worcester, nor for the heavy grades by which the principal summits are passed. It is plain to be seen, however, that with grades not exceeding those of the roads with which the comparisons are made, a large increase in the number of tons transported for each mile run would be exhibited in the table.

Table exhibiting the useful effect, or work done, for each mile run by trains on the following roads from 1846 to 1850, inclusive, expressed in passengers and tons of freight carried one mile.

Roads.	Aggregate of miles run by the trains.	Aggregate of pass. and tons of freight.	Average number carried for each mile.
Western	3.696.713	213,925,952	57·9
Bost. & Wor.	2.063,632	126,499 456	61·3
Bost. & Maine.	1,812,422	92,997,700	51·3
Fitchburg	1,557.937	82.702 400	53·8
Bost. & Lowell	1,202.088	82,227.452	68·4
Eastern	1,356,136	74,720.643	55·1
Bost & Prov.	1,165,079	50,118,288	43·0
Old Colony	901,543	36,198,135	40·0
	13,755 550	759,390,026	54·15

The Mississippi and its Tributaries.

The St. Louis Christian Advocate of a late date, contains a highly interesting article on the "Topography and Hydrology" of the Mississippi and its numerous tributaries. The author was unable to ascertain precisely the distance to which each stream was navigable; but he was satisfied himself that the aggregate exceeds *twenty thousand* miles. From this fact some idea may be formed of the vast influence which this stream and its tributaries are to exert upon the commerce and industry of the North American continent. It will be seen from the recapitulation which we subjoin, that the total length of "the Great River," with all its parts, is 51,000 miles.

Rivers.	Miles.
Mississippi and its tributaries, not including those given below, aggregate length	14,381
Red and all tributaries—aggregate length	4,125
Arkansas " "	5,540
White " "	1,650
Ohio " "	10,750
Missouri " "	12,170
Illinois " "	1,270
Wisconsin " "	675
Mississippi, with all its inlets	50,561
Outlets of bayous (in all)	439
Total length of "The Great River," with all its parts	51,000

The New Orleans Chamber of Commerce have memorialized Congress on the importance of removing the existing obstructions to commerce at the mouth of the Mississippi, and state that some idea may be formed of the immensity of the outward current of trade through it from the average annual quantity of value of the following articles, which are the chief but by no means the whole of the productions of the south and west which seek their market through this obstructed channel.

		Value.
1,000,000	bales cotton	$35,000,000
60,000	hogsheads tobacco	4 500,000
50 000	hogsheads sugar	2,500,000
100,000	barrels molasses	900,000
600,000	barrels flour	2,400,000
375.000	barrels pork	4,500,000
59,000	hogsheads bacon	3,500,000
1,150,000	kegs lard	4,200,000
52,000	barrels beef	364,000
400.000	pigs lead	1,200,000
800.000	sacks corn	800,000
	Making together the sum of	$59,904,000

Add to this a variety of other products, amounting by well authenticated records to $30,000,000, and an aggregate of $90,000,000 will be shown to be the amount of this outward current of trade.

They state also that within the last few weeks nearly forty ships have been aground on the bar, for various periods, from two days to eight weeks; some of which were compelled to throw portions of their cargo overboard, and others to discharge cargo into lighters, before they could be got through the channel, occasioning heavy expense to the goods, and great straining and injury besides involving pecuniary losses which cannot be estimated at less than $500,000.

They further state that the duties of importations on foreign productions brought into the country

through this channel within the last year, and collected in the city of New Orleans, was $2,260,790; which added to $700 000 calculated there, but collected in the ports of Cincinnati, Louisville and St Louis, making a total of nearly three millions of dollars of revenue which goes into the coffers of the Federal Government.

The advantages obtained by means of this twenty thousand miles of navigable rivers are unequalled in any other nation or section of country of the same dimensions, and when are added to this distance, the thousands of miles of lake, river, canal, and railway navigation, now in operation and progress in this country, there will be found an aggregate of over fifty thousand miles of inland navigation; all useful and navigable, to a certain extent, well employed. By reason of some natural obstructions, or periodical accumulations, some of the water routes are much impaired in their capacities. Among these are the obstructions at the mouth of the Mississippi, and the bar in the Hudson, at Castleton, the most important outlets of our inland commerce.

These are both works which have in former years been under the protection and care of the Federal Government, whence it is now most natural to look for aid. The prolonged existence of these impediments would be seriously felt by our foreign commerce as well as by the cities on the sea board as both are in a great measure dependent on the inland country, which sends forth its products by these channels, for their heavier and more bulky articles of food and commerce. And no sooner will our foreign commerce commence to droop from these causes, than the resources of the government will suffer a comparative diminution; the revenues of the conntry will be cramped, and the stimulous which is now urging forward new lines of improvement by the promise of rich rewards in the returns of both inland and foreign commerce, will lose its vitality, and its power of momentum will disappear.

This view of the subject renders it a matter of the highest importance that these obstructions should be removed speedily, and that all proper encouragement should be extended by the Government to internal improvements. Good policy dictates such a course as favorable to commercial advancement no less than as a protection to the ordinary revenues, requisite to defray the expenses of the Government.

Great solicitude is also expressed by those interested in lake and river navigation, for the construction, at the expense of the Government, of a Ship Canal around the Falls at Saute Ste Marie, and another around the falls of the Ohio near Louisville, together with the construction of some lake piers and light-houses and the removal of obstructions on the St. Clair flats and at the mouths of several harbors. All these are in a greater or less degree important as effecting the facilities for transportation on the great inland routes.

We are happy to see the Chambers of Commerce in different cities taking decided action on this subject, with the intent to impress Congress with some sense of its importance, and it is also gratifying to know that that body has the subject under consideration, and a bill before it embracing appropriations for some of the above mentioned objects. It is to be hoped it will favor the subject with that investigation commensurate with its magnitude, and take measures to insure for the future the same unparalleled success in commercial pursuits, which has thus far attended the career of this country.

Receipts of Produce at Tide-Water.

The quantity of Flour, Wheat, Corn and Barley left at tide-water, during the fourth week in May, in the years 1851 and 1852, is as follows:

	Flour, bbls.	Wheat, bu.	Corn, bu.	Barley, bu
1851....	137,499	66,615	356,303	33,078
1852....	137,811	192,218	261,261	13,196
Inc...	312	Inc.123,603	Dec.97,042	Dec.19,882

By reducing the wheat to flour, the quantity of the latter left at tide water this year, compared with the corresponding period of last year, shows a decrease of 217,243 barrels of flour.

The following table shows the quantity of some of the principal articles of produce left at tide-water from the commencement of navigation to 31st May, inclusive, during the years 1850, 40 days; 1851, 47 days; 1852, 42 days:—

	1850.	1851.	1852.
Canal open	April 22.	April 15.	April 20.
Flour, bbls.....	373,489	740,814	472,861
Wheat, bush.....	107,221	327,176	583,226
Corn, do.....	509,793	1,749,853	860,767
Barley, do.....	105,714	86,271	60,880
Rye, do.....	91,515	50 617	73,125
Other grains, bush.	290,432	687,323	536,929
Beef, bbls.....	19,862	21,828	14,386
Pork, do.....	33 253	31,479	32,508
Ashes, do.....	12,176	9,579	7,240
Butter, lbs.....	255,414	423,492	46,500
Lard, do.....	1,108 376	7,174,780	3,713,300
Cheese, do.....	1,219,778	650,640	229,400
Wool, do.....	372,505	304,776	116,300
Bacon, do.....	4,191,802	5,711,760	2,911,400

Pennsylvania.

Commerce of Philadelphia.—The number of foreign arrivals at Philadelphia in the month of May were, 73, coastwise do. 2,877, total 2 950. During the same month last year there were, foreign 90, coastwise 2,750, total 2,840. During the first five months of the two years they were as follows:

Arrivals.	1852.	1851.
Foreign.....	269	277
Coastwise.....	7,191	8,364
Total.....	7,460	8,641
		7,460
Decrease.....		1,181

The cash duties collected during the same time were as follows for 3 years:

1852.....	$1,733.947
1851.....	1,699,885
1850.....	1,442,361

Of the emigrants arrived from foreign ports during the first five months of 1852, there were

Males.....	3,062
Females.....	2,257
Total.....	5,319

Coal Trade.—The following shows the amount received from the Schuylkill region:

	Reading railroad.	Schuylkill canal.
Tons this week.....	34,840	25,161
" since Dec. 1st.....	664,051	215,983
Same time last year.....	724,744	143,202

From the Lehigh region, per the Lehigh canal:

Week ending June 1st.....	35,027
This year.....	233,211
Same time last year.....	246,503

Dauphin Coal Company.—The board of directors of the Dauphin coal company at a meeting held a few days since, decided unanimously to extend their railroad to connect with the Reading railroad at Schuylkill Haven or at Port Clinton. The completion of this part of the Dauphin road will give the company 52 miles of railroad from the Susquehanna river to the Schuylkill valley; an improvement of vast importance to themselves and to the extensive works with which they will connect.

Georgia.

Central Railroad and Banking Company.—Statement of the condition of the Central railroad and Banking company of Georgia, at the close of business, on Monday, the 24th day of May, 1852.

Railroad and appurtenances.....	$3,264,189·91
Notes and bills discounted, and bills receivable.....	402 253·99
Due by other banks.....	134,302·07
Due by agencies and other companies	30,779·78
Stocks in other companies.....	466,054·84
Banking houses and other real estate.	17,896·82
Protests.....	36·00
Railroad expenditures.....	256,579·27
Expenses.....	7,008·79
Interest on 7 per cent bonds.....	9,578·50
Notes of other banks.....	18,800·00
Specie.....	72,996·26
	$4,680,476·23
Capital stock paid in.....	$3,267,000·00
Bonds due by the company, 7 per ct.	328,187·00
Bank notes in circulation.....	212,032·00
Suspense account.....	2,538·12
Due other banks and companies.....	63,775·49
Unclaimed dividends.....	17,468·56
Earnings railroad paid in since Dec. 1, 1851.....	535,772·90
Individual deposits.....	84,833·90
Bank earnings.....	29,141·69
Reserved fund.....	139,726·57
	$4,680,476·23

Statement of the business of the Central railroad for six months, ending 31st May, 1852,—contrasted with the six months ending 31st May, 1851.

	1851.	1852.	Increase.
Through freight.	274,151·89	351,927·98	77,776 09
Way freight....	88,086·78	92,361·32	4 274·54
Through passage	32,204·49	35,561·94	3,357·45
Way passage...	26,906·06	38,260·64	11,354·58
U. S. mails.....	10,400 00	16,800·00	6,400·00
	$431,749·22	$534,911·88	103,162·60

Massachusetts.

Nashua and Lowell Railroad.—It appears from the annual report of this corporation, submitted at the late meeting in this city, that the receipts for the eleven months ending on the 1st of April last, were $114,920 83, of which $47,147 40, was for passengers, $60,585 65 for freight and the balance for mails, rents &c. The total expenditures for the same period were $61,604 35, from which was paid a dividend of 8 per cent for 11 months, leaving a cash surplus of $5,316 48. The Stony Brook railroad, operated by the Nashua and Lowell company, has paid the expenses of operating, the interest on the capital, and left a surplus of $834,01 to be divided. The Wilton railroad, also operated by the same company, by contract, has very nearly paid the expenses of operating.—*Lowell Journal, 2d.*

Boston and Providence Railroad Co.—Judge Warren presided at the annual meeting of the stockholders at the depot in Boston on Wednesday morning. Charles H. Warren, William Appleton, Joseph Grinnell, John Barstow, William Amory, George R. Russell and Samuel T. Dana were chosen directors, each having the whole vote cast, 1415. The road is in good condition, but for several years to come the expenses will be large, as the rails must be relaid. The receipts for the year ending June 30, 1822, (estimated for May and June) will be $411,468 54; and the expenditures $223,325 82. The receipts and expenditures are both larger than any former year. Adjourned to the 10th inst., when the directors will report upon extending aid to the Providence and Bristol road.—*Post.*

Essex Railroad.—A meeting of the stockholders of the Essex railroad company was held yesterday, at Lyceum Hall. Reports were read, from the treasurer and the directors, showing the present condition of the company, and Messrs. William D. Pickman, W. L. Weston, Geo. Wheatland, William D. Northend, and Oliver Thayer, were chosen a committee, to procure the means of extricating the company from its present embarrassment, —to report thereon at an adjourned meeting to-morrow forenoon.—*Salem Gazette 27th.*

Illinois.

Terre Haute and Alton Railroad.—We learn that Messrs. Barnes, Mattoon & Phelps, of Springfield, Mass., are the gentlemen who have taken the contract for the construction of the entire line of this great thoroughfare, extending from this city to Terre Haute, Indiana; a distance of about 165 miles. This firm is well known as one of the strongest and most reliable in the country, and their entire ability to perform any contract they may undertake, is admitted on all hands. They are to build the road, depots, cars, locomotives, etc., in the very best manner; the road to be furnished with rails weighing 60 pounds to the yard, and to be put in complete running order in three years from the 10th of this month, for $3,000,000. It is believed, however, that it will be finished at a much earlier day than that specified in the contract. Messrs. Barnes and Phelps are expected here on the 1st proximo, with a corps of Engineers; and the road is to be built under the superintendence of Mr. Phelps. Too much praise cannot be bestowed upon Capt. Ryder, for the judgment and skill he has evinced in conducting this matter to a successful and highly satisfactory termination.—*Alton Telegraph.*

Alton and Springfield Railroad.—The last number of the Bloomington Intelligencer says, a corps of engineers, under the direction of Mr. Hopkins, reached this place during the last week, and report the ground over which the survey was had, highly favorable to the construction of the road. They immediately returned to Springfield, and are now engaged in the permanent location of the road, preparatory to the letting of the contracts, which it is expected, will take place at an early day—probably in July. The company, we are informed, design having the road in running order by the time, or very soon after, the 6th division of the Central road, extending from this to La Salle is completed. The latter work, it will be recollected by our readers, is to be finished by March next.

The Alton and Springfield company contemplate, at an early day, the survey of a route from here to Morris or Joliet, at one of which places it is expected the above will connect with the Rock Island road, and which, when constructed, will form an air-line between Chicago and St. Louis.—*Ibid.*

Ohio.

Railways to Toledo and to Fort Wayne.—Our readers know that the Dayton and Toledo Railway will in a short time be completed to Troy. Gentlemen are now in the East to procure funds to extend this line north, to Sidney, without delay. At Sidney the line crosses the Indiana and Bellefountaine road, which intersects the Cleveland road, and connects with the line to Pittsburgh. Measures are also in progress to extend the road from Sidney north towards Toledo to Lima, in Allen county. This line is over a level country, where a road may be speedily and cheaply constructed. It is expected that this line will be completed at an early day. At Lima the line is intersected with a line already under contract from Fort Wayne. It is confidently expected that a railway connection between Cincinnati and Fort Wayne will be opened by these lines in 1853. When the line from Lima to Crestline, on the Cleveland road is completed, a connection by these lines will be opened from this city to Dayton, to Fort Wayne, to Cleveland and to Pittsburgh, and all before the close of the year 1853.—*Cincinnati Gazette.*

Cincinnati and Marietta Railroad.—The board of directors of this road have directed seventy miles more of the road to be put under contract, which will complete the connection between Marietta and Cincinnati. Seventy-seven miles were put under contract about a year ago, which will be ready for the iron and cars during the summer of 1853. The board has also directed a survey of a proposed extension of a line from Marietta to Wheeling, to be made without delay. The Wheeling Gazette says:

"The money for discharging the expenses of this new survey has been pledged for some time, rendering it unnecessary to trench upon the funds of the company for that purpose. It is understood that a good route, from Marietta to Bridgeport, exists within the distance of 75 miles at farthest; and it is believed the surveys will prove a still shorter line. Influential parties in Philadelphia are pledged to secure the filling up of this link, between their Hempfield line, and the Great Southwest, simultaneously with the completion of our road to Marietta."

New Albany and Michigan Railroad.

We understand that intelligence was yesterday received from Mr. Brooks, which must prove highly gratifying to all the friends of our railroad. Mr. B. has negotiated a sale of the company's eight per bonds, to the amount of one million of dollars, at par. The whole amount authorised by the company [$2,500,000] could have been negotiated on the same terms; but Mr. B. believed that the remaining $1,500,000 could be disposed of on the same terms six months hence by delaying the sale to which time the interest on this sum will be saved to the company, it having no immediate use for the entire amount at present.

We further learn that Mr. Brooks has purchased seventeen thousand tons of heavy T rail, which will be amply sufficient to complete the road the entire distance from New Albany to Michigan city. This iron has been purchased on much more favorable terms than any heretofore. The greater portion of it is to arrive at New York in a short time and will be immediately shipped to Michigan city, to which place Mr. Brooks will speedily repair for the purpose of contracting for building and finishing of the road from that point to Lafayette. This portion of the road will now be pushed forward to speedy completion, and will be ready for the cars by the time, or before, this end of the road is finished to Crawfordsville.

We further learn that the Northern Indiana and Southern Michigan company have abandoned their injunction suit, now pending in the Supreme Court, having given up all hope of a successful issue. The work is now free from all impediments and embarrassments. Its credit is good, and there is no probability that its future progress will be impeded by injunction suits or for the want of funds. The great railroad of Indiana will be pushed forward to rapid completion.—*N. A. Ledger.*

Boston and Providence Railroad Company.

Judge Warren presided at the annual meeting of the stockholders at the depot in Boston on the 2nd inst. Charles H. Warren, Wm. Appleton, Joseph Grinnell, John Barotow, Wm. Amory, George R. Russell and Samuel T. Dana were chosen directors, each having the whole vote cast, 1415. The road is in good condition, but for several years to come the expenses will be large, as the rails must be relaid. The receipts for the year ending June 30, 1852, (estimating for May and June) will be $411,468 54; and the expenditures $223,325 82. The receipts and expenditures are both larger than any former year. Adjourned to the 10th inst., when the directors will report upon extending aid to the Providence and Bristol road.

Covington and Lexington Railroad.

We learn that Mr. Medberry, who won so excellent a reputation as chief engineer on the Columbus and Xenia railroad, has been appointed chief engineer on the above road. We part with him from Ohio with regret, and congratulate this company on the choice they have made.—*Zanesville Courier.*

Baltimore and Ohio Railroad.

The Baltimore and Ohio railroad extension, is now laid to Tygart's Valley Falls; some six or seven miles north of Fetterman, in Taylor county, Virginia, and will be completed to Fairmount in the course of two or three weeks. The cars are arriving and departing daily.

Maine.

Kennebec and Portland Railroad.—The business on this road, since it has been open to Augusta, has been constantly increasing. The freight and travel is already very large, and the great convenience afforded to the way travel between the towns along the line of the road, together with the cheapness of the fare, has resulted in the daily increasing number of passengers.

Fox River Valley Railroad.

A meeting was held at Dundee, on the 11th ult., for the purpose of taking measures to secure the passage of a charter, at the called session of the Legislature of the State of Illinois, for a railroad, to be built up the Fox River Valley. The names of the following persons were presented by a committee, and adopted by the meeting, as incorporators:

Of McHenry: John Gillilan, Wm. McConnell, H. N. Owen, George Gage, G. W. Earley and Wm. Henry.

Of Kane: J. A. Carpenter, H. E. Hunt, A. Edwards, Thos. H. Thompson, M. C. Town, George Harvey and Geo. B. Raymond.

Of Chicago: E. S. Wadsworth, B. W. Raymond.

The capital stock of the road was fixed at $800,000, with the privilege of chosing directors and commencing operations as soon as $250,000 are subscribed. The following points were determined upon:

Commencing at or near the village of Batavia, on either side of the Fox river, in the county of Kane, and State of Illinois; running thence through, or near to as practicable, the following villages, viz: Geneva, St. Charles, Clintonville, Elgin and Dundee, in the county of Kane; and Algonquin, McHenry and Richmond in the county of McHenry, and thence in a northerly direction to the north line of the State of Illinois.

Virginia.

Internal Improvement Liabilities—The total liabilities of the State of Virginia for works of internal improvement, now in progress is $12,980,976 60, divided as follows, viz: Manasses Gap railroad, $205,450; Side road $723,200; Virginia Central road; $992,200; Virginia and Tennessee road; $2,000,000; Orange and Alexandria road, $600,000; Blue Ridge tunnel and road, $900,000: James River and Kanawha canal, $7,560,126 60.

New York and New Haven Railroad.

On the 13th inst., an election of directors for the New York and New Haven railroad Co., was held, and resulted in the re-election of the old board: Robert Schuyler, Morris Ketchum, Jonathan Sturgis, Anson G. Phelps, Elihue Townsend, Henry J. Sanford, New York; William P. Burrell, Bridgeport; William W. Boardman, New Haven; John E. Thayer, Boston.

At a meeting of the board of directors, held on the 21st day of May, 1852, the following gentlemen were elected officers of the company for the year ensuing, viz: Robert Schuyler, president; William P. Burrell, vice-president and secretary; Morris Ketchum, treasurer; George W. Whistler, Jr. superintendent.

Massachusetts.

Newburyport Railroad.—The Herald says this railroad finds an amount of business already larger than its most sanguine friends looked for in so early a stage of its operation. Its freight business has increased greatly, being 300 per cent. larger than last year. The receipts of the first four months of the present year, in round numbers, were $6,000, and the expenses $4,700. When the severity of the winter, and the storms and snows of March and April are taken into account, this is a very favorable indication for the year, especially as all the great travelling season, from the 4th of July to Christmas, upon which all the railroads mainly rely for their profits, is yet to come.

The cost of the road, 15 miles long, will probably come up to $250,000, including between $30,000 and $40,000 for engines and cars. The road is operated now at a great disadvantage, in conse-

quence of about half the cost of it having been provided for by bonds and a floating debt, on much of which a considerable sacrifice in interest money is necessarily incurred.

American Railroad Journal.

Saturday, June 12, 1852.

British Provinces.

Quebec and Halifax Railroad.—We learn that Hon. Mr. Hincks of Canada, and Hon. Mr. Chandler of New Brunswick, returned in the last steamer, having been unsuccessful in their efforts to secure the guarantee of the British Government to the Provincial debentures, to be issued for the construction of the above road. The refusal of the Home Government was upon the ground that the line proposed by the Colonies was not a *military*, but a *commercial* line. So it seems that Great Britain will not assist the Provinces in anything that will promote their real good, but will aid in the construction of a military work which may be used to increase and strengthen the dependence of the Colonies upon the mother country. The Home Government will lend money, provided this money shall be expended in forging fetters to curtail still further the liberties of her Colonial subjects.

We are surprised at this result for two reasons; first, at the absurdity of establishing a *military* line from Halifax to Quebec, which is to be kept up and maintained by a *railroad*. This road is to run hundreds of miles through a dense forest, and with the whole British army to protect, ten resolute men could render it impassible from one year's end to the other. The opinions of men who insist upon making a railroad between the above points a military line, under the idea that it can be maintained as such, would be beneath contempt in a community of children. One hundred and fifty miles at least of the above line would be through an uninhabited forest, and a single back woods-man, could in a night blow up the track, and interpose obstacles to the passage of trains, which would cut off all communication for a month at a time.

Another reason for surprise is, the total disregard paid by the Home Government to the wishes of the Colonists. The above project has been the great engrossing theme in all the Provinces for the past two years, a greater part of which period, has been taken up in maturing and perfecting a plan upon which all could unite in a common object. This, after infinite difficulty, having been accomplished, under assurances of aid from the Home Government, we supposed that the latter would eagerly seize the opportunity of showing a maternal regard for the Provinces, and of binding them still faster to the central power, by means of the immense debt which the assistance requested, would create. In all this we are disappointed. The result will be, that Great Britain will find this last to be the severest blow which she has ever struck at her American Colonies, and which cannot fail to produce the most deep-seated, and wide discontent; and will contribute not a little toward severing the tie which binds them to her. The Provinces will feel that they have been trifled with, and will certainly resent the slight they have received.

While such are the facts as far as the relations of the Colonies and the Home Government are concerned, we believe that the result will in the end promote the best good of the former. They are competent to the task of building all needed *useful* works. The benefit resulting from a railroad from Quebec to Halifax, was the merest chimera in the world. All the money expended upon it would have been wasted. The Provinces, now thrown upon their own resources, will be governed solely by *commercial* or prudential considerations in the character and direction of their road. There is not the least difficulty in obtaining money in this market upon the Colonial debentures for all works that promise to pay, and no others should be built, no more than should a ship that will not be able to find employment. Thrown back upon their own resources, and with no entangling alliances, and with the pole star of self interest for their guide, they are now in just the right position to move forward with energy and *safety*.

We understand that Mr. Hincks has brought home with him propositions from private individuals to build the contemplated road, taking in pay such means as the Colonies themselves can offer.

New York.

Syracuse and Binghamton Railroad.—We publish to-day the notice of Judge Stephens, President of the Syracuse and Binghamton railroad company, for the letting of contracts for the grading, masonry and bridging, for the whole road. It will be recollected that this work was advertised for letting on the 15th of May last, but in consequence of the large amount of field work to be done, in the examination of the various routes, it was found impracticable to make a final and definite location of the entire line at so early a day; hence the necessity of defering the letting of contracts until the 20th of July.

We are assured that it is the intention of the directors to have a careful and thorough examination of the various routes made, and such a comparison made as will enable them to select beyond a question the most eligible route the country will admit of. We take pleasure in calling attention to the notice, believing that contractors of large experience and ability, will do well to turn their attention to the work now offered for contract.

Taft and Gleason's Screw Wrench.

Attention is directed to the advertisement of Messrs. Logan, Vail & Co., the manufacturers of Taft and Gleason's new Screw Wrench. One of the chief peculiarities which distinguish it from others is, the main bar is square, having the thread cut on the corners. The lip of the wrench is moved by a detatched thumb screw. We have examined a specimen of this wrench, and believe it to be a very great improvement over any other in use, combining in an eminent degree, strength, durability and convenience. We believe they are universally approved wherever used.

Sherry and Byram's Clocks.

Attention is invited to the advertisement of this firm in the present number, by which it will be seen that all varieties of clocks are offered to the public on reasonable terms, which, it is proved by abundant testimony, are capable of keeping correct time through all changes of temperature. This attainment has long been a great desideratum with all clockmakers, but has never before, we believe, been accomplished so as to afford correct time-pieces at cheap rates. If Messrs. S. and B. have succeeded in this respect so as to be able to sell clocks cheap which will keep exact time in all kinds of weather without regulation, they will meet a demand from railroad companies and other sources which will soon compensate them for the years of study and experiment which they have expended.

Wisconsin.

Milwaukee and Mississippi Railroad.—We give in another part of our paper, a report of the Engineer of this work, E. H. Brodhead, Esq., to the company, in which the condition and prospects of this project are fully set forth. Mr. Brodhead is a well known Eastern engineer, whose statements in everything coming within the scope of his profession, will be received with entire confidence.—We invite attention to his report.

The Milwaukee and Mississippi railroad, connecting the great lakes with the Mississippi, occupies one of the *natural* routes of trade and travel in the United States. Above the point where the road will strike the Mississippi river, are at least 800 miles of navigable water courses, which traverse, what is destined ere long to be, one of the finest and best settled portions of the country. The tendency of the trade of this vast region is toward the last, by the *lake* route, and the road connecting lake Michigan and the Mississippi, will intercept this trade at the various points of intersection with the latter. This fact is what gives such importance to the Milwaukee and Mississippi railroad, as it is the most *northerly* line which will for some years be constructed from lake to river, and must of course command the trade of the country *north* of its western terminus.

While this road has all the advantages of position as above stated, its prospects from a *local* business are not exceeded by any western road within our knowledge. It will accommodate at least 20,000 people. That part of Wisconsin traversed by it, will compare favorably in resources, and in possessing a dense and thrifty population, with any portion of the West. It is so recently that this State has been settled, it is hardly possible to believe that a large portion of its territory south of the Wisconsin river, contains 40 inhabitants to the square mile. Yet such is the fact; and this population will turn out as much business to a road, as an equal number in any portion of the United States. The local business of the road above, promises a very large income upon its cost.

Upon striking the Wisconsin, an outlet will be opened for the lumber of that river, from which source a greater part of the State is soon to be supplied with this important article. When this point is reached, the road will not only secure a most lucrative through business, but must prove a great boon to the whole State.

Henderson and Nashville Railroad.

We learn through gentlemen of high respectability, recently from Hopkinsville, Kentucky, that very spirited and enthusiastic meetings, addressed by Hon. A. Dixon, Gen. Hopkins, and other leading men, are being held along the line of the Henderson and Nashville railroad, that more than four hundred thousand dollars of the stock had been secured, that the amount was fast increasing, and that the success of the enterprise was now rendered certain.

This line is about 130 miles long, and can be built ready for the cars at but little over $10,000 per mile. It traverses a fine country and exhaustless mines of the best bituminous coal in the west, which will find a good market both on the Ohio and the Cumberland. It is the southern connection of the Evansville and Illinois railroad, and a northern connection of the Nashville and Chattanooga railroad, to both of which it will furnish a large through business. From its position on the map, this road, being the last link to be put under construction of a great northern and southern route, is

second in importance to very few if any of the railroads now opened in the country.

Indiana.

Evansville and Illinois Railroad.—We invite attention to the advertisement of the sale of the securities of the above road to be found in another column.

This company come before the public, under remarkably favorable auspices, in having an important portion of their road already completed, and free from debt. The extent of line now in operation is worth much more than the sum asked for, the earnings of which will provide ample means for the payment of the interest on the bonds as it shall fall due.

The above road must soon constitute a part of a very important through line extending from Lake Michigan via Terre Haute, Evansville and Nashville, Tennessee, to Mobile and New Orleans. We regard the above as destined to be the great line between the gulf and the lakes. Of its early completion there cannot be a doubt. Already are the people of Kentucky moving on the line from Evansville to Nashville, and their can be no doubt that the connecting link between Vincennes and Terre Haute will soon be supplied.

The city of Evansville is the leading commercial town on the Ohio below Louisville, and is destined to be a city of great commercial importance. Already it is the seat of a very large trade both from Indiana and Kentucky, it is the Ohio terminus of the Wabash and Erie canal now nearly completed, and which will be the longest link of the kind (464 miles) in the world.

The object of the above railroad is to connect the city of Evansville with that portion of Indiana which now makes that city the depot of its trade. But as soon as it shall be extended to Terre Haute, it will be brought into immediate connexion with the railroad system of Indiana, and it will then become an important through route for trade coming up the Mississippi and Ohio. The road is in good hands, and we cannot recommend a security in which we have greater confidence.

Union House.

We invite the notice of distant readers who visit the city occasionally, to the advertisement in this Journal of the above house. It will be found a pleasant and agrecable retreat, where good accommodations may be had at reasonable charges, while the situation is at once eligible to all parts of the city, and quiet, when compared with many other houses in great thoroughfares.

Erie Railroad.

The Erie road have bought six thousand tons best iron in England for their second track.

Stock and Money Market.

The money market continues to present the same general features of great ease, which we have noted for some weeks past. In the ordinary channels of business, money is exceedingly abundant at very low rates. Railroad securities of the first class steadily improve in prices, and all our new projects find but little difficulty in securing sufficient means to push forward their work with energy and vigor. Indications from every quarter are favorable to a continuance of the present state of things.

As a drawback to the advantages arising from the low rates of money, railroad iron has materially advanced within a few weeks past and three to five dollars advance per ton is asked. Fortunately, very large purchases for many of our leading roads was made before the advance took place.

The fancy stock market is not firm. Erie stock has a downward dendency, owing to the unfavorable rumors as to the small *net* earnings of the road. It is stated that a 4 per cent dividend will not be declared in July.

The demand for railroad bonds continues good. The principal recent sales were those of the Junction road, Ohio, which brought from 89 to 95 51½, the average being about 90. The amount offered was $150,000, and bids were put in for over $1,200,000.

Receipts of Long Island railroad company, in six days, from 17th to 22d May, 1852, inclusive, were $3,700 11
Do. for seven days, from 16th to 22d May, 1851, inclusive 3,205, 73

Increase in favor of 1852 ..... $494 41
Last year there was a Sunday train.

The gross earnings of the Western and Atlantic railroad for April, show a large increase over the corresponding month last year, as will be seen by the annexed comparative figures:

	1851.	1852.
From Freights	$280.52 62	$33,152 58
" Passengers	5.636 70	8,734 93
" Mail	1,000 00	1,000 00
Total	$27,487 22	$42,887 51
Increase		15,400 29

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JUNE 12, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¾
U. S. 6's, 1856	106½
U. S. 6's, 1862	111½
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	115½
U. S. 6's, 1868	115½
U. S. 6's, 1868—coupon	120½
Indiana 5's	97
Indiana 2½	51
" Canal loan 6's	90
" Canal preferred 5's	47¾
Alabama 5's	—
Illinois 6's, 1847	77½
Illinois 6's—interest	48
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	100¾
Maine 6's, 1855	—
Maryland 6's	106½
Michigan	—
Mississippi	—
New York 6's, 1854-5	—
New York 6's, 1850-'61-'62	112
New York 6's, 1864-'65	116
New York 6's, ½ y., 1866	116½
New York 5½'s, 1860-'61	107
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	104
New York 5's, 1866	106
New York 4½'s, 1858-'59-'64	—
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	105¾
Ohio 6's, 1860	108¾
Ohio 6's, 1870	114½
Ohio 6's, 1875	115
Ohio 5's, 1865	104
Ohio 7's, 1851	—
Pennsylvania 5's	102
Pennsylvania 6's, 1847,-'53	96
Pennsylvania 6's, 1879	108
Tennessee 5's	90
Tennessee 6's, 1880	108
Virginia 6's, 1886	101½

CITY SECURITIES—BONDS.

Brooklyn 6's	107
Albany 6's, 1871-1881	107
Cincinnati 6's	99½
St. Louis	95½
Louisville 6's 1880	95½
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	108½
New York 5's, 1858-'60	100¾
New York 5's, 1870-'75	103¾
New York 5's, 1890	—
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	107
Baltimore 1870-'90	105½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	116
Erie 2d mortgage, 7's, 1859	108
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	97
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	106
Reading 6's, 1870	83½
Reading mortgage, 6's, 1860	90
Michigan Central, convertible, 8's, 1860	106½
Michigan Southern, 7's, 1860	98
Cleveland, Col. and Cin. 7's, 1859	106½
Cleveland and Pittsburg 7's, 1860	—
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	June 9.	June 2.
Albany and Schenectady	104½	108½
Boston and Maine	109½	109½
Boston and Lowell	108½	107½
Boston and Worcester	106½	106½
Boston and Providence	94½	93½
Baltimore and Ohio	75	76
Baltimore and Susquehanna	32	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	116	117
Eastern	103½	103½
Erie	86½	87½
Fall River	99½	99½
Fitchburgh	105	106½
Georgia	—	—
Georgia Central	103	—
Harlem	71½	72½
" preferred	114½	112
Hartford and New Haven	128	125
Housatonic (preferred)	35	35
Hudson River	62	62
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	109	103
Michigan Central	102½	100
Michigan Southern	118	118
New York and New Haven	111½	111½
New Jersey	136	138
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	54½	55½
Ogdensburgh	30½	29
Pennsylvania	44½	43½
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	79½	78½
Rochester and Syracuse	119	117½
Stonington	52	55
South Carolina	—	—
Syracuse and Utica	128	129
Taunton Branch	115	115
Utica and Schenectady	134	133
Vermont Central	18½	17½
Vermont and Massachusetts	22½	23½
Virginia Central	—	—
Western	107½	109½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Lexington and Big Sandy Railroad.

In another column of this Journal will be found the announcement that the requisite amount of stock had been subscribed to warrant the organization of a company to construct the above road. Since writing that, however, we have been gratified by the receipt of the address of the committee appointed by the Big Sandy railroad convention, which was held on the 15th of April last. The convention here referred to, unanimously resolved that the proposed road from Lexington to the mouth of the Big Sandy was practicable and worthy the support of the community; that the probable cost of the road from Slate creek to the mouth of the Big Sandy, was less per mile than the usual cost of roads in Kentucky, and that the cost of the remainder would not exceed the usual cost of other roads in the state; that the counties through which it is to pass should subscribe liberally to the stock, to aid in its construction; that the city of Lexington will be incalculably benefitted by the construction of this road, and should therefore put forth all her energies in aid of the enterprise; that the stock must yield a large profit, and therefore challenges the encouragement of the capitalist; that all proper means should be used to promote the commencement and completion of the work; that the farmers particularly have an interest in this enterprise, perhaps beyond any other class of citizens, because it brings their products nearer to market, and it is therefore entitled to their consideration and support, and that the commissioners in the several counties be requested to have the books opened for subscription of stock, as soon as the charter will permit, and that they take all necessary means to have the company organized in as short a time as it can be done under the Charter.

The address of the committee on the foregoing resolves breathes a spirit of confidence in the ability of the people on the route, to build the road, pronounces the assertions in the resolves to be self evident truths, and fortifies this position by numerous facts and arguments to show more clearly the resources of the section of country which would be made tributary to this route, and the advantages which would accrue to the merchants, planters, and farmers on the route, by having their places of business and lands, or farms, brought into nearer proximity to the great thoroughfares from the western rivers to the Atlantic.

The beneficent tendency of railroads, the advantages they possess over plank-roads and turnpikes in point of transportation, and over even the best water routes for purposes of travel, and their vast importance where water carriage is out of the question are fully set forth in the address, as well as many other points in their philosophy, which it is not necessary to enlarge upon here, from the fact that they are already pretty well understood by the readers of the *Journal*.

The route proposed for this road consisting of a distance of about 128 miles, is represented with the exception perhaps of 40 or 50 miles, from Lexington to Slate creek, as being the most favorable of any in Kentucky, and this exception is not more difficult than most western roads.

It is estimated that the first forty or fifty miles from Lexington will not cost over twenty thousand dollars per mile, while the remaining eighty miles will not exceed fifteen thousand including cost of cars, depots and all equipments for business, making an aggregate of two millions of dollars. The charter of this company provides for the taking of stock by any county or city through which the road may pass, or indeed for any other county or city to do so.

It is proposed by the committee that the stock shall be taken something as follows:

Clarke county	$200,000
Citizens of Clarke	50,000
Montgomery county	200,000
Citizens of Mongomery	50,000
Bath county	150,000
Citizens of Bath	50,000
Carter county	75,000
Citizens of Carter	75,000
" " Flemming	25,000
" " Greenup	150,000
Contractors to take one fourth in stock	500,000
Manufacturers in iron one fourth in stock	125,000
	$1,650,000

This estimate gives an aggregate of one million six hundred and fifty thousand dollars, and leaves only three hundred and fifty thousand dollars to be raised from other sources. It will be seen that Fayette county and the city of Lexington, are not included in the above estimate.

And in view of the great influence which the construction of this road must have on the interests of Lexington, and Fayette, they are set down for the remaining $350,000, lacking to make up the desired $2,000,000. Aid is also anticipated from Louisville, in the event of the above estimated subscriptions not being filled. The committee further state that they have put down for citizens in some counties larger amounts than perhaps they should have done, but for that wise provision in the charter of the company, which permits citizens to subscribe stock in land, on or near the route of the road, at such prices as may be agreed upon by the commissioners and the party supscribing. By this wholesome provision, many, very many persons who desire to aid in making the road, will be enabled to do so, and not only not injure themselves by doing it, but render themselves much richer, and at the same time aid in this improvement. The landholder is benefited, because by the making of the road, the remainder of his land will be rendered vastly more valuable than the whole was before. The company will be greatly benefited, because the land which they take at its value when subscribed, will be increased in value, perhaps five fold when the road shall be made. This new feature in railroad charters, we are satisfied, will be followed in all time to come. Its beneficial effects must be felt more sensibly to all parties concerned.

Much further argument and illustration is entered into in the address to show how the debts are to be cancelled without becoming a burden on the shoulders of the subscribers by the rise of the value of farm produce, the facilities for getting to market, the large dividends on the stock, and the numerous benefits which the road will, in obedience to the general principal of the construction of more speedy modes of conveyance confer on all those located along its line; but of all this it is unnecessary for us to enlarge, as the numerous points are demonstrated by familiar illustrations, which our readers have been acquainted with for years. It will benefit the farmer by enabling him to get his stock and produce to market at a much cheaper rate and in a great deal less time, besides bringing him late intelligence as to the state of the markets, which will allow him to choose his own time for marketing.

The farmer of Kentucky will thus be on an equality with his neighbors across the Ohio in Ohio and Indiana, by having the privilege of putting his produce or stock on the cars, where it will command the highest price, and taking it to market at once. It will benefit the laborer by developing the vast mineral resources all along the line, thereby raising up blast furnaces which would give employment to hundreds, and create fine home markets for vegetables and farm produce. The coal mines will also be brought to a forward state of exploration by means of this road making another great source of employment for day-laborers. The route passing along within a few miles of the White Sulphur and Olympian Springs, too, will command a large amount of pleasure travel which will help to swell the receipts.

But we can follow the committee no farther.—We are truly rejoiced to see Kentucky awaking to the full importance of railroads, in order to the full development of her magnificent, natural resources. She has a soil second to no other State for most agricultural purposes, and is blessed with water navigation to a great extent, but all these things are available only to a certain extent with railroad facilities for land carriage.

Bellefontaine and Indiana Railroad.

We learn by a letter from the Chief Engineer, that this company commenced laying the rails at Galion, on the 27th ult., and that the road is to be opened to Marion, (20 miles,) in July. The laying of the rails is to be commenced at Bellefontaine early in July, and the track opened to Sidney, [22 miles,] about September; and from Sidney to Leromie Creek, [10 miles,] in October; between Leromie Creek and the Indiana State line, [26 miles,] in November; and between Marion and Bellefontaine, [40 miles,] in December of this year.

On the 17th of this month, the Indianapolis and Bellefontaine road is to be opened to the town of Muncie, 58 miles eastward from Indianapolis, leaving but 25 miles to complete the Indiana line to its eastern terminus and junction with the Bellefontaine and Indiana road.

This short gap will be closed early in the fall, in time to meet the Ohio connexion at Union, where *that* dinner is to be discussed.

The iron for the first division of the Bellefontaine and Indiana road is all shipped from New York, and is daily arriving at Cleveland, and at Galion. The last purchases for the residue of the iron, are now being shipped from Europe, and it is hoped that no detention will take place from its non arrival in time. The spikes and chairs were purchased in this country.

This line is very favorably situated for the convenient delivery of the iron, locomotives, cars, etc., having the Cleveland, Columbus and Cincinnati road running to its eastern terminus, at a distance of only 79 miles from the Lake; the Mad River railroad crossing it about midway, at Bellefontaine, 102 miles from Sandusky city; the navigable feeder of the Miami canal at Sidney, and the main line of the same, at Leromie creek, 25 miles from the western terminus; so that materials can be cheaply shipped from Cleveland, Sandusky and Toledo, to four different points on the road.

There is no doubt that the gap in the Lake Shore line, between Cleveland and Erie will be closed by September; and about the end of the year, we hope to congratulate our railroad friends upon the completion of the long chain from New York to Terre Haute; bringing our city into direct railroad connexion, not only with the Wabash river, but with Madison, Louisville, Cincinnati, etc., on the Ohio, and nearly every part of the State of Indiana.

We learn, also, that the arrangements made by the Ohio and Pennsylvania railroad company, will ensure the completion of that important line to its

western terminus, and in connexion with the Bellefontaine and Indiana road, by the close of this year, when our New York friends must be prepared for a lively competition with Philadelphia, for the immense trade and travel of the west.

Nine hundred and sixty-six miles of continuous railroad from New York to Terre Haute! Who could have dreamed of such a triumph in railroad enterprizes twenty years ago? We can yet scarcely realize the truth, that within a few brief months, we can leave our city and in forty hours find ourselves on board of a steamer on the Wabash river, or stepping upon one of the magnificent floating palaces of the Ohio, at Louisville.

When we find the business on the New York and Erie Railroad already demanding a second track, what may we expect when our continuous lines are extended in every direction, through Ohio, Indiana, Illinois, Kentucky, Tennessee, Missouri, Michigan, &c. The result will probably astonish even the most sanguine calculators.

Louisville and Memphis Railroad.

The Memphis Enquirer speaks of the prospects of this project in the most gratifying manner. A party of engineers are now engaged in surveying the route, and so far as heard from, the examination is satisfactory in the highest degree. From the bridge on Wolf river, where the Randolph road crosses to the point indicated, a route has been found which does not vary a half mile from a direct line; and is so nearly level that the cost of grading is estimated at *less* than $1000 per mile. The very best of timber for the purpose stands thickly along the track. Those who are familiar with the country assure us that for twenty miles further, the country is equally favorable for the construction of a railroad. Indeed, it is believed that the entire route from this to Trenton, will be found to be more favorable to the cheapness of construction, than the same extent of any other road now projected in the State.

A letter from a gentleman at Brownsville, gives the most flattering accounts of the fine spirit that prevails there in regard to this enterprise. Haywood county will take $200,000 county subscription, besides a large private stock subscription. A heavy subscription will be made by the wealthy planters of Tipton, besides, probably a very handsome subscription by the county.

Pennsylvania.

Reduction of Fare.—The Philadelphia American states that the board of canal commissioners of Pennsylvania have adopted a resolution to reduce the fare on the Columbia railroad to 2½ cents per mile, in consequence of which the directors of the Pennsylvania railroad company will immediately lower the fare to Pittsburg to $9 by the boat, and $10 by the stage. The fare from Philadelphia to Massillion will be $18 50, and to Cleveland $11.

Union House, New York.

THIS new and commodious house is now open for the reception of guests. Having an eligible situation in a quiet part of the city, it offers many inducements for families visiting the city for a few days, who can be accommodated with suites of rooms at low rates. Warm and cold baths can be had free of extra charge on application at the office. This house is convenient to the landing of the Collins' line of Steamers, and the Canal street Depot of the Hudson River railroad, and stages to all parts of the city are constantly passing the door. Board $1 50 per day.

A. A. BURR, *Proprietress*,
6m24 279 Hudson-st., near Canal.

Notice to Bridge Builders.

OFFICE OF CENTRAL OHIO R.R. Co.,
Zanesville, May 14, 1852.

SEALED PROPOSALS will be received at this Office until Monday, June 7th, 1852, for the Superstructure of a Double Track Railroad Bridge, with a foot passenger way attached, across the Muskingum River, at Zanesville. The whole length will be 528½ feet, divided into four spans of 124½ feet each in the clear. The Bridge seat on the abutments will be four and a half feet; and upon the four piers six and a half feet each.

Proposals will also be received for building a Draw or Pivot Bridge of forty-six feet span, in the clear, across the canal at Zanesville.

Bids are solicited for either Iron or Wooden Bridges, and may be made upon plans submitted by builders.

ROBERT MAC LEOD, Chief Eng.

Railroad Iron.

THE undersigned are now prepared to enter into contracts to deliver Railroad Iron free on board at shipping ports in Great Britain, or at ports in the United States.

P. CHOUTEAU, JR., SANFORD & CO.,
May 17, 1852. No. 51 New st.

Evansville and Illinois R. R.

SALE OF $350,000 SEVEN PER CENT MORTGAGE and Convertible Bonds, of the Evansville and Illinois Railroad Company.

The Evansville and Illinois Railroad, commencing at the city of Evansville, Indiana, on the Ohio river, extends up the Wabash valley, and will connect more or less, directly with all the railroads converging at Indianapolis the capital of the State.

It is an important link in the central line of railroads connecting the Northern lakes with the Southern seaboard. The whole of this chain of roads is either already in operation or approaching completion, excepting the Henderson and Nashville Railroad, to which a sufficient amount of stock has been subscribed to insure its early construction.

The main trunk of the E. and I. R. R., reaches from Evansville to Terre Haute, a distance of 107 miles, and the Company is authorized also to construct a divergent line from any part of the main trunk direct to Indianapolis. It is intended at once to complete the line to Terre Haute, where it will intersect the Terre Haute and Indianapolis and the Terre Haute and St Louis roads.

The present issue of bonds provides for the completion and equipment of the first section of the road, extending from Evansville to Vincennes, a distance of fifty-one miles, where it joins the Ohio and Mississippi Railroad. The engineers' estimate of the cost of this section, ready for the cars, does not exceed $10,500 per mile.

More than one half the distance, 27½ miles, is finished and in successful operation, its earnings being more than enough to pay the interest on the bonds now offered. The residue is already under contract, or being let; 11 miles extending to White river will be completed in time to secure the early fall business, and the remainder during the ensuing winter and spring. The iron for the whole 23½ miles has been purchased, and a considerable portion is now going forward. The contracts have all been made below the estimates.

The means at the disposal of the company, applicable to the construction and equipment of this section of the road, are as follows:

Stock subscriptions	$345,300
Earnings to 1st April, from transportation and other sources	16,500
Present issue of bonds	350,000
Total	$711,800

Evansville is the depot of the Southern trade of the Wabash valley and of Green river, Kentucky. It is the most rapidly growing city in Indiana, and now contains 7,000 inhabitants. The population has doubled, and the taxable property trebled, in six years. The arrivals and departures of steamboats at its wharf in 1831, were 5,398. The Wabash is the most fertile of all the western vallies, and produces more corn and hogs than the same area in any other section of the country. It is also marked out by nature as a great route of travel.

The position of the E. and I. railroad guards it against competition for the through travel of a vast region of country in and adjacent to the lower Ohio, while its local business must be sufficient to well support the road. When completed to Vincennes, it will give a cut off railroad route from the Ohio at Evansville, to the Mississippi, at St. Louis, of 196 miles, against the present river route of 370 miles, and from Evansville to Cincinnati of 241 miles, against the present river route of 350 miles. In either case, the distance will be performed in less than one third the time now required by the river.

The bonds are for $1,000 each, redeemable 1st January, 1862, principal and interest payable at the Phenix Bank in New York, the coupons for the latter on 1st January and 1st July. They are convertible into stock up to 30th April, 1857, and are secured by a first and only mortgage on the whole road from Evansville to Vincennes, its machinery, franchises and appurtenances. The mortgage also covers the real estate purchased by the company for depots, etc., which cost $10,000, and is now worth more.

The trustees for the bondholders are Evan R. Bebb and John F. A. Sanford, of the city of New York.

Sealed proposals for the whole or any part of these bonds, endorsed "Proposals for Evansville and Illinois Railroad Bonds," will be received at the office of Cammann, Whitehouse & Co, No. 56 Wall street, until three o'clock on the 19th day of June, inst., when they will be absolutely disposed of to the highest bidder.

Printed exhibits of the road, etc., with a map showing its location and connections, can be obtained on application at the above named office.

JOHN INGLE, JR.,
Secretary and Financial Agent E. & I R.R. Co.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS,

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Firm of Davenport & Bridges, Cambridgeport Car Manufacturers
ALFRED BRIDGES. { Late Firm of Davenport & Bridges, Litchburg Car Manufacturers

Notice to Contractors.

LEXINGTON AND DANVILLE RAILROAD.

SEALED proposals for the construction of this road will be received as follows:

At the Office in Lexington, from 1st to 15th of July, for the grading and masonry of 12 miles of the road between Lexington and Nicholasville.

At the Office in Lexington and at the office in Danville, from the 1st to the 15th August, for the grading, masonry, and bridges of the remainder of the road (22 miles) from Nicholasville to Danville.

Plans, profiles, specifications, &c., may be seen at either of the offices within the times specified.

GEORGE C. SCHAEFFER,
Ch. Eng. Lex. & Dan. R. R.

Danville, Ky., May 28, 1852.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE, Chief Engineer.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.

June 2, 1852.

To Mining and Civil Engineers, Surveyors, etc.

A YOUNG MAN, who has been engaged for the last six years with eminent Engineers in Scotland, is desirous of a situation. Has had considerable practice in the working of mines—being a good draughtsman, and in possession of engineering instruments.

Address ENGINEER, care D. H. ARNOT,
1m20* 50 Wall st., New York.

Railroad Commission Agency,

166 PEARL ST., NEW YORK.

THE subscribers are prepared to furnish Railroad Companies with the most approved patterns of Railroad Iron. Also, Chairs and Spike, Passenger and Freight Cars, Locomotive Engines, and Railroad Track and Depot Scales, at manufacturers prices.

Orders are Solicited.

JOHN STRONG. WM. T. PINKNEY, Jr.

REFERENCES:

Simeon Draper, New York; John Bradley, Burlington, Vt.; Duryee, Forsyth & Co., Rochester, N. Y.

CAUTION.
India-rubber Car Springs.

AN advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

Diploma—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE, President.

N. Meios, Recording Sec'y.
Adoniram Chandlea, Cor'g. Sec'y.
New York, Oct., 1851.

New England Car Spring Co, No. 104 Broadway, New York. 7tf.

GLENDON
LOCOMOTIVE TIRES,

FOR SALE BY
GEORGE GARDNER & CO.,
No. 5 Liberty Square, Boston

Notice to Contractors.

Office of Illinois Central R R. Co.
Chicago, 26th May, 1852.

THE Illinois Central Railroad Company having decided to make payments in cash on all contracts for grading, masonry and superstructure, are prepared to receive proposals for divisions Nos. 1, 2, 6, 8, 9 and 10, if made immediately, to be addressed to the Chief Engineer. Plans, profiles and forms of proposal may be seen at 35 Canal street, New York, or at the office in Chicago.

A reply, definitely accepting or declining each proposal, will be forwarded by mail on or before the 15th day of June, 1852. Proposals should state the address and references of the party.

R. B. MASON, Chief Engineer
Illinois Central Railroad.

Sherry & Byram's
AMERICAN CLOCKS.

CLOCKS FOR CHURCHES, PUBLIC BUILDINGS AND RAILROAD STATIONS, REGULATORS FOR JEWELLERS, AND OTHER STYLES DESIGNED FOR BANKS, OFFICES, &C., ALSO ASTRONOMICAL CLOCKS.

THE undersigned having succeeded in counteracting effectually the influences of the changes of temperature upon the pendulum, and introduced other improvements, are enabled to warrant their clocks superior to any now in use; ample opportunity afforded to test their performance

Glass Dials for illuminating, similar to those put up at the City Hall, N. York, furnished at short notice.

Address SHERRY & BYRAM,
Oakland Mills, Sag Harbor, N. Y.

Some of the finest clocks in the world are made at the works of Sherry & Byram.—*Scientific Americnn.*

Mr. Byram is a rare mechanical genius.—*Journal of Commerce, N. Y.*

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

Dissolution of Copartnership.

THE Copartnership heretofore existing between the subscribers under the firm of Chouteau, Merle & Sanford, is this day dissolved by its own limitation. Either of the partners will sign the name of the firm in liquidation.

PIERRE CHOUTEAU, Jr.,
GUILLAUME MERLE,
JOHN F. A. SANFORD.

New York, May 1, 1852.

N.B. The Iron Department of our business, and the concerns relating thereto, are assumed and will be continued by P. Chouteau Jr., Sanford & Co., and we ask reference of our friends to the following notice of that firm.

CHOUTEAU, MERLE & SANFORD.

May 7, 1852,

COPARTNERSHIP NOTICE.

The undersigned have this day formed a copartnership, under the firm of P. Chouteau, Jr., Sanford & Co., for the transaction of a General Iron Commission and other business.

P. CHOUTEAU, Jr.,
J. F. A. SANFORD,
U. A. MURDOCK.

New York, May 7, 1852.

The Iron Business heretofore conducted by the late firm of Chouteau, Merle & Sanford, is assumed and will be continued by us.

P. CHOUTEAU, Jr., SANFORD & CO.

Steam Engines and Tools.

ONE Horizontal Steam Engine, of superior workmanship and material—12 in. cylinder, 3 feet stroke, on heavy bed frame of 4,600 pounds weight, well finished in all respects.

One Steam Engine finished as above—10 in. cylinder, 3 feet stroke.

A sample of the above Engines may be seen at Bogardus' Iron Buildings, corner Centre and Duane sts., and at Platt & Brother's, Maidenlane, N.Y.

Two 6½ feet Planing Machines, of the most approved pattern, strong and heavy, will plane 31 in. wide, and fitted up in the very best manner.

Six 2 feet 4 in. Planers, will plane 12 in. wide, and work with quick motion, well adapted to locomotive tools and engine work.

One 12 foot Lathe 25 inch swing, with counter shaft, etc., complete.

Also, Boiler Punches, Power Shears, Presses, and other Tools, Shafting, Pullies, Hangers, and Machinery of all kinds fitted up in the best style.

Apply to the MATTEAWAN MACHINE CO., Matteawan, Dutchess Co., N. Y.; near the Hudson River Railroad Depot, at Fishkill.

4t21 A. L. ACKERMAN, Agent.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other. CHARLES STODDER,
75 Kilby st., Boston.

June 20, 1851. 3m.

FILES.

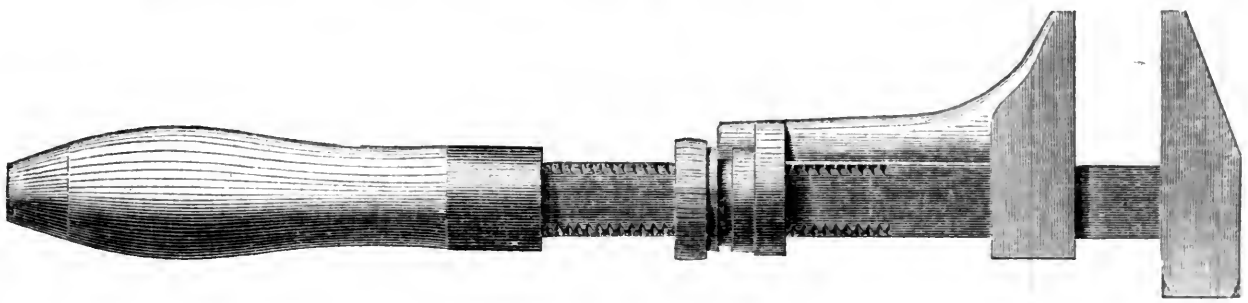
THE Subscriber, Agent for the Manufacturers, offers to execute orders for the well known Files made by J. Martin & Co., and which for many years have borne the stamp of "Vickers." These Files are made from *Naylor & Co's best steel*, and for hardness, beauty of cut, and durability are not surpassed by any other make. WM. BAILEY LANG,
3t 18 No. 9 Liberty Square, Boston.

M. B. Hewson, *Civil Engineer.*

(Open to a New Engagement,)
Memphis, Tenn.

TAFT & GLEASON'S IMPROVED SCREW WRENCH,

MANUFACTURED BY LOGAN, VAIL & CO., 9 GOLD ST., NEW YORK.



THE Manufacturers desire to call the attention of the HARDWARE TRADE to the above article, as they believe it to be in all respects superior to any Wrench made in this country. The inventor has been engaged for several years in perfecting improvements in this Wrench, and he is warranted by the annexed certificates in saying, that it is the only kind that has been practically tested in Machine Shops and on Railroads without a single failure. The importance of having a tool of this kind, of the very best quality, is best understood by those who use them, and the trade will see the necessity of keeping goods of this kind that can be fully relied on by the Mechanic and Engineer.

The improvement in Taft & Gleason's Wrench, (the patent for which is applied for,) consists in the main bar being left square, the thread being cut on the four corners. This plan leaves the bar much stronger than by having circular edges, or a round bar, while, at the same time, the nut is as strongly secured as by any other mode of connection, and is as easily managed. The Wrench will be seen at once, by any mechanic, to unite in the highest degree, simplicity with strength and durability.

Sizes Nos. 6, 8, 10, 12, 15, 15 extra, and 21 inch.

The following certificate was given by a committee appointed by the Society of Master Mechanics and Locomotive Car Builders' meeting in Boston once in each month, for the purpose of examining new and useful inventions appertaining to their different kinds of business, and which are calculated to be of use to the public generally.

—

BOSTON, March 1, 1852.

Having examined the Screw Wrench invented by Geo. C. Taft and John Gleason, and compared it with other wrenches formerly used by us, we entertain the highest opinion of its superiority over any other wrench now before the public, and do not hesitate to give the following opinion:

The Wrench is stronger than any other we have ever examined, from the fact that the thread being cut on four corners, leaves the bar much stronger than when cut on two circular edges, or on a round bar, for, in the two last cases the bar must be very much reduced to allow it to pass through the sliding jaw, thereby weakening the main bar very much.

A. S. ADAMS, Sup't Locomotive Power,
B. and W. R.R.
G. S. GRIGG, Sup't Boston and Prov. R.R.

—

The following vote was passed at a monthly meeting of the Association of Master Mechanics of New England. It was voted that the report upon Taft & Gleason's Wrench be accepted. It was voted that the members of this Association encourage the use of Taft & Gleason's Wrench as the best in use.

JOHN B. WINSLOW, Secretary.
BOSTON, March 6, 1852.

BOSTON, March 28, 1852.

This is to certify, that I have used Taft & Gleason's Improved Screw Wrench for the last year, and I find it the best wrench I have ever used, both for durability, convenience, strength, and style of finish.

A. S. ADAMS,
Sup't Motive Power, B. & W. R.R.

—

BOSTON LOCOMOTIVE WORKS, April 1, 1852.

This is to certify, that having used Taft & Gleason's Improved Screw Wrench for the past year, I find it to be the best wrench in point of strength, durability and convenience, that I have ever used.

EDWARD T. TROFFITER,
Agent for Hinckley & Drurys.

—

BOSTON AND FITCHBURG R.R. CO.

This is to certify that we have used Taft & Gleason's Improved Screw Wrench for the last year, and find them superior to any screw wrench we have ever used, for convenience, strength and durability.

OLIVER AYRES, Master of Loco've Shop.
JOHN. A. KIMBALL, " Car "

—

This is to certify, that we have used Taft & Gleason's Improved Screw Wrench for the past year, and feel bound to say that it is superior to any wrench we have ever used for convenience and durability.

W. H. SCOVILLE & SONS.
Chicago, Ill.

BOARDMAN'S PATENT
Steam Boiler and Furnace,

FOR LOCOMOTIVES, STEAMBOATS, AND STATIONARY PURPOSES. It is fully demonstrated that this Boiler effects a saving of 50 per cent of the fuel used by the best flue boilers, and 40 per cent of the amount required by locomotive boilers. Its form and construction insure great strength and durability. It is convenient in use, its flues never clog, and no sparks nor smoke can escape from it.

Pamphlets of certificates will be sent to persons desiring it. Single and territorial rights are sold on reasonable terms. For further information, apply to

H. BOARDMAN, 128 Fulton-st., N. Y.

TYRES
FOR LOCOMOTIVES,

MADE from the celebrated LOWMOOR IRON, bent, welded and blocked to a true circle, can be imported through the Subscriber, sole Agent for the United States and Canadas.

These tyres are now running on our principal roads in this country, and are sent from the Company's Works with ONE WELD, at a cost equal to that heretofore charged for those made from two short bars.—The superior quality of these tyres gives them a preference, and they now stand without a rival.

Orders executed for any quantities, with promptness and despatch. WM. BAILEY LANG,
No. 9 Liberty Square, Boston.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on the oldest railways in this country.

RAYMOND & FULLERTON, 45 Cliff st

UNITED STATES
CAR-SPRING COMPANY.

OFFICE 25 CLIFF ST., NEW YORK.

HAVING purchased Fuller's Patent for the United States for manufacturing INDIA RUBBER CAR SPRINGS, and erected an extensive Factory, with the most improved machinery, we are prepared to furnish to Railroad Companies and Car Builders, *Rubber Springs* of as good quality as ever before offered, and at the reduced price of *Fifty cents* per pound for *Cash*.

Only the *best quality* of Rubber is allowed to be used, and the manufacture of our Springs is under the supervision of one of the most experienced Rubber manufacturers in the United States.

We also manufacture all kinds of HOSE, not only for Railroad, but all other purposes, to which it can be applied; PACKING of all qualities and thickness, and BUCKETS of every size, of a superior quality. Terms favorable, and prices such as to offer great inducements to the public.

All orders promptly filled by addressing either the Selling Agent, D. S. DODGE, No. 25 Cliff street, or GEO. T. M. DAVIS, Secretary and General Agent.

DIRECTORS:

Anson G. Phelps, of N. Y. Wm. E. Dodge, of N. Y.
Alfred Kelley, of Ohio, Edmund Burke, of N. H.
Horace H. Day, of N. J. Geo. W. Pratt, of N. Y.
David S. Dodge, of New York.

DAVID S. DODGE, President.
GEORGE W. PRATT, Treasurer.
GEO. T. M. DAVIS,
Secretary and General Agent.

New York, May 18th, 1852. 3m

Measuring Tapes

OF the best quality for Surveyors and Engineers, manufactured by EDDY & WELLS,
6m*15 No. 7 Platt st., New York.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable *Zinc Paints* at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering, These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints

MANNING & SQUIER, Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

Ogden & Martin's
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our Cement for public works or other purposes. We warrant the cement equal in every respect to any manufactured in this country. It attains a great degree of hardness, setts immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength.

For sale in tight barrels, well papered, at their office by OGDEN & MARTIN, 104 Wall st.
February 16, 1850. 1y*

The above cement is used in most of the fortifications building by government.

ARTIFICIAL LIGHT
FOR RAILROADS.

LANTERNS FOR LOCOMOTIVE ENGINES with argand burners and Reflectors of a true parabola, were introduced by the subscribers in May, 1840, since which time we have supplied the following named Railroad Companies with them, viz:

Androscoggin & Kennebec,	Michigan Central,
Albany and Schenectady,	Mad River and Lake Erie,
Auburn and Syracuse,	Manchester and Law'ce,
Boston and Providence,	Mansfield and Sandusky,
Boston and Worcester,	Macon and Western,
Boston and Lowell,	Nashua and Lowell,
Boston and Maine,	Newburyport,
Buffalo and Rochester,	N. Hampshire Central,
Columbia and Philad.,	N. York and N. Haven,
Columbus and Xenia,	Norfolk County,
Cheshire,	Northern, N. Hampshire,
Connecticut River,	" New York,
Conn. and Passumpsic,	Norwich and Worcester,
Cocheco,	N. Orleans & Carrollton,
Cuba,	N. London, Willimantic
Eastern,	and Palmer,
Erie,	Old Colony,
Essex and Manchester,	Port., Saco and Porta'th,
Fitchburg,	Rutland and Burlington,
Fall River,	Richmond and Petersb'g,
Great Falls and Conway,	Saratoga & Washington,
Hartford and New Haven,	Stonington,
Hart., Prov. and Fishkill,	Syracuse and Utica,
Hudson River,	South Reading Branch,
Kennebec and Portland,	Vermont Central,
Lowell and Lawrence,	Vicksburg and Jackson.

In all cases our Lanterns have given satisfaction. The reflectors are made with great care, are heavily plated with pure silver, and every part of the work is strong and substantial.

The reflectors are similar to those used in the United States Lighthouses as now furnished by us. The United States Commissioners for running the North Easterly Boundary line, procured of us a small parabolic reflector with an argand burner of ¾ inch diameter, and Major Graham, in his report to Congress, says the light was distinctly seen thirty miles, and was used in establishing the lines.

Having heard complaints of the artificial lights used for lighting Railroad Passenger cars, we made experiments to obtain a superior light to any then in use. In November, 1847, we introduced a double parabolic reflector to an argand burner, which reflects the rays of light in a direct horizontal line parallel with the sides of the car and over the heads of the passengers, thus avoiding the inconvenience of a concentrated light. These lamps are esteemed the best in use, and are sold at moderate prices.

Samples of our Locomotive and Car Lamps may be seen at Messrs. Bridges & Brothers, 64 Courtlandt street, New York.

HENRY N. HOOPER & CO.,
No. 24 Commercial St. Boston.

May, 1852.

To Contractors.



OHIO AND MISSISSIPPI RAILROAD, EXTENDING FROM CINCINNATI TO ST. LOUIS.

SEALED proposals will be received at the offices of the undersigned in the cities of Cincinnati and St Louis, until the 15th day of June next, for the grading, masonry and bridging, of the following portions of the above road.

First—From Cincinnati, extending 72 miles westerly, to the intersection of the Madison and Indianapolis railroad.

Second—From Illinoistown, opposite St. Louis, extending 50 miles easterly, to a point near the town of Carlyle.

Maps and profiles of the line will be ready for exhibition and all the necessary information will be given at the above offices on and after the 24th inst.

For the remaining 213 miles, proposals will be received from such parties as desire to bid for the work upon their own examinations and such information as the Engineers will be able to give, the character of the country being uniform and preliminary surveys in progress.

Co-partnership firms bidding for the above work will please give the full name and Post-Office address of each member of the firm.

H. C. SEYMOUR & CO.

To Railroad Companies.

THE Undersigned is prepared to negotiate with Railroad Companies for the use of the improvement patented by Henry M. Paine "for Ventilating Railroad Cars, and excluding dust, cinders, sparks, etc., from the same." Among the many advantages resulting from the use of this improvement may be named the following:—the entrance of dust, cinders, etc., is effectually prevented; it provides free and perfect ventilation without unpleasant draughts; its use preserves the interior fittings of the cars; secures the safety of passengers from injury, etc., etc.

The free use of this improvement upon *one car* is tendered to each railroad company disposed to try its merits; *provided* application be made to the R. C. V. Co., who will guarantee the free use of the same, under seal of the company, for the full time agreed upon in testing its value.

The R. C. V. Co. will sell rights under this patent to none but Railroad Companies, who can contract with any party they may choose to employ in placing the improvement upon their cars. Perfect models of the improvement, full size, to be seen at the Office of the Company. Pamphlets setting forth full particulars will be sent to any party sending for them.

H. J. HALE.
Gen'l Agent R. R. Car Ventilating Co.,
17tf 146 Broadway, (up stairs.)

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article *superior* to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Car Spring co. to maintain a monoply and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any *freezing in our late cold weather*, nor are they affected by the *heat of our southern summers*. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Boiler Plates and Axles,

MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by

WM BAILEY LANG,
Jan. 22, 1852. No. 9 Liberty Square, Boston.

Railroad Iron.

THE Subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of Railroad iron at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
29 Central Wharf.

Boston, June 1, 1851.

Rubber Springs.

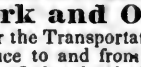
THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "*that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever.*" It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

1852.  1852.

PEOPLE'S OSWEGO LINE,
New York and Oswego,

ARE prepared for the Transportation of Merchandise and Produce to and from New York, and ports on the Western Lakes, by the Lake Ontario and Welland Canal route. Special attention given to Railroad Iron.

PROPRIETORS.
LEWIS & BEARDSLEY, Oswego.
JAMES W. CAMPBELL, New York.

AGENTS.
James W. Campbell, 111 Broad st., New York.
W. H. Clark, 60 Quay st., Albany.
Lewis & Beardsley, Oswego.
Smith & Hunt, Toledo, Ohio.
G. W. Bissell, Detroit, Mich.
C. Walker & Son, Chicago, Ill.
H. H. Hurlbut, Western States.
May 15, 185

Bowling Tire Bars.

40	Best Flange Bars	5½x2	inches,	11 feet long.
40	"	5½x2	"	7 feet 8 in. long.
40	" Flat "	6x2	"	11 feet long.
40	"	6x2	"	7 feet 8 in. long.

Now in store and for sale by
RAYMOND & FULLERTON,
45 Cliff street.

Railroad Iron.

THE undersigned being appointed Agent to Messrs. Guest & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, is duly authorised to contract for the sale of G L Rails on the most advantageous terms. RICHARD MAKIN,
April 22, 1852. 65 Broad st., second floor.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg.

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly. HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

To MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction. W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country. H. D. BIRD,
President.

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction. F. C. ARMS,
General Superintendent.

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:—

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

$3,000 REWARD — TO MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

$800 for the best method of excluding dust from cars when in motion.

$400 for the best railroad brake.

$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed. F. M. RAY.

New York, January 1, 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction – India-rubber springs. For sale, to be delivered immediately. ESSEX CO.,
Lawrence, Mass.
March 23 tf. GORDON McKAY, Agent.

CHILLED RAILROAD WHEELS.—THE UNdersigned are now prepared to manufacture their improved Corrugated Car Wheels, or Wheels with any form of spokes or discs, by a new process which prevents all strain on the metal, such as is produced in all other chilled wheels, by the manner of casting and cooling. By this new method of manufacture, the ubs of all kinds of wheels may be made whole—that is, without dividing them into sections—thus rendering the expense of banding unnecessary; and the wheels subjected to this process will be much stronger than those of the same size and weight, when made in the ordinary way.

A. WHITNEY & SON,
Willow St., below 13th,
Philadelphia, Pa.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M Ray and associates, stating that some of my springs froze, but which they have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, SIX HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

MR. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,
LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know or care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtlandt street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

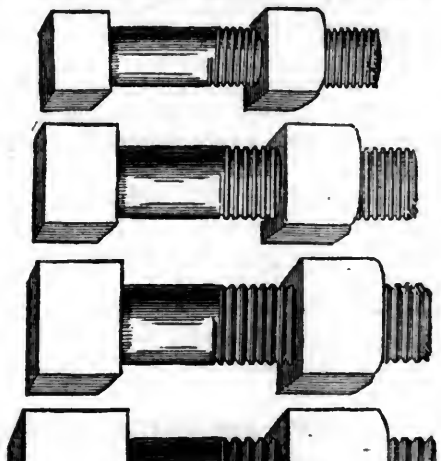
The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,
Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtlandt street, New York.

BOSTON BOLT COMPANY,



BOSTON, MASSACHUSETTS.

MANUFACTURE

Screw Bolts of all kinds,

Suitable for Steam Engines & all kinds of Machinery.

Also, Car Bolts, Bridge Bolts, and Bolts for Buildings, etc , etc.

All kinds of neat forgings of Bolts to gauges and patterns for Locomotive Engines, etc., etc.

N.B.—This Company manufacture, also, the most complete Slide Lathe, and at the last Franklin Institute Fair, were awarded a Premium for the superiority both of construction and design of the same.

N. A. BARRETT, Agent,
75 State Street, Bosto .

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

RAILROAD CAR AND COACH TRIMMINGS.
Doremus & Nixon,

21 PARK PLACE
AND
18 MURRAY STREET,
IMPORTERS AND FURNISHERS
HAVE FOR SALE

Plain Garnet Plush.	Fig. Garnet Plush (Butterfly pat.
" Crimson "	" Crimson " (Elegant.
" Scarlet "	" " " (Gen. Taylor.

BROCATELLES.

Crimson Silk Brocatelles.	Gold and Maroon do.
Gold and Blue "	" Brown "
Silk and Wool "	of every color.

MOQUETTS,

Of elegant designs and colors.

GERMAN CLOTH FOR CAR LININGS.

The most beautiful goods ever shown in this country, and the subscribers are the sole agents for the sale of them.

Oil cloths Enamelled with Gold. } These goods can be
" " Silver. } furnished in any
Do. Silver ground velvet printed. } dimensions req'd.

CURLED HAIR

Of every description and quality.
New York, 1850. 1y16

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.

Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York

Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources *which can be relied on.* The following is from Mr. G. W. Whistler, Jr, Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To MR. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREEN ST.
New York, March 5, 1852.

F. M. RAY, ESQ.

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rubber Springs.

TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me. and using, as an argument, that in such case I could obtain the *entire* monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the *first* premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to *myself.* Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and *responsible* parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

RAILROAD
India-rubber Springs.

IF any Railroad Company or other party desires it, the NEW ENGLAND CAR SPRING CO. will furnish India-rubber Car Springs made in the form of washers, with metalic plates interposed between the layers, or in any other form in which they can be made; in all cases guaranteeing the right to use the same against any and all other pretended rights or claims whatsoever.

F. M. Ray, 104 Broadway, New York.

ELEVATION

OF

SUSQUEHANNA BRIDGE N.Y.

as built on Mr Callum's Paten

100 90 80 70 60 50 40 30

Scale to Plan and Elevation

PLAN

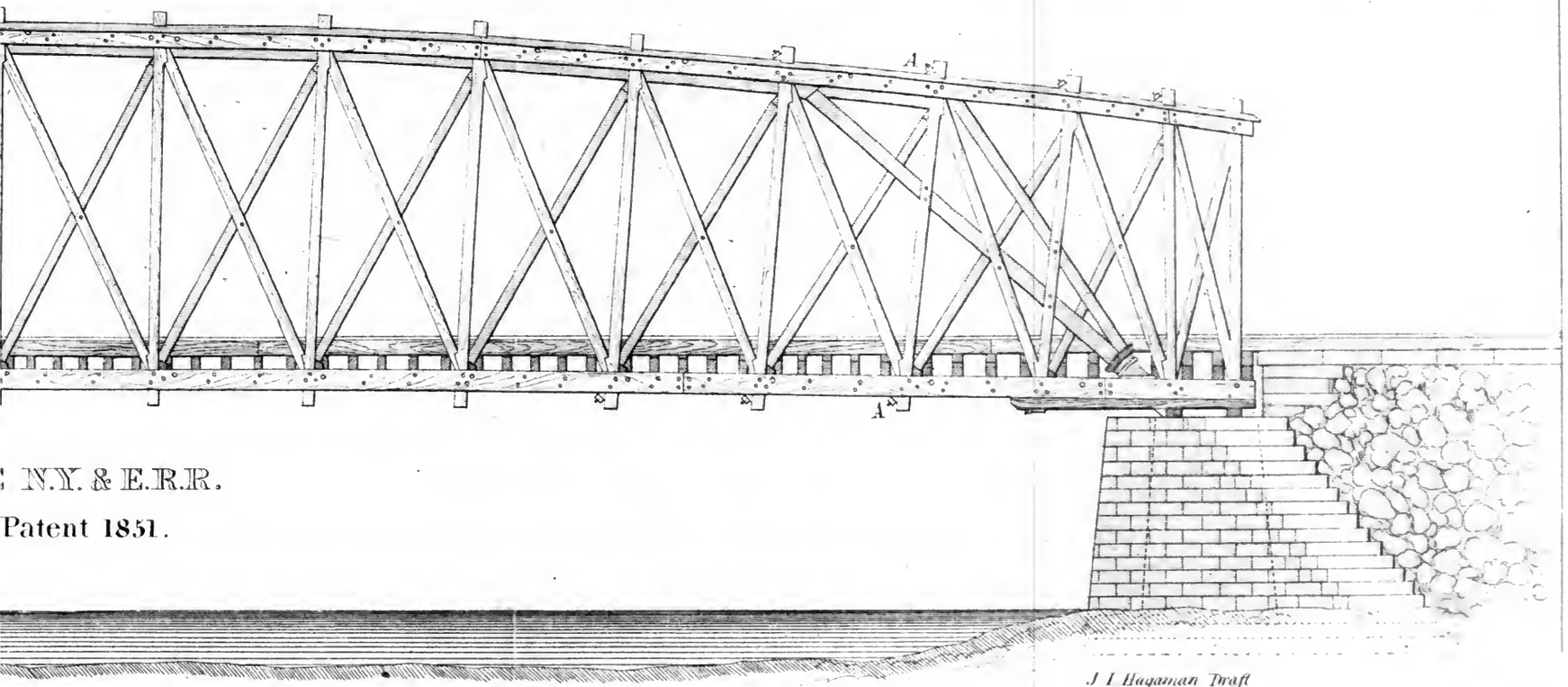
Upper

Straining

Longit

Isometrical of lower chord & details

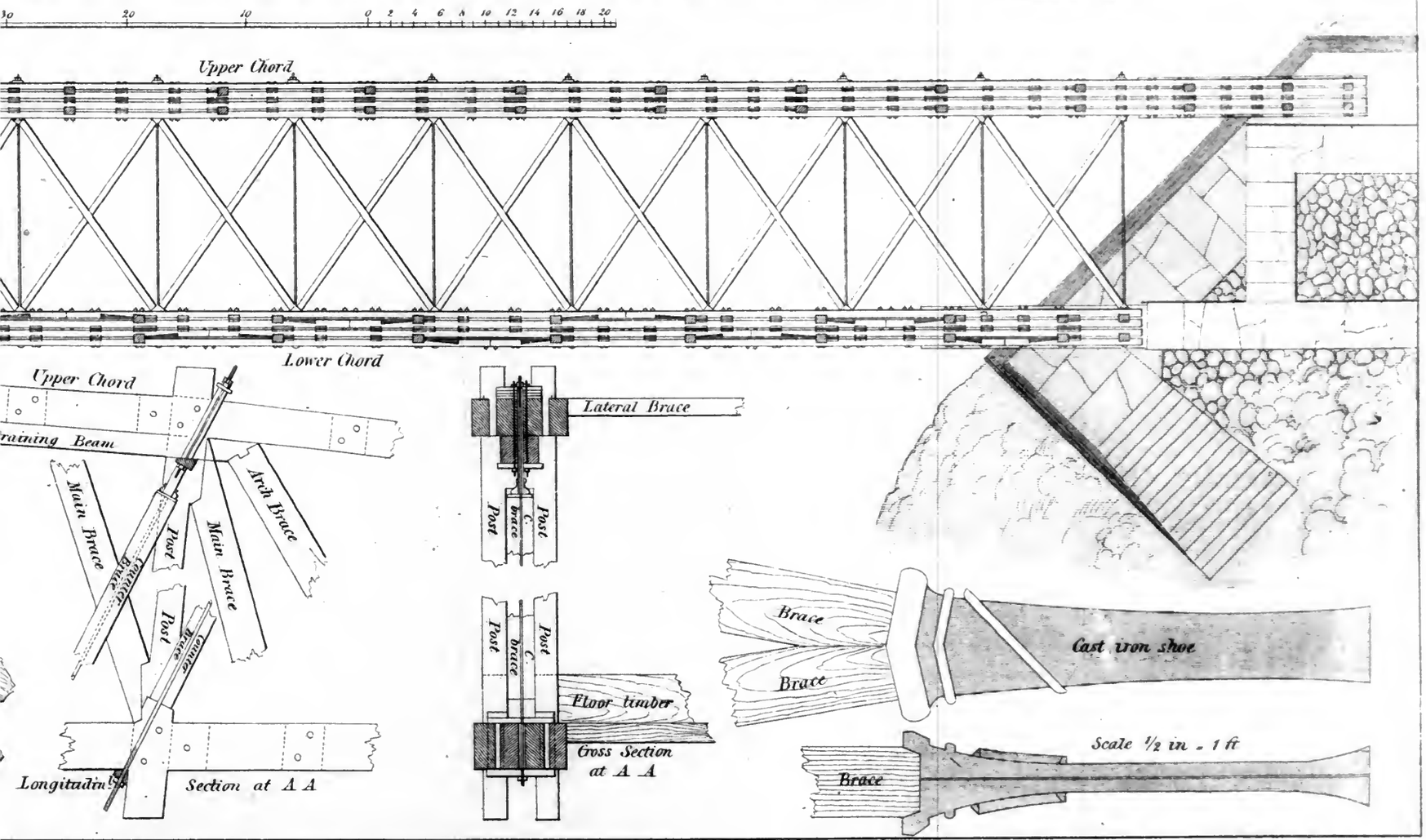
Scale ¼ in = 1 ft



C N.Y. & E.R.R.

Patent 1851.

J I Hagaman Draft



Lith of Sarony & Major, 117 Fulton Street NY

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 25] SATURDAY, JUNE 19, 1852. [WHOLE No. 844 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

McCallum's Railroad Bridge....385
Lafayette and Erie Railroad....396
Syracuse and Binghamton Railroad....386
Pennsylvania Railroad....387
New Jersey Central Railroad....388
Greenville and Columbia Railroad....389
Boston and Worcester Railroad....390
Croton Aqueduct....390
Receipts of Produce at Tide Water....391
Railroads in Ohio....391
Railroads in New York....391
Lexington and Big Sandy Railroad....391
Susquehanna Railroad....391
Southwestern Railroad....392
Baltimore and Ohio Railroad....392
Ohio and Mississippi Railroad....392
Rochester and Syracuse Railroad....392
Galena and Chicago Railroad....392
Railroads in Missouri....393
Stock and Money Market....393
Mobile and Ohio Railroad....394
Are We Building too many Railroads....395

American Railroad Journal.

Saturday, June 19, 1852.

McCallum's Patent Timber Bridge.

We give below a description, which is accompanied by a lithographic drawing, of *McCallum's* Patent Timber Bridge.

The plan of this bridge is now exclusively used in all new structures upon the New York and Erie railroad, and has just been ordered for all the bridges, on the 125 miles of double track now constructing.

A bridge upon the plan annexed was built some 8 months since over the Susquehanna river, near Lanesboro', Pennsylvania, upon the New York and Erie railroad, and has not, up to this time, required the slightest adjustment nor repairs, although it has been in constant use.

In January last a large number of Civil Engineers, Bridge Builders and Mechanics were invited by the Chief Engineer of the road to be present to examine the above bridge, its adaptation to railroad purposes, and witness some experiments, instituted for the purpose of testing its strength and stiffness. After a careful examination, followed by a series of experiments, a committee, consisting of Mr. A. J. Centre, Engineer of the Panama railroad company, Mr. Silas Seymour, Chief Engineer of the Buffalo and New York city railroad, and Mr. S. W. Hall, late Chief Engineer of the Chemung railroad, were appointed a committee to draw up a statement of the results of the experiments, a portion of whose report we give below.

"This bridge is known as McCallum's Patent Inflexible Arched Truss railroad bridge. It is constructed principally of pine timber, with less than the ordinary proportion of iron rods, bolts, and castings. The whole length of each truss is 200 feet, and has a clear span, or distance between supports, of 190 feet.

The experiment consisted mainly in running from one to four locomotives across, at different rates of speed, noting the effect, and observing particularly the deflection or settling of the truss under various weights.

The following are the weights of the engines and tenders used in the experiments; these weights include the usual complements of wood and water:

	Engine,	Tender,	Total.
No.	92, 49,510 lbs.	33,290 lbs.	82,800 lbs.
	58, 72,900	34,000	107,900
	127, 54,400	36,300	90,700
	27, 56,380	36,730	93,010
Gross weight of four engines			374,410

In running one of these machines back and forth at different speeds, no deflection could be detected by the naked eye, and a levelling instrument was used, to determine the existence and extent of deflection.

Upon placing first one engine and tender upon the centre of the bridge and noting the deflection, then bringing on successively the second, third, and fourth, and arranging them as near the centre of the bridge as possible, the deflections were found as follows:

No.	gross wt.		deflect.
	92, 82,800 lbs.	or 41·4 tons,	0 013 ft.
"	92, 58, 190,700	or 95·35	0·038 "
"	92, 58, 127, 281,400	or 140·7	0·061 "
"	92, 58, 127, 27, 374,410	or 187·2	0·061 "

On removing these engines from the bridge it was found that the truss had entirely resumed its original level, showing that the elasticity of the timbers was unimpaired.

The greatest weight put upon the bridge was a fraction less than one ton per foot of the span,—was 1·1 ton per foot, occupied by the engines and tenders, and was 2·1 tons per foot, occupied by engine No. 58.

The plan of this bridge is the result of a series of experiments made by Mr. McCallum, who has for several years had charge of the bridges upon the New York and Erie railroad.

The experiments were highly satisfactory to all present, and we have no hesitation in expressing our conviction that this structure is better adapted for railroad purposes, and particularly for bridges of great span, than any other in use."

A. J. CENTRE,
S. SEYMOUR.

Mr. Hall, well known as an engineer of experience in the construction of bridges, addressed the following note to Mr. McCallum on the subject of the strength of his bridge:

Dear Sir:— I regret that I was not able to meet with the other members of the committee to report upon the experiments which we witnessed at Lanesboro', Pa., upon your bridge.

The result of the tests then applied was highly gratifying to me, as it was to all present.

The load sustained was greater than I have ever known placed upon a bridge of a single span, and the deflections, as will appear by the record reported, were quite insignificant. I therefore consider your bridge the most perfect structure within my knowledge. Its superiority over bridges in general use, consists, not only in the quality of the material and the perfection of the workmanship, but in the accurate knowledge displayed in the design of the nature and extent of the various strains to be provided against, and the nice disposition of materials for that purpose.

Very respectfully, yours, etc.,

S. W. HALL.

In reference to the above, we are happy to copy the following editorial notice from Appletons' Mechanics' Magazine, edited by J. W. Adams, Esq., well known as an accomplished civil engineer:

We have no hesitation in affirming, that of all the timber bridges patented in this country, there are none, in point of strength, economy (in which we include ultimate durability), facility of repair, and uniformity of action, to be preferred before this plan of bridge lately patented by Mr. D. C. McCallum, of Oswego, engineer or ways and structures on the New York and Erie railroad.

The bridge shown in elevation, on plate No. 4, has been built lately for the New York and Erie railroad, at Lanesboro', over the Susquehanna river, in the place of one built by ourselves, several years since, under the orders, and according to the plan of the chief engineer of that road, but which proved unequal to the duty imposed upon it; and its removal became a matter of necessity.

We objected to the plan of the original bridge, built in that locality, as we have ever done to any plan of bridge in which the attempt was made to unite the independent systems of arch and truss, and make the stability of the bridge dependent upon their uniformity of action. In this plan of Mr. McCallum, the two principles are not independent as heretofore; but the action of the arch in the upper chord is made an integral part of the truss itself; and instead of two systems acting unequally, and to the ultimate injury of the structure, we have

the best features of both united in a manner which admits of entire uniformity of action.

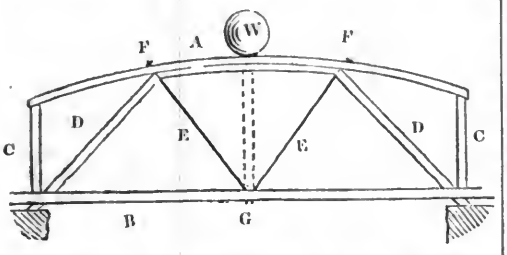
In the construction of bridges for railroad purposes, two prominent difficulties have long been discovered, viz., a lack of sustaining principle towards the ends of the trusses and near the abutments, and an entire absence in many cases of a proper counteracting principle to prevent vertical vibration by a moving load. See *Haupt on Bridges*, to which admirable work the reader is particularly referred for a full description of the proper office of a counter-brace.

Bridges built with straight chords parallel to each other, have a tendency to deflect suddenly at a point near the bearings; hence spur braces have been used, from the masonry to the lower chord of the bridge, taking up a portion of the water-way, which is sometimes objectionable; and arch braces have also been used, extending from the top of the lower chord to the upper chord of the bridge, thrusting upon the lower chords. In this bridge the upper chord is an arch-beam, any deflection in the centre of the bridge causing a corresponding thrust or outward movement of the arch; the outward movement is resisted by the arch braces, and thrown upon the abutment by means of the cast shoe, which passes by the lower chord and bolster, abutting upon and into the masonry.

Upon an examination of the drawing, it will be discovered that any deflection in the centre of the arch must be followed by a corresponding raising of the same at the upper end of the arch-braces; said braces being connected with the lower chords by means of tension-rods.

It will also be observed, that each of the main braces operates precisely in the same manner; that every outward thrust produced upon the arch will be followed by a counteracting or upward tendency towards the ends of the bridge.

The following diagram illustrates this action, in which A is an arch-beam; B, lower chord; C C, struts; D D, arch-braces; E E, tension-rods; W, weight. It will be seen that the tendency of the weight W will be to lower the arch in the centre, deflecting it to a straight line or below it, that the points F F will be thrust outward, the braces D D correspondingly lengthened, raising the points F F, and by means of the tension-rods the point G; by removing the weight W, and placing a strut between the arch-beam and lower chord, as represented by the dotted lines, it will be seen the point G will be prevented from raising in consequence of the load W, the point F remaing stationary for the same reason. Mr. McCallum's bridge is peculiar in the arrangement through which the arched upper chord, by means of the arch braces bearing on the abutment, together with the counter brace tension-rods acting on the lower chord, conduce to an uniformity of action highly advantageous to the durability of the bridge.



Indiana.

Lafayette and Indianapolis Railroad Celebration.—The Lafayette papers speak in enthusiastic terms of the celebration of the opening of the Lafayette and Indianapolis railroad to Thorntown, Boone county, on the 3d inst. A barbecue was prepared and partaken of by about 4000 persons, after which addresses were delivered by Dr. Deming, H. W. Ellsworth, Esq., Sanford Cox, Esq., and a letter from Hon. Albert S. White, President of the road, was read.

All the proceedings were characterised by great enthusiasm.

Syracuse and Binghamton Railroad.

REPORTT OF THE ENGINEER.

In accordance with your request, I herewith submit a brief statement of the progress and present state of the preliminary and final surveys of the route of your road. A preliminary survey of the entire line to Binghamton—a distance of nearly 76 miles—has been completed; also all the necessary surveys for a definite location from Cortland village to Binghamton—a distance of about 43 miles. The section of country traversed by this portion of the route, also that between Cortland village and Tully, is well adapted to the construction of a first class railroad, upon which a high rate of speed can be easily attained. The maximum grade for this portion of the route will not, I think, exceed 20 feet per mile; the average descent from Tully to Binghamton, along the valley of the Tioughnioga—a tributary of the Susquehanna—being about 6 feet per mile. The curvatures for this distance are in no case objectionable, as the minimum radius of curvature somewhat exceeds one-half a mile.

On that portion of the line situated between Syracuse city and Tully summit, no definite route for a location has yet been selected. The total elevation to be overcome from the point of divergence on the Oswego and Syracuse railroad, in Syracuse, to the summit near Tully Centre, is nearly 800 feet, which it will not be possible to distribute equally throughout the whole distance of 18¼ miles, yet I am of the opinion that the maximum grade upon the Lafayette route may be brought somewhat within 70 feet per mile; and a considerable portion of this elevation will probably be ascended with a grade of less than 45 feet per mile. Two other lines have been surveyed, the maximum grade upon which has been reported at 50 feet per mile. But as the surveys of these routes have been merely preliminary, and as the maps and profiles of neither of the three routes have been completed, it is not in my power at the present time to speak definitely of their respective merits, or to determine the precise rate of inclination, or the minimun radius of curvature that will be necessary to adopt in a final location of this portion of the route.

I hope to be able to lay before your board, in the course of a few weeks, complete maps and profiles of the entire line of location, accompanied by a detailed report of the general characteristics of the route and the estimated cost of completing the same, which I think will not exceed $20,000 per mile.

A large number of land titles from Cortland village to Binghamton have been released at very fair and reasonable rates, and I believe the land owners are generally well disposed towards the road, and nearly all are axious to have the same completed as scon as possible. The arrangement of land titles has thus far been conducted entirely by Judge Stephens, the President of the corporation, to whom much credit is due for his persevering efforts and success.

That the road can be completed at a reasonable cost, and that when completed it will do a large amount of business, no person of intelligence, experienced in the construction and operations of railroads can entertain a doubt. It will not only open to the best of markets one of the most wealthy and populous agricultural sections of the state, but it will be the connecting link in the shortest line of roads that can be constructed between the valley of the lakes and the Atlantic. The distance from the city of Oswego, on lake Ontario, to Binghamton is 111 miles; thence to New York, by the N. Y. & Erie railroad, is 225 miles—whole distance, 336 miles. The distance from Binghamton to New York, by way of Scranton, as estimated, is 187 miles; and from Oswego to New York, by the same route, 298 miles. The distance from Binghamton to Philadelphia, by Scranton, is estimated at 205 miles—making the distance from Oswego to Philadelphia, by the same route, 316 miles. The distance from Oswego to Syracuse, is 35 miles, shortening the distance that much of course, from the latter city to either New York or Philadelphia; and shortening the distance from Syracuse to Philadelphia, as compared with the route by Albany or New York, 117 miles. Thus making a great saving in distance, not only to the citizens of Syracuse and Oswego, but to the travel on the Rochester and Syracuse direct road, in going to Philadelphia, the city of Washington, or any southern portion of the country. These distances are principally compiled from the published reports, and are approximately correct.

I am aware that the city of Oswego looks to this road as of vital importance to her commerce, to her great manufacturing interests, and to supply coal for her domestic consumption, and for distribution at the different ports on the lakes. I am aware that Syracuse and its wealthy neighboring localities, look upon it as furnishing a new outlet for their vast mineral and manufacturing interests, and for a supply of coal, upon which, in a few years at most, her prosperity must greatly depend. I am also aware of the importance of including the anthracite coal fields of Pennsylvania in the route; and when we reflect that coal lies at the foundation of the present steam power of Great Britain, and at no distant day must occupy the same position in this country, we cannot attach to it too much importance. Yet these varied interests will not, in my opinion, alone constitute the business of the road. They may be its great items, yet when looked upon in compatison with that great aggregate of small items which administer to the necessities, the comforts and the luxuries of a wealthy, highly civilized and commercial people, they lose much of their pre-eminence. I do not overlook or underrate any of the above considerations so interresting to Oswego, Syracuse, and the coal fields, in the great amount of business this road will do; but my entire confidence rests upon the fact that it will be a necessary and common avenue to other great and important roads leading from cities and localities which are destined to exercise a large control over our internal and foreign commerce, and all the domestic intercourse of our country.

Illinois.

Western and Atlantic Railroad.—Below we give the decision of the Supreme Court of Illinois, touching the right of railroad companies to proceed in the construction of railroads under the general law of that State. This law provides that any body of individuals, upon subscribing $1000 per mile, and on the payment of 10 per cent upon that amount, they may organize themselves into a company by the choice of officers, and may survey and locate their proposed road. The law further provides, that the above preliminary steps being taken, the company may then apply to the Legislature for confirmation of location. The Western and Atlantic Railroad Company took the prescribed preliminary measures, but upon their application to the Legislature, that body refused to sanction the location of their line. The company claimed that it was competent for them to proceed with the construction of their road, and condemn land, by virtue of the right acquired under their previous organization, without further authority from the legislature, and an action was instituted for the purpose of testing their rights under the general law. This we believe is in the main a correct statement of the principles of the following case.

At a Supreme Court, began and held at Mt. Vernon, on the second Monday in November, in the year of our Lord one thousand eight hundred and fifty one, to wit: on Monday, the 24th day of November, in the year of our Lord one thousand eight hundred and fifty one.

Present Hon. SAMUEL H. TREAT, Chief Justice.
" " JOHN D. CATON, Assistant "
" " LYMAN TRUMBULL, " "

Thos. J. Gillenwater, vs. Mississippi & Atlantic Railroad Company. } Error to Effingham.

On this day came again the said parties, and the court having dilligently examined and inspected, as well the record and proceedings aforesaid, as the matters and things therein assigned for error, and being now sufficiently advised of and concerning the premises, are of opinion, that in the record and proceedings aforesaid, and in the rendition of the

judgment aforesaid, there is manifest error: therefore it is considered by the court, that for that error and others in the record and proceedings aforesaid, the judgment of the Circuit Court in this behalf rendered, be reversed, annulled, set aside, and wholly for nothing esteemed, and that this cause be remanded to the Circuit Court for such other and further proceedings as to law and justice shall appertain. The whole with the costs against the said defendants in error.

The defendant in error is a company formed under the act of the fifth of November, 1849, providing for a general system of railroad incorporations—and the question is, has it the right to condemn the right of way by proceeding under the 22d section of that act. The most ingenious arguments have failed to raise a doubt in our minds that the company does not possess the power. That section provides that "any number of persons, not less than thirteen, intending to organize a corporation under this act, and every company that may hereafter organize under this act, may present a petition to the Legislature, stating the place from and to which they propose to construct their road, and its location and route with reasonable certainty, or that they intend to run the said road on the most direct and eligible route between the points of terminus; and praying the Legislature to determine whether the construction of the said proposed road will be of sufficient public use to justify the taking of private property for the construction of the same. The section then proceeds to provide, that the legislature shall determine and decide by law that the road will be of sufficient utility to justify that, then such company may proceed in a particular manner therein prescribed, to acquire the right of way, by paying the owner a just compensation therefor. It was insisted on the argument, that the provision requiring legislative sanction before the authority to condemn the right of way could be exercised, is applicable only to the association of thirteen persons who had not previously organized into a company, and not to the company of twenty-five persons who had organized under the first section of this act. The language of the law, however, is so explicit, as absolutely to forbid such a construction. It provides that thirteen or more persons "intending to organize," and every company that may hereafter organize under this act, may present a petition, etc.

Here are embraced with equal certainty, both classes of association. Both are allowed to present petitions, and one has no more authority to exercise the right to be conferred by future legislatures than the other. It was insisted by one of the counsel, that the word may, as here used, may be construed as imperative only upon the unorganized association of thirteen, while as to the organized company it is only permissive.

But we can find nothing in the language of the law to sustain the suggestion. If the organized company was perfect without further grant of power, their could have been no object in allowing them to apply for it. To introduce such an application would be worse than useless—a trouble to the company and an idle waste of time to the legislature. The words which necessarily point to the organized company, could not have been instituted for so useless a purpose.

It is laid down as a rule that the word *may* means must or shall, only when public interest and right are concerned, and when the public, or third persons have a claim *dejure* that the power should be exercised. Schuyler Co., vs. Mercer Co., 4 Gilman, 20; Malcolm vs. Rogers 5 Cowan, 188. Certainly such is its position here. Both the public and the third persons over whose land the contemplated road may run, have an interest in compelling the company to apply to the legislature to approve of the road, and find in favor of its public utility, before the power to force the right of way is exercised. It is admitted to be imperative as to one of its nominatives, and it is equally clear that it is so as to the other. The statute says, that after a certain other act has been passed, the company may then proceed to take private property for the use of its road. That is equivalent to saying that right shall not be exercised previous to such act. The right to take private property for public use, is one of the prerogatives of the sovereign power, and thus the legislature has, in language not to be mistaken, expressed its intention to reserve that power until it could judge for itself, whether the proposed road would be of sufficient public utility to justify the use of this high prerogative. It did not intend to cast this power away to be gathered up and used by any one who might choose to exercise it.

Some expressions used in the third and fourth divisions of the twenty-first section were relied upon to show that no other legislation was contemplated to authorize an organized company to exercise the power.

The third division of the 21st section authorizes the company to purchase and take by voluntary grants and donations, and by its servants to enter upon all such lands that may be necessary for the construction of the road: "Not until the compensation to be made therefor, as agreed upon by the parties, or ascertained as hereinafter described, be paid to the owner or owners thereof, or deposited as hereinafter directed, unless the consent of such owner be given to enter into possession." By the fourth division, the company is authorized for the making of embankments, &c., to take land: "In the manner provided hereinafter, &c." The different provisions of this statute, like those of all others, must be construed together. The general expression of one section must be restrained or limited by the particular provision of another, when the manifest intent of the legislature requires it—and such is the case here.

The land and right of way are to be acquired in the manner hereinafter prescribed: That provision is made in the 22nd section, which authorizes it only to be done after the legislature shall have decided the road to be of sufficient public utility to justify it. Until this has been done, it is manifest that the powers there specified, like many others provided for in this act, are not to be exercised. They are powers specified and provided for, but not conferred. While in this incipient state, the company is not in the condition to exercise many of the powers specified in other parts of the act, and such is emphatically the case, as to the one claimed. The legislature as it would seem, out of abundant caution, and to leave no possible doubt, that it was its deliberate intention to reserve the right to itself—to judge of the public utility of the road, before authority be given to take private property for its use, concludes the 22nd section, with the following expressive declaration:

"And the Legislature hereby reserves to itself the right to indicate the route and *termini* of said roads, and the same shall not be constructed or commenced, without the expressed sanction of the Legislature of this State, by a law to be passed hereafter."

This provision, it was insisted, should only be applied to the unorganized association, for the reason that the organized company would always have their road surveyed, and their route determined before an application is made to the Legislature.—But this is no more required of the organized, than the unorganized company.

It is true that the former, in their articles of association must specify to a certain extent, the route and terminus of their proposed road; but in their applications to the Legislature, the same specifications, in these respects, are to be made by both.—The objections apply as much to the one as the other. And we have no doubt that this concluding clause of the section is equally applicable to each, and that it applies to both.

It was finally insisted under this construction of the law, that it would make those portions of it which deprive the company of the power to take private property, unconstitutional, for two reasons. First, the company have organized under the law, and have expended a large amount of money in making their maps, surveys and profiles—all of which will be an entire loss, if it is not permitted to make the road, which is, in effect, depriving them of their property, without just compensation. It is only necessary to answer that all this must have been foreseen when the enterprise was undertaken and the company formed, in case they should be unable to get a grant of necessary power. It may be a hard case, possibly, and an unjust one; but of this, we know nothing, for with it we have nothing to do. It was further urged, with apparent sincerity, that that portion of the law, which withholds the power claimed, is a violation of the Constitution, which enjoins upon the Legislature, "To encourage internal improvements, by passing liberal general laws of incorporation for that purpose." This is a Constitutional command to the Legislature, as obligatory on it, as any other of the provisions of that instrument; but it is one which can not be enforced by the Court of Justice.

It addresses itself to the Legislature alone, and it is not for us to say whether it has obeyed the behest in its true spirit—whether the provisions of the law be liberal, and tend to encourage internal improvement, is a matter of opinion about which men may differ, and as we have no authority to reverse Legislative action on the subject, it would not become us to express ourselves in relation to it.

The law makes no provision for the construction of canals, turnpike roads, and yet, they are as much internal improvements as railroads; and we might as well be asked to extend what we might consider the liberal provision of the law to them, because they are embraced in the constitutional provision, as to ask us to disregard such provisions as we might consider illiberal. The argument proceeds upon the idea that we should consider that done which ought to be done. But that principle has no application here. Like laws upon other subjects within Legislative jurisdiction, it is for the Court to say what the law is, not what the law should be.

The judgment of the Circuit Court is reversed.

—

I, FINNEY D. PRESTON, Clerk of the Supreme Court, within and for the First Grand Judicial Division, of Illinois, do hereby certify that the foregoing is a true and correct copy of the final order and opinion, in the before styled cause, as appears of record in my office.

In testimony, whereof, I have hereunto set my hand, and affixed the seal of my said office, at Mount Vernon, the 26th day of May, A. D. 1852.

[L. S.]

FINNEY D. PRESTON, Clerk
Supreme Court.

Pennsylvania Railroad.

This company are about to effect a loan with which to complete this work, based upon a mortgage of the road. The whole amount of the loan is limited to $5,000,000, of which only $3,000,000 are now offered, and is reimbursable on the 31st of December, 1880. The bonds have coupons attached, and are convertible into the stock of the company at any time previous to Dec. 31, 1860.

We copy the portions of the company's circular, showing the financial condition of the company and the general characteristics of the road.

The cost of the whole railroad, including its exuipment, is estimated at $12,500,000. The whole amount that will be obtained from the present subscriptions to the capital stock of the company, will not be less than $9,750,000, which leaves the am't required to complete and equip the road $2,750,000, which is less than the sum proposed to be raised at present by a loan—giving an ample margin for contingencies or the extension of the double track.

The expenditure of this sum, in addition to the amount due on stock subscriptions, will present an outlay of $12,750,000, upon contracts executed at *unusually low prices*, to secure a loan of only three millions.

No debt has heretofore been incurred by the company, and its capital stock is being continually enlarged by new subscriptions. The amount now paid in is $9,417,895.

This broad basis—together with the large receipts from the business of the road in its unfinished condition—gives to this loan claims upon the consideration of capitalists, that are not surpassed, if equalled, by those of any other railroad company in the Union—and places it, as a safe investment, among the first class government securities.

The following brief description of the railway, its characteristics, and the progress of the different lines that are to connect it with every important place in the great west, will satisfy all who desire an investment, where the *returns* will be *certain*, and the principal entirely secure, that this loan will meet *all* their requirements. It is based upon an

improvement which occupies not only the *shortest* and *best* route between the Mississippi valley and all of the important Atlantic markets, but also one that commands the local travel of the populous region traversed, without a competitor. These advantages are secured to it both by the length of the road and the unbroken mountain barriers, which stretch on the north to the Susquehanna and on the south to the Potomac rivers.

The railway was commenced in July, 1847, and will be completed, with a single track and sidings, in August or September, 1853. It will extend from Harrisburg to Pittsburgh, connecting the Ohio river with the capital of the State, and, by means of the railroads already finished on the east, with Philadelphia—the second city in point of population on the western continent, and first in the natural resources of the country tributary to it.

The length of the Pennsylvania railroad will be 248 miles, of which 191 miles are now in successful operation. The whole of the remaining distance is under contract, and rapidly advancing towards completion; 18 miles more will be opened in July, and the remainder—except that portion crossing the Allegheny mountains, where the Portage railroad is temporarily used for 28 miles—in September or October next.

The route of this road, although it intersects in its course all of the mountain ranges of the State, is highly favorable. The allegheny mountain is the only one not severed to its base by either the Susquehanna, Juniata, or Conemaugh rivers, the valleys of which are followed by the railroad thro' the great gateways which nature has opened for its accommodation.

The crest of the Allegheny mountain is passed by a tunnel 3,570 feet long, and at an elevation of 2,161 feet above tide water. No stationary power is required on any part of the railroad. The distance from Harrisburg to Altoona, at the foot of the eastern slope of the mountain, is 131 miles, and the ascent overcome 858 feet. The steepest ascending gradient on this part of the road, passing eastwardly, is 10½ feet per mile, and westwardly 21 feet per mile. From Altoona to Pittsburg, the steepest gradient is 52 8-10 feet per mile, with the exception of 9¼ miles of the eastern slope of the mountain, where an ascent is encountered of 95 feet per mile, (reduced upon curves according to their radii)—upon which extra locomotive power will be employed.

The Baltimore and Ohio railroad overcomes this mountain by a maximum gradient, 15 miles in length, of 116 feet per mile, and descends upon the west side, at the same rate, for 8 miles. It also overcomes Laurel Hill, which is avoided on this route, by a tunnel 4,200 feet long, with gradients on each side of 105 feet per mile.

The Pennsylvania railroad is graded for a double track in all the tunnels and rock cuttings, and much of the earth work The masonry, in all cases, is constructed with the same object.

The superstructure is of the most substantial character. The cross ties of white oak, 8 by 8 inches, 8½ feet long, placed 2½ feet apart, are imbedded in ballast of broken stone, twenty inches in depth. The rails weigh 64 lbs. per yard, except on the steep gradient ascending the Allegheny mountain, where 76 lb. rails are to be used. The buildings are commodious and substantial. From Altoona to Pittsburg, 117 miles, there are only two wooden bridges, each of about 100 feet span; all the others being constructed of stone or iron. The road and its appurtenances throughout will compare favorably with any work of the kind in America. While very little has been expended in unnecessary ornament, nothing has been spared to secure substantial excellence.

Bituminous coal abounds on the western part of the road, from Pittsburg to the summit of the Allegheny mountain, a distance of 105 miles; the road passing in this distance through numerous veins, varying from 4 to 13 feet in thickness. The extensive coal field at Broad Top Mountain, is within 15 miles of the road, at a point 158 miles east of Pittsburg, and 90 west of Harrisburg. This is the nearest bituminous coal to tide-water in the United States. While in the valley of the Susquehanna, the line of the road is in the immediate vicinity of the Anthracite coal region.

At Harrisburg, commences the Harrisburg and Lancaster railroad, 36 miles long, now leased and worked by the Pennsylvania railroad company.—This road intersects the Columbia railroad at Lancaster, completing the railroad communication to the city of Philadelphia. The distance from Harrisburg to Philadelphia is 106 miles, but improvements are now in progress upon the Columbia railroad which will save about 4 miles, making the whole distance from Pittsburg to Philadelphia 350 miles.

At Harrisburg the line of railroads leading to the cities of Baltimore and Washington also commence. The distance from Harrisburg to Baltimore is 85 miles, and from Pittsburg to Baltimore, by this route, 333 miles.

The above Eastern and Southern connections are completed.

The following statement will exhibit the receipts of the company since the commencement of the present fiscal year.

For January	$93,772 50
February	157,251 13
March	245,373 71
April	206,408 91
Total	$702,806 28
Same month last year	340,539 25
Increase	$362,267 03

New Jersey Central Railroad.

The Central railroad of New Jersey is now about being opened to Easton, and the directors beg leave to lay before the stockholders, at the close of the fifth year of its corporate existence, a full statement of its past history, present condition, future prospects, probable cost and financial condition.

Route and Proposed Connections.

Attention was early called to the subject of a direct railroad communication across New Jersey, to connect the city of New York with the rich mineral and agricultural regions of Pennsylvania. The difficulties of construction had deterred rival enterprises from being undertaken, and the regions in question remained cut off from an eastern outlet, and with scanty and insufficient communications even with the south and west of their own State.—The object of this company is to supply this eastern outlet, and at the same time to give to the western counties of New Jersey a connection with their natural market.

The ronte selected is by ferry from New York to Elizabethport, on Staten Island Sound, 12 miles, where the requisite grounds for depots, shops, coal-yards, etc., have been procured, at reasonable rates. From this point the road passes, with few deviations from a straight line, and for half the distance over a singularly favorable country, through the thriving towns and villages of Elizabethtown, Westfield, Plainfield, Bound Brook, Somerville, Clinton, New Hampton, Asbury and Bloomsbury to Phillipsburg, opposite Easton, at the junction of the Lehigh river with the Delaware. The length of road is 63 miles; making the distance from New York to Easton 75 miles.

Here the charter terminates; but that of the Delaware, Lehigh, Schuylkill and Susquehanna railroad authorizes the bridging of the Delaware at this point, and the construction of a railroad in a direct line up the Lehigh valley, 40 miles, to Parryville, where a connection will be made with the Beaver Meadow railroad, 17 miles long, leading to the Lehigh coal fields. The directors of the Lehigh road, expect to have it under contract within a year, and completed within 18 months. The distance from New York to these mines will then be reduced to 128 miles.

The extension of the Lehigh road from Parryville to Tamaqua, 20 miles; the reconstruction of the Catawissa railroad, from this point to Catawissa, 12 miles; the building of the remainder of the road, from Catawissa to Williamsport, 45 miles; and the building of the Sunbury and Erie railroad, from Williamsport to Erie, 240 miles; the whole of which enterprises appear now reasonably certain to be speedily completed; will give an additional length of road 347 miles; and a line will then extend from New York to Erie, on Lake Erie, 462 miles, in a direct course, and with most favorable grades.

From Allentown, on the line of the Lehigh railroad, 17 miles from Easton, a connection is proposed through one of several channels, with the Pennsylvania Central railroad, at or near Harrisburgh; which will bring the Schuylkill coal fields within 125 miles of New York, and open the most direct communication with Pittsburg and the railroads of Ohio. Distance from New York to Pittsburg, 423 miles. The semi-bituminous Dauphin coal will also avail itself of this opening as the cheapest avenue to an eastern market.

From your road at New Hampton, 59 miles from New York, the Warren railroad, uniting with the Cobb's Gap railroad, will diverge to the north, through the Delaware Water Gap, 66 miles, to Scranton in the heart of the Lackawanna coal fields; reducing the distance from New York to those mines to 125 miles! Thus the three great rival coal-beds will all be brought within about 125 miles, respectively, of the city, by routes whose favorable grades will enable them to transport coal at very low rates. This distance cannot be materially shortened, as it is in each case little over that of a straight line.

From Scranton, the Lackawanna and Western railroad is in operation to Binghamton, 62 miles; from that point the Syracuse and Binghamton railroad is surveyed to Syracuse, 75 miles; and from thence to Oswego, 35 miles, the Oswego and Syracuse railroad is in operation; making the distance from New York to Lake Ontario, by this line, only 297 miles!

In the above sketch, reference is made to the points of more public interest, namely, the coal fields, and the contemplated line of through traffic. For the prosperity of the company, the directors look fully as much to the wealthy, fertile and manufacturing counties of New Jersey traversed by the road; to the immense water-power of Belvidere; to the manufactories established and to be established at Elizabethport and Raritan; to the rapid increase of Plainfield, Westfield, and other villages on the lower end of the line, to which numbers now remove in the summer with their families; and to the business of Easton, the terminus of the road, one of the most prosperous towns in Pennsylvania, and a great depot for coal, lumber, iron, etc. These and other branches of local business, which no competition can take away, they propose to foster, by a liberal system of rates for passengers, commutations, and freight.

It will give some idea of the magnitude of the business done at Easton, (a place the existence of which was hardly known in New York until very recently,) to state that there are, within three miles of that place, 18 merchant and grist mills, 6 saw mills, 3 oil mills, 3 tanneries, 5 foundries, 7 distilleries, 1 planing mill, 1 rolling mill and wire factory, 3 large blast furnaces, 2 cotton factories, and other smaller factories all in successful operation. At South Easton there is a vast water-power sufficient to greatly increase the number of manufactories; besides which the Lehigh has a fall of two hundred feet between the Lehigh Water Gap and Easton, a distance of twenty-five miles, which would admit of any additional water power, that might be required. The surrounding country is remarkable for the exquisite beauty of its natural scenery, and its uncommon healthiness, as well as for its exceeding fertility and great advantages for trade and business. The excess of flour over and above the home consumption, that is sent to market annually from Easton and its vicinity, exceeds 110,000 barrels, and 50,000 barrels of corn meal.—At Easton alone, there were manufactured, the past year. 90,000 barrels of flour, 14,000 barrels of whiskey, 3,000 tons of pig metal, and 800 tons refined iron; and in Northampton and Lehigh counties, 200,000 barrels of flour, and 18,000 barrels of corn meal. Immense deposits of the finest kinds of iron ore have been found, both in the neighboring hills and under the most valuable farms, and no section of the United States seems to be more favorably adapted to the successful manufacture of iron. In proof of this it is only necessary to name the Crane Works, at Catasauqua; the Lehigh Works, at Allentown; the Glendon Works, the South Easton Works, the Durham Works and Cooper's Works all within a few miles of Easton. In short, the position of Easton is so favorable, and its present growth so rapid, that nothing but the opening of the present avenue to the East appears to be want-

ing to enable it to take a position among the large inland cities.

Surveys, Grades, and Curves.

Surveys were made, at various periods, of the different routes proposed; and the final surveys and location were made, with great care, by James Laurie, Esq. No expense has been spared to make it a first class road, suitable for the economical transportation of the large business that is expected to be done over it.

On the portion of the road from Elizabethport to Somerville, which came to the company by purchase, the work was originally very light and the grades were without difficulty kept very low. In one case, near Scotch Plains, a grade of 40 feet to the mile, coming East was left in the original construction, which it is proposed to take out at an early period, as it is the only heavy grade on the whole line. The road consists, principally of straight lines, with curves of large radius. Many improvements will be made whenever a second track is required.

The same character of road, namely, straight lines, easy curves, and grades of not more than 20 feet to the mile, coming east, was preserved in the part from Somerville to Whitehouse built by this company in 1848; though with greater expense, as the country was more rolling.

The remainder of the road now under contract, presents great natural difficulties; as the country is crossed by several ranges of hills, running north and south. Notwithstanding these obstacles, the road, as constructed, has no grade over 21 feet to the mile, coming east, and none but easy curves. The cuttings and fillings are very heavy; as may be judged, when it is stated that 1,660,000 cubic yards of earth or rock, will have been moved, and about 50,000 cubic yards of masonry built, on 28 miles of road. The item of masonry includes four river bridges of great height, the one over the South Branch being 1,280 feet long and 98 feet high. Fortunately, a part of the work, more particularly along the Musconetcong range, was of a very light character, which has assisted in reducing the average cost.

History of the Company.

The company was incorporated in February, 1847, under the name of the Somerville and Easton railroad company.

In February, 1849, by a supplement to its charter, it was authorized to purchase the railroad, which, under another charter, had been constructed from Elizabethport to Somerville, and the corporate name was changed to the Central railroad company of New Jersey by which name it is now known.

Under the provisions of this supplement—after a full examination of the books, and a careful valuation of the road and its appurtenances—a proposition for a consolidation was made, and ratified by the respective stockholders. By this agreement the stockholders of the central railroad company became the owners of the railroad from Somerville to Elizabethport, relaid with a heavy H rail; of a permanent interest in the ferry to New York, and of all the other assets of the old company. Pursuant to this arrangement the company has the control of the whole line from Easton to the city of New York.

Under the original charter, 9¼ miles of road, from Somerville to Whitehouse, had been previously built, at a cost when opened for travel, of $236,460 69.

From the time of the above purchase, in April, 1849, to the present time the consolidated line from New York to Whitehouse, has been operated with great success.

The attention of the board was then turned to the completion of the road to Easton; but for some time without success, as the expense was great, and they were determined not to move in the matter until the whole of the requisite funds were secured, and all possibility of embarrasment avoided. The favorable money market of 1850 enabled them to close a contract, in July of that year, with Messrs. Boody, Ross & Co., for the whole grading, masonry, bridging, and superstructure, of the extension.

The fifteenth section of the Charter is as follows:

"And be it enacted, That the said corporation shall have power to borrow such sum or sums of money from time to time, as shall be necessary to build, construct or repair said road, and furnish the said corporation with all the necessary engines and machinery, for the use and objects of the said company, and to secure the payment thereof by bond and mortgage, or otherwise, on the said road, lands, privileges, franchises and appurtenances of, or belonging to said corporation, at a rate of interest not exceeding seven per cent per annum."

By virtue of this section, 1,500 bonds, of $1,000 each, were created, bearing interest at seven per cent per annum, payable semi-annually in the city of New York; the principal of 500 bonds payable at the same place, on the 1st August 1860, of 500 on the 1st August 1865, and the remaining 500 on the 1st August 1870; the whole secured by a mortgage of the road and franchises to James Boorman and John C. Green, as trustees for the bondholders.

The contract was signed in the early part of July 1850, and the work was commenced on the 16th Sept., in the same year. It is expected that the section of the road from Whitehouse to Clinton will be opened on the 1st May, and no disappointment is anticipated in opening the entire road to Easton on the 1st July, as the work is well advanced on all the sections except two, and on those night forces are employed.

Financial Condition.

The capital of the company is $1,200,000, divided into shares of $50 each; with liberty to increase to $2,000,000. Of this $954,000 has been paid. The remainder of the stock has been reassigned or forfeited to the company, Interest at the rate of seven per cent per annum has been paid on the stock, *in stock*, the whole of the earnings of the 47 miles in operation being applied to the construction of the remaining 28 miles, and the purchase of engines and cars. The balance of interest on stock, bonds, &c., not covered by earnings amounts at present to $71,114 60. This balance will be charged as part of the cost of the extension, whenever the construction accounts are ready for closing.

The policy of the company will be to divide in stock the net earnings of the road, until the capital of the company is full, and all the floating debt extinguished.

The directors now submit a statement of the present condition of the company, as shown on the ballancing of their books on the 31st March, 1852.

CENTRAL R. R. Co. OF N. J. *Statement April* 1, 1852.

Capital stock	$954,000 00
Central mortgage bonds, due 1860	315,000 00
" " " " 1865	400,000 00
" " " " 1870	400,000 00
Somerville mortgage bonds	39,000 00
Somerville bonds payable	101,000 00
Bills payable	57,710 75
Balances of sundry accounts	6,684 14
	$2,273,394 89

Floating Debt, and Means of Liquidation.

Of the mortgage bonds, $1,115,000 have been issued; and the company have on hand $385,000. The estimated payments to the contractors will absorb $256,000 of these, and leave $129,000 applicable to other purposes.

The present debts other than bonds, as shown by the statements are		$64,391 89
Estimate for station houses, engines, cars, improvements, and sundries, (omitting the contractors and interest)		191,431 50
		255,826 39
Deduct bonds applicable	$129,000	
Deduct estimated earnings	$213,000	
Less interest on bonds, etc	126,000	
	87,000	
		216,000 00
Balance unprovided for		$39,826 39

As most of the indebtedness will have twelve months to run, and the credit of the company is good, the directors anticipate no difficulty in paying the claims as they acrue, or in extending them for short periods, to suit the receipts.

In conclusion, the directors have much pleasure in assuring the stockholders that, although the cost of the road has been more than was anticipated before full estimates were made, and the difficulty in starting the extension was very great, yet the financial condition of the company is easy, the road well built and judiciously located, and after the road is opened to Easton, on the 1st day of July next, the business bids fair to surpass the most sanguine anticipations.

Whenever the several enterprises which have been briefly alluded to, shall be carried out, for which the present easy money market affords every facility, the Central railroad of New Jersey will assume a prominent position among the important avenues which radiate from the city of New York.

By order of the board,

JOHN T. JOHNSON, *President.*

South Carolina.

EXHIBIT OF THE GREENVILLE AND COLUMBIA RAILROAD COMPANY.

The Greenville and Columbia railroad company was chartered by the legislature of South Carolina in 1845. By the charter the capital was declared to be one million of dollars, or ten thousand shares of $100 each. This charter was found not to suit the public expectations, and in December 1846, it was amended so as to make the shares $20 each, and to increase the number of shares to 50,000. The amendment gave the stockholders the privilege of working out one half of their stock in the construction of the road. The amendment directed the road to run from Columbia to Newbury, and thence by any route which the stockholders might fix upon to Greenville. In May, 1847, the company was organized, and the undersigned was placed at its head. Soon after lines of survey were run from Columbia *via* Newbury and Laurens to Greenville, and also from Newbury through Abbeville and Anderson to Greenville.

The stockholders, at their annual meeting in November 1847 located the road from Columbia up the Broad valley, on its N. E. bank, to Alston, thence by Pomaria, Prosperity, Newbury courthouse, Silverstreet, Chappel's bridge, Dyson's (then crossing the Saluda) Ninety-six, Greenwood, Cokesbury, Grier's, Belton to Anderson courthouse, and thence to Greenville.

This excluded Laurens, and as the subscription of that district was conditional, the stockholders of that district withdrew. Great discontent was manifested by the Greenville stockholders, so much so, that they for the time refused to pay their subscriptions.

Notwithstanding these difficulties in the beginning, the road was located in January, 1848, for 16 miles along the valley of Broad river to Littleton, and contracts were let out, and the work begun. By the annual meeting in May, the work was in progress, and the stockholders, with the exception of the Greenville stockholders, began to pay their stock, under calls of one-twentieth, at the end of every sixty days, (the first instalment was paid at the subscription). In July of that year the line from Littleton to Anderson, 108 miles, was put under contract, the stockholders from Broad river to Anderson, 98 miles, taking the conttacts, and in most instances, thus paying one-half of their stock in work. In 1848, December, the legislature subscribed one-half of the bonds of the South Carolina railroad company, $272,949 74 to the stock of the company, for which scrip has been issued to the state, but the state has no vote, nor any direction in the company. In 1849, September, the laying of the track was begun at Columbia. In Oct. of that year, a reconciliation with the stockholders of Greenville was effected, and they returned with an increased subscription on the part of themselves, and the people of Buncombe and Henderson, North Carolina, amounting to $180,000. One citizen of Greenville, Vardry McBee, subscribed $50,000. At the same meeting of stockholders a branch to Abbeville court-house was agreed on, and additional stockholders to the amount of $75,000 were received. The location of 1847 was altered so as to run to Anderson from Dr. Brown's (now Belton) and from the same place by Williamston to Greenville, and application for an amendment of the charter was directed to be made. The charter was accordingly amended, increasing the stock to $2,000,000, whenever the company should think prop-

er, and sanctioning the branch to Abbeville, and the change of location. By the same act the legislature authorized a further subscription on the part of the state of $75,000 in the stock of the South Carolina railroad company, when the grading to Abbeville and Greenville should be completed. The grading of the Abbeville branch, fourteen miles, was immediately undertaken, and will be completed by the 1st of August next. The grading of the extension to Greenville will be completed in all '52.

There has been paid in on the capital stock of the company $1,004,231 97. The company have contracted debts to the amount of $253,026 39, this makes an aggregate of $1,257,258 36. They have laid out for the construction of their road, timber, iron, right of way, depots, workshops, land and rolling stock $1,183,269 76, they still have on hand of stock received in the South Carolina railroad, bonds and Columbia bonds $74,000. This added to their expenditure makes $1,257,258 36. They will have the further sum of $75,000 in the stock of the South Carolina railroad company on completing the grading to Abbeville and Greenville, they also will have $193,768 03 of stock not yet paid in, these means will pay all the debts of the company and leave a surplus of $89,741 69 towards the completion of the road, which will require $214,730 98, and will thus leave a deficiency of $124,989 24 to be provided for beyond present available assets.

The road was completed and in operation on the 1st of June, 78 miles. It produced an income for the months of January, February, March, and April of $40,470 66, an average of more than $10,000 per month. The income of May was not precisely ascertained when I left (1st June), but it was equal to, if not more, than any of the previous months. The average expense of the road is about one-half of the gross profits.

Thirty miles of wooden superstructure are laid and ready for the iron, beyond the point of completion. The entire length of the road and its branches is 164 miles, 156 of which are graded. We have iron which has been paid for and in our possession for 49 miles beyond our present completion, we have fourteen miles of iron now delivering, and twenty-six miles more contracted for, which have yet to be paid. A little more than half of the road will be laid with the T iron, weighing 50 lbs per yard, thirty-six miles with the flange iron, weighing 25 lbs., and the balance with the Charlotte pattern, weighing 36 lbs per yard.

The company has seven locomotive engines, costing $51,385 27, three sets of passenger and baggage cars, and 110 freight cars, costing $74,944 48, they have workshops and machinery costing $22,874 42, they have real estate, depots and water stations costing $36,578 47, so that independent of the road itself, the company has in other property $185,783 64.

The company, at their last July meeting, authorized $150,000 of bonds to be issued. This has been accordingly done, and I now, out of that issue offer $20,000, bearing 7 per cent interest, payable half yearly on coupons at any bank in New York, 1st July, and 1st January. The bonds are redeemable in ten years. The principal will be paid where the interest is payable. A further issue of $150,000 will probably be issued after the 14th of July next I desire proposals for that sum.

The charter authorizes the company to assess the stockholders 20 per cent on their capital, to complete the road. It may be asked why this is not done? The answer is, we prefer to borrow, because we believe, with the income of the road and our other means, we can repay without assessing. The road will be entirely finished by 1st of April, 1853.

The road runs through the richest agricultural part of South Carolina, it traverses the western border of Richland and Fairfield, it passes over the N. E. corner of Lexington, and traverses Newbury from north-east to south-west, it passes over the north-western angle of Edgefield, traverses Abbeville, Anderson, and Greenville. Much of the trade of Spartanburgh, Union, and part of Chester finds its way over it. Laurens has a railroad connecting with the G. R. R. at Helena, one and a-half miles from Newbury. The Spartanburgh and Union railroad, is to unite with the G. and C. railroad at Alston.

The future probable business of the road may be judged of as follows:—108,000 bags of cotton will annually pass over it, which will equal $108,000, flour and other products, and stock will ap roach half as much, say $54,000, the up freight, or freight on merchandize will amount to at least $100,000, passengers, mails, &c., will equal at least $60,000—equal to $322,000—put the expenses of the road at one-half, $161,000, it leaves a net profit of $161,000, on a capital of $1,546,991 34, the entire cost of the whole road, its brancnes and outfit. This, it will be seen is greatly beyond 7 per cent.

This is no exaggerated statement, for I speak from certain and ascertained data. The present prospect is, that from Anderson, South Carolina, the road will proceed to pass through the Rabun Gap in Georgia, and connect with the Highwassee R. R. leading to Knoxville, and then by the Charter to be extended through Tennessee and Kentucky to Louisville. The connection through the Rabun Gap will also unite with the Chattanoga and Nashville R. R. so that by this connection the trade and travel of the south-west will pass down and up the G. & C. R. R. greatly enhancing its means.

JOHN BELTON O'NEAL,
President G. & C. R. R. Co.

New York, 12th June, 1852.

AN EXHIBIT OF THE CONDITION OF THE GREENVILLE AND COLUMBIA RAILROAD COMPANY.

Total length of road from Columbia to Greenville C. H., when completed, inclusive of two branches to Abbeville and Anderson Court Houses	164 miles.
Length of road, grading completed	156 "
Length of road upon which the timber track is laid, inclusive of 80 miles in operation	105 "
Length of road now in operation	80 "

Probable date of the completion of the road, 1st April, 1853.

Estimated cost of whole road	$1,352,991 34
" " outfit	194,000 00
	$1,546,991 34

Outfit in use—7 locomotive engines; 3 sets passenger and baggage cars; 110 freight cars.

Receipts from capital stock	$1,004,231 97
Receipts from company's bonds issued at short dates	41,171 00
Receipts from company's bonds issued at ten years—	
"Coupons"	76,500 00
Receipts from bills payable	129,220 57
" interest account	6,136 82
Amount capital stock unpaid	193,768 03
Deficiency of amount, estimated cost of road and outfit	95,962 95
	$1,546,991 34

EXPENDITURES.

For engineering and bureau expenses		$68,142 54
Graduation		358,243 81
Iron rails		298,098 20
Timber, spikes, chairs and track laying		159,727 51
Trestle work, bridging and masonry		104,647 25
Real estate, depots and water stattons.		36,578 47
Work shops and machinery		22,874 22
Right of way and incidentals		8,618 41
Locomotive engines	51,385 27	
Passenger and freight cars	74,944 48	
		126,329 75
Assets S. Carolina railroad bonds	44,000 00	
Do. town of Columbia bonds	30,000 00	
		74,000 00
State subscription, payable on completion of road to Abbeville and Greenville		75,000 00
Balance to complete road and outfit		214,730 98
		$1,546,991 34

Illinois.

The Illinois Central railroad company have made a further purchase of forty thousand tons of rails at a low figure, one half cash and one half bonds, at par. This makes fifty thousand tons purchased, about two-thirds of the entire amount needed to iron the road.

Massachusetts.

Boston and Worcester Railroad.—This road was incorporated in 1831, and opened throughout July 4th, 1835. Its length, including branches, is sixty-nine miles, of which, forty-five miles has a double track. The cost of the road January 1, 1852, was $4,862,700.

The following table has been compiled for the Boston Courier by George A. Foxcroft, Esq., exhibiting the operations of the road during the last ten years; its cost, and the market price of the stock, at the beginning of each year. The item of "interest" is deducted from the receipts and expenses:

Year.	Cost	Value of stock.	Gross receipts.	Running expenses.	Net income.	Div'nds.
1842.	$2,374,500	$109 pr sh.	$168,510	$180,697	7 pr ct.	
1843.	2,764,400	107 "	206,641	176,726	6	
1844.	2,836,900	114 "	 413	233,264	193,139	7½ "
1845.	2,914,100	120 "	487,455	249,729	237,726	8 "
1846.	.....	116 "	554,712	283,876	270,836	8 "
1847.	3,483,300	112 "	722,170	381,986	340,184	10 "
1848.	4,113,600	115 "	716,984	381,917	334,367	8½ "
1849.	4,650,400	106 "	703,361	405,551	297,810	6 "
1850.	4,908,300	93 "	757,947	377,041	380,906	6½ "
1851.	4,882,600	102 "	743,923	392,657	350.....	7 "
			5,844,839	3,085,212	2,702,627	av. 7·9-20

Croton Aqueduct.

The length of the Croton Aqueduct, from the Croton river to the distributing reservoir, is 40½ miles. Its width is 7 feet 5½ inches, and its height 8 feet 5½ inches. It has an uniform descent of 13½ inches to the mile.

The daily supply of water now delivered in the city is about 30,000,000 of gallons. The supply is limited to this quantity from the use of iron pipes across the high bridge. Only two pipes of 3 feet bore, each, are yet laid down. The average depth of the flow of water in the aqueduct will not exceed 4 feet. The rapidity of the current is about one and three fourth miles per hour.

The supply of water in the Croton river may be increased by the use of dams, sufficient to meet the wants of any city in the world. To introduce a larger quantity into the aqueduct it would become necessary to throw up additional embankments to protect and strengthen the walls. By filling the aqueduct, the flow of water would be increased to two miles the hour. In such case, the capacity of the aqueduct would be increased to 100,000,000 gallons per day, or three times its present amount. To effect this result it will probably become necessary to carry the aqueduct over the high bridge, and dispense with the use of pipes altogether. It will thus be seen that although the use of water at the present time equals the supply, the aqueduct may, without greatly increased expense, be made to more than double the quantity now delivered, yielding a daily supply of 100,000,000, gallons equal to the legitimate wants of 2,000,000 people.

Measures are also in progress for the construction of a new receiving reservoir to embrace an

area of 100 acres, having an average depth of about 35 feet. The present receiving reservoir contains an area of 35 acres, so that the two together will form a lake of 135 acres, and which will contain a supply of water equal to the wants of the city for many weeks at a time.

Receipts of Produce at Tide-Water.

The quantity of Flour, Wheat, Corn and Barley left at tide-water, during the fourth week in May, in the years 1851 and 1852, is as follows:

	Flour, bbls.	Wheat, bu.	Corn, bu.	Barley, bu
1851....	118,989	68,614	262,550	8,233
1852....	126,088	94,721	288,485	9,716
Inc...	7,099	Inc.26,107	Inc.25,935	Inc..1,483

By reducing the wheat to flour, the quantity of the latter left at tide water this year, compared with the corresponding period of last year, shows a decrease of 204,983 barrels of flour.

The following table shows the quantity of some of the principal articles of produce left at tide-water from the commencement of navigation to 7th June, inclusive, during the years 1850, 47 days; 1851, 54 days; 1852, 47 days:—

	1850.	1851.	1852.
Canal open	April 22.	April 15.	April 20.
Flour, bbls.....	449,574	859,803	598,449
Wheat, bush.....	140,018	395,790	677,947
Corn, do.....	620,337	2,012,403	1,149,250
Barley, do.....	108,314	94,504	70,576
Rye, do.....	99,634	54,537	80,395
Other grains, bush.	382,777	811,554	606,392
Beef, bbls.....	23,181	23,478	15,531
Pork, do.....	38,220	38,007	40,362
Ashes, do.....	13,823	10,851	9,813
Butter, lbs.....	276,264	520,052	83,303
Lard, do.....	4,627,826	8,581,250	4,345,087
Cheese, do.....	1,662,663	750,321	440,670
Wool, do.....	452,925	330,416	142,023
Bacon, do.....	5,214,242	7,029,840	4,127,856

Ohio.

Dayton and Greenville Railway.—Mr. E. B. Taylor, the president of this just finished road, called upon us yesterday, and informed us that the opening train will pass over the road to-morrow. The cars will leave Dayton for Greenville immediately after the arrival of the morning cars from Cincinnati. We do not know what arrangements have been made for celebrating an event of so much importance to this part of the country, but suppose they will be both pleasant and appropriate.

Marietta and Cincinnati Railway.—At the recent meeting of the board of this company, in Chillicothe, the following resolution was passed by a unanimous vote:

"*Resolved*, That it is the true policy of the company to construct an independent line of railway into the city of Cincinnati—and that the president be directed to adopt such measures as may be necessary to obtain subscriptions of stock for this purpose, with a view to an early commencement of operations between that city and the point to which the road is now under contract; and that the president employ such agents as he may deem necessary to accomplish the objects of this resolution."

Indiana.

Central Railroad.—The Indiana Journal, speaking of the sale of Indiana Central railroad bonds, made here a short time since, at about 95½ says:

This sale speaks volumes for the Central road, and without doubt fixes its reputation among eastern capitalists, at the very highest grade of western railroads. It traverses undoubtedly one of the best countries in the world, occupies a position that must command the travel through the central portion of the Ohio valley, and in addition to all this is of easy and cheap construction, and is in the hands of most excellent and judicious men. These things seem to be well understood east, and hence this most advantageous sale.

New York.

Troy and Schenectady Railroad.—At a meeting of the directors of the Troy and Schenectady railroad company, on Monday, Russell Sage, Esq., was elected president of the company; Thomas Symonds, vice president, and Hiram Smith secretary. Messrs, Edwards and Ingram were appointed the executive, and H. N. Lockwood, J. N. Willard, and W. F. Sage, finance committee for the ensuing year.

Rochester and Syracuse Railroad Company.—The following gentlemen were chosen directors on the 9th inst.:—

Henry B. Gibson, Joseph B. Varnum, James J. Van Allen, John Wilkinson, John A. Chedell, Nat. Thayer, Wm. F. Weld, Horace White, Jocob Gould, Joseph Fellows, Chas. Seymour, Lewis Brooks, Robert H. Ives, H. B. Gibson president.

The company have resolved to rebuild their depot in the city of Rochester, of brick, and of dimensions considerably enlarged, so as to accommodate the Niagara Falls road.

Rochester, Lockport and Niagara Falls Railroad Company.—The forlowing gentlemen were chosen directors of this company, for the current year, at the annual election, held on Thursday the 10th inst.:—

Joseph B. Varnum, Edward Whitehouse, New York; Azariah Boody, Freeman Clarke, Silas O. Smith, Rochester; Elias B. Holmes, Brocbport; Roswell S. Burrows, Alexander Ward, Albion; Isaac C. Colton, Lockport.

It is expected that the road will be opened on the 25th inst., or between that time and the 1st of July.

Albany and Schenectady Railroad.—The following gentlemen were elected directors of this company by the stockholders on Wednesday of last week: Messrs. E. C. McIntosh, G. Y. Lansing, Lyman Chapin, H. Pumpelly, Augustus James, Friend Humphrey, John F. Winslow, R. H. Winslow, and Thos. Tileston. The traffic of the road continues to be large.

Utica and Schenectady Railroad Company.—At an election for directors of this company, held on the 7th inst., the following persons were elected directors for the ensuing year:

Erastus Corning, Nicholas Devereux, Nathaniel S. Benton, Alonzo C. Paige, John Townsend, Jas. Hooker, Thos. W. Olcott, Marcus T. Reynolds, J. Phillips Phœnix, E. T. T. Martin, Livingston Spraker, John Ellis and Eleazer F. Backus.

Rutland and Washington Railroad.—The Rutland and Washington railroad is now open from Rutland to Troy, and in connection with the Rutland and Burlington road, passengers are carried through from New York to Burlington, a distance of over 300 miles, by an express train, in nine hours. Trains leave New York at 6½ o'clock in the morning, and arrive in Burlington at forty minutes past 3 o'clock in the afternoon.

Sodus Point and Southern Railroad.—The Newark Democrat of the 3d says, the farmers along the proposed route of this road are getting alive to the importance of pushing it ahead. A meeting was held a few days since in Newark, which was largely attended by substantial farmers, who subscribed liberally to the stock and seemed determined to have the enterprize carried forward.

Sodus Bay and Ithica Railroad.—There is a great desire manifested among the people of Wayne, Seneca, and Tompkins counties, to have a railroad between the above points, passing through the counties named, and connecting lake Ontario with Cayuga and Seneca lakes. An enthusiastic meeting in favor of the project was held at Ovid, Seneca Co., some days since, in which all three of the counties on the line were represented by delegates. Resolutions were passed, approving of the project as feasible, and necessary to the development of the resources of that section of country, and appointing a committee to solicit subscriptions to defray the expenses of a survey of the route.

Kentucky.

At the meeting of the stockholders of the Lexington and Big Sandy railroad company, held at Owingsville, on the 4th inst., the following gentlemen were elected:

Directors.—Dr. Z. Cushing, of Greenup; Robert G. Carter, of Carter; Frederick Rand of Bath; Joseph Bondurant, of Montgomery; B. B. Grooms, of Clarke; D. T. Adams, of Fayette.

The directors then immediately assembled, and chose Richard Apperson, Esq., of Montgomery, president of the company.

We think the public have occasion to be gratified at the selection of the gentlemen above named. With a majority of the board we are personally acquainted, and it affords us pleasure to bear testimony to their qualifications. We are much gratified at the election of our own fellow-citizen, Mr. Adams, who made so liberal a subscription to the capital stock of the company, and who is so well qualified to discharge the duties of a director. Mr. Apperson, the president, is a thorough business man, possesses much energy of character, and by the devotion of his time and talents to this great enterprise will, we have no doubt, secure its completion. We regard his appointment as an excellent one. See the proceedings of the meeting of the stockholders in our paper to-day.—*Kentucky Statesman.*

Susquehanna Railroad.

The Susquehanna railroad company was organized at Harrisburg on the 10th inst. Gen. W. F. Packer was elected President, and Gen. Simon Cameron, Treasurer; Mr. A. B. Warford was appointed Chief Engineer. A resolution was passed by the board to commence operations at once, and to prosecute the work to completioa with all possible energy and despatch. The organization of the company is thus noticed in the Philadelphia American of Saturday:

"This company, chartered last year with authority, for the benefit of Baltimore, to tap the Pennsylvania railroad—on the west side of the Susquehanna, without crossing the river at all—and to secure to that city the key to the trade of the lakes by an extension up the river to Sunbury or Williamsport, was organised on Friday at Harrisburg by the election of the following officers: President, Wm. F. Packer; Directors, Messrs. Simon Cameron, George F. Miller, Eli Slifer, Joseph Casey, J. R. Priestley, J. B. Packer, and P. Dougherty, of Pennsylvania; Wm. Woodville, Henry Tiffany, Alexander Fisher, Wm. F. Murdock and William Gilmor, of Baltimore. The charter requires a majority of the board to *reside* in the State."

Baltimore and Ohio Railroad.

It is with unfeigned pleasure that we have it in our power to announce to-day, the completion of the Baltimore and Ohio railroad to the Monongahela river, a distance of one hundred and twenty-four miles from Cumberland. This great event took place on Saturday the 5th instant. The progress of the track during the month of May, we are informed, has been most rapid, there having been *twenty miles* of road laid down during that month. At this rate we shall soon stand upon the banks of the Ohio river.

From Fairmont to Niles' Fork the graduation is now ready for the rails, and from this latter point to Wheeling, the work is said to be so much advanced as to leave no doubt of the completion of the whole road on the 1st of January next. We understand that the Chief Engineer has made arrangements for the delivery of a part of the iron rails at Wheeling, so as to facilitate his depot arrangements at that point, in anticipation of the approach of the track.

It is also a subject for congratulation, that simultaneously with this gratifying announcement, the revenue for the past month of May, shows an ag-

gregate increase on both roads of within a fraction of $60,000, over the corresponding month of last year. It is believed to be the largest month's revenue ever realized since the work has been in operation. The revenue of the main stem, as will be seen by the monthly table, was $141,734,13, and of the Washington branch $33,140,25.—*Baltimore Patriot.*

American Railroad Journal.

Saturday, June 19, 1852.

Southwestern Railroad.

There is now every indication that this very important work will be prosecuted from Danville, Kentucky, to the Tennessee State line in the direction of McMinnville, under the charter of the Lexington and Danville railroad company. A meeting of the friends of the enterprize was holden at Danville on the 20th and 21st of May, at which, Cumberland, Adair, Russell, Casey, and Lincoln counties were represented by delegates who pledged their several counties to furnish subscriptions to the aggregate amount of $440,000 in aid of the work, of which $208,450 was already subscribed—and it was estimated that counties not represented in the meeting would swell the subscriptions to $630,000, whereupon the meeting made a proposition, embracing a statement of these facts to the president and Directors of the Lexington and Danville railroad company, that the said company should undertake the construction of the road from Danville to the State line.

To this proposition J. Barbour, Esq., President of that company, on behalf of the board of directors replied, that the work proposed was deemed important to the interests of the company, and the route, perhaps the best and most feasible of any offering, and proposed substantially the following basis for an arrangement with the meeting to go forward with the work. First, $500,000 good solvent subscriptions to be made by the counties south of Boyle, in the State of Kentucky, within five months after the conclusion of this arrangement.

Second, This done, $5,000 to be raised for the expenses of preliminary surveys, to be expended under the direction of the board of directors, and a committee of citizens appointed for that purpose, to be converted into stock should the road be constructed.

Third, Upon obtaining within ten months after the ratification of this agreement by the stockholders, the sum of twelve thousand dollars per mile in solvent subscriptions, this company will promptly undertake the construction of said extension, provided, the directors are satisfied that the road will be met from McMinnville, Tenn., at the State line by the shortest and best line for the interests of the company, and at such point as may be agreed upon by the board and the Tennessee company: or upon the procuring a less amount of subscriptions, if, after the surveys are made the board may think it necessary to justify the undertaking.

Fifth, The means raised for the construction of the extension of the road from Danville to Tennessee line should be kept separate from those raised, or to be raised for that portion of the road between Lexington and Danville, until both are completed, when the whole road should be joint stock.

If this proposition is accepted by the meeting, and ratified by the stockholders, this board will give the utmost means in its power to raise the means and construct the road.

A meeting of the stockholders is called for the 22nd of June, to consider and decide upon this proposition.

Upon the receipt of this proposition by the meeting it was resolved to accept its terms, and resolutions were passed pledging the necessary means to be raised, appointing treasurers to receive contributions to the $5,000 fund in each county, and calling a convention of the friends of the enterprize at Russell Springs on the 3d of July to take other necessary steps to further the construction of the road.

Civil Engineering.

A pamphlet has been issued from the civil engineering department of Union College, having for its object the answering of inquiries for information respecting the nature, object, extent, terms, etc., of the course of instruction pursued in the same, which has been in progress since May 1845. It defines and analyzes the general subject of civil engineering, and points out the value of a knowledge of its principles as a part of a liberal education, as well as to special students of it as a profession; it also explains what the course of studies proposes to effect for each of the two classes of students referred to, sketching an outline of the subjects taught, and giving the details of operations. This department is under the direction of Prof. Gillespie, a fine scholar and accomplished gentleman.

Baltimore and Ohio Railroad.

The city of Baltimore has just subscribed $1,500,000 to the Northwestern (Virginia) railroad, by which she proposes to open a direct line to the Ohio river, in direction of Cincinnati, and $500,000, for the purpose of pushing a road up the valley of the Susquehanna river, in Pennsylvania. The friends of the above project claim that by means of the above road, the city of Baltimore will be brought nearer both to Cincinnati and Lake Erie, than any other eastern city, and that consequently it will be in a good position to compete for the trade of the whole country. The above subscriptions were voted with the greatest unanimity, and the city is now prosecuting the above works with the greatest zeal and confidence. The people of Philadelphia are somewhat disturbed at the movements of Baltimore to get possession of the Susquehanna valley, and the press of that city are loudly calling upon the City Council to subscribe without delay, the $1,000,000 proposed to be taken in the Sunbury and Erie railroad, and to seize upon the route between Sunbury and Harrisburgh, and keep the influence of Baltimore from going about the latter point.

Ohio and Mississippi Railroad.

Location of road.—At a recent meeting of the directors of the Ohio and Mississippi railroad at St. Louis, the following route for the western portion of the above road was agreed upon, viz., "commencing 270 feet south 80 degrees west of the southwest corner of the western abutment of the bridge across Cahokia creek, in Illinoistown, running thence nearly east, passing south of Lake Marrais to Caseyville; thence up the valley of the little Canteen creek, a distance of about one and three-quarter miles; thence descending a ravine in a southerly direction, a distance of four miles, to the Ridge Prairie; thence in a south-easterly direction to a point near Lebanon, in St. Clair county; thence nearly due east, to a point near Aviston, in Clinton county; thence nearly due east to the Kaskaskia river near the town of Carlyle, in said county of Clinton; thence in the same direction to a point at or near the town of Salem, in the county of Marion; be, and the same is hereby adopted as the location of the Ohio and Mississippi railroad, in the state of Illinois, from the town of Illinoistown, on the Mississippi, to the point above designated."

Kentucky.

Lexington and Big Sandy Railroad.—We learn from the last number of the Kentucky Statesman, that the requisite amount of stock to enable the Lexington and Big Sandy railroad company to organize, has been subscribed; and that the stockholders were to meet at Owingsville on the 4th inst., for the purpose of effecting the organization. If this important enterprise is now taken hold of as it should be, and an efficient board of directors elected, this road may be pushed to a rapid completion. To Lexington, says the Statesman, it is of more importance than any other one road which makes her a point.

Two thousand one hundred and seventy-six shares of the stock, amounting to $108,800, have been taken, and from the character of the people and the county, there is little doubt that the enterprise will be carried forward successfully.

Baltimore and Ohio Railroad.

The Baltimore and Ohio railroad company, in anticipation of the completion of the road to Wheeling by the end of the present year and of the immense business which will then press upon it, have made arrangements and contracts for the construction of 1,158 burden cars. Of these, Messrs. Murray & Hazlehurst have contracted to furnish 400 house stock cars; Messrs. Scott & Bolster, 50 wooden house cars; B. P. Benson, 100 wooden house cars; Poole & Hunt, 100 wooden house cars; Messrs. Denmead, 100 wooden house cars and 200 gondolas; and the company itself will construct 50 iron house cars, 100 house stock cars, and 58 gondolas.

The Mobile and Ohio Railroad.

The Mobile Tribune says:—The directors have closed contracts for the graduation, etc., of forty-five miles more of the Mobile and Ohio railroad, excepting a few light sections, extending from Citronelle to Winchester, Mississippi. Early in July, eighty miles more will be let out, reaching to the South line of Kemper county, and in August following, one hundred miles more, between Lauderdale and Pontotoc, will be offered for contract.—These different divisions, including the distance from the city to Citronelle, make two hundred and eighty-five miles. All this will be completed within a couple of years.

New York.

Rochester and Syracuse Railroad.—The following gentlemen have been elected directors of the above road for the current year: H. B. Gibson, Chas. Seymour, Canandiagua; Jacob Gould, Rochester; Joseph Fellows, Geneva; John H. Chedell, Auburn; Horace White, John Wilkinson, Syracuse; Nathn. Thayar, Boston; ——Ives, Providence; Joseph B. Varman, J. J. Van Allen, New York; W. F. Weld, Boston; Lewis Brooks, Rochester.

Illinois.

Galena and Chicago Union Railroad.—The annual meeting of the stockholders in the above road, was held in Chicago on the 1st inst. The board of directors for the ensuing year is unchanged from the last. The board also re-elected the officers of last year, viz:

John B. Turner, President and Superintendent; John Van Nortwick, Chief Engineer; W. M. Larrabee, Secretary; W. H. Brown, Treasurer.

Hudson River Railroad.

The following gentlemen have been unanimously elected directors of the Hudson River railroad company, for the year commencing June 14 1852: Edwin D. Morgan, John David Wolfe, Edward Jones, Moses H. Grinnell, Drake Mills, Joseph Tuckerman, J. Boorman Johnston, Henry Young. Governeur Kemble, of Cold Spring; James Hooker, of Poughkeepsie; Erastus Corning of Albany; John Wilkinson, of Syracuse; James C. Forsyth, of Kingston.

At a subsequent meeting of the board, the following officers were re-appointed: Edwin D. Morgan, President; Edward Jones, Vice President; Thomas M. North, Secretary and Attorney.

Missouri.

Pacific, and Hannibal and St. Joseph Railroads.—The President of the United States has ordered the following lands in Missouri to be reserved from sale until the railroads are located. The reservation is made under the late act of Congress, granting lands to that State for these roads, viz:

For the Pacific railroad, all the lands in the Clinton and Springfield districts, all in the Fayette and St. Louis districts south of the Missouri river, and townships 34, 35, 36 and 37, in ranges 3, 4, 5, 6, 7, 8, 9 and 10, in the Jackson land district. These are reserved from sale for six months.

For the Hannibal and St. Joseph railroad, until the line of the road can be located, thirty miles on each side of the township line between townships 47 and 48, giving a strip of country equal to sixty miles, the entire length of the road.

Lake Erie and St. Louis Railroad.

A meeting will be held at Logansport, in Cass county, Indiana, on the 23d of June, for the purpose of organizing a company for the construction of that part of the above road situated in the State of Indiana, and to take all proper steps for its construction in Ohio and Illinois.

The attendance of several gentlemen, who are interested in the connecting road in Ohio and New York, is promised and expected; and all interested in the work, from the Lake to the Mississippi, are invited to attend.

New Jersey.

Central Railroad.—This road, so important to the coal interests, extending from the city of New York, via Elizabethport, to Easton, Pennsylvania, is now approaching completion, and another month will see it in full operation throughout its entire length. The cars now run to Clinton. A full report of the condition and prospects of the company is in the hands of the printer, and will shortly be distributed. The Delaware Lehigh and Schuylkill railroad extending from the terminus of the Central up the Lehigh valley to the coal mines, is nearly located; and the friends of that enterprize are sanguine of now securing its immediate construction.

Baltimore and Ohio Railroad.

The Cumberland Journal says: "The Baltimore and Ohio railroad is advancing westward with rapid strides. The cars are now running through the big tunnel, and the track has been laid to the 115th section beyond Cumberland. Early next month the cars will run to the town of Fairmount in Marion county Va.; and on the 21st of June the road will be formally opened to that point. Upon that occasion the president and directors, with a large number of distinguished visitors, will pass over the whole line, and inaugurate the event with proper ceremonies."

Growth of Dunkirk.

The result of a census recently taken at Dunkirk, gives a population of four thousand and sixteen—showing a ratio of increase, during the last twelve months, of nearly 200 per cent. Over one hundred dwellings have been erected in the place since the 1st of March last. Total number of arrivals from April 19 to May 29: steamers, 126; propellors, 21; brigs, 11; schooners, 14.

Louisville and Nashville Railroad Directory.

The general council elected last evening the following gentlemen directors of the Louisville and Nashville railroad company for the ensuing year: L. L. Shreve, Jas. Guthrie, Wm. Riddle, and G. L. Douglass, of Louisville; Eugene Underwood, of Nashville; J. L. Helm of Elizabethtown; and G. B. Adams of Bowling-Green.

Stock and Money Market.

Money continues in great abundance with an active business in all kinds of R. R. securities. The quotation for sound securities, as well as for fancies, continue to shew an upward tendency.

The most recent sale of bonds was of the Tioga and Blossburg Railroad, which averaged about 91. This is a coal road and consequently not so attractive as a road built for passengers and general business, though the project is a good one.

The general aspect of the market is favorable, and most of our works in progress are being freely supplied with money at fair rates.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JUNE 19, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¾
U. S. 6's, 1856	106¼
U. S. 6's, 1862	112½
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	115¾
U. S. 6's, 1868	115¾
U. S. 6's, 1868—coupon	120½
Indiana 5's	99
Indiana 2½	52
" Canal loan 6's	91
" Canal preferred 5's	41
Alabama 5's	—
Illinois 6's, 1847	80
Illinois 6's—interest	50
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	100¾
Maine 6's, 1855	—
Maryland 6's	107
Michigan	—
Mississippi	—
New York 6's, 1854-5	—
New York 6's, 1860-'61-'62	112
New York 6's, 1864-'65	117
New York 6's, ½ y., 1866	117
New York 5½'s, 1860-'61	108
New York 5½'s, 1865	107
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	104
New York 5's, 1866	106
New York 4½'s, 1858-'59-'64	—
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	103
Ohio 6's, 1860	106
Ohio 6's, 1870	114½
Ohio 6's, 1875	112
Ohio 5's, 1865	103
Ohio 7's, 1851	—
Pennsylvania 5's	97½
Pennsylvania 6's, 1847,-'53	96
Pennsylvania 6's, 1879	108
Tennessee 5's	91
Tennessee 6's, 1880	109
Virginia 6's, 1886	112

CITY SECURITIES—BONDS.

Brooklyn 6's	109
Albany 6's, 1871-1881	108
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	95½
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	109½
New York 5's, 1858-'60	101½
New York 5's, 1870-'75	105
New York 5's, 1890	—
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104
Baltimore 1870-'90	106½
Boston 5's	102½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	107½
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	98
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97
New York and New Haven 7's, 1861	106
Reading 6's, 1870	85½
Reading mortgage, 6's, 1860	93
Michigan Central, convertible, 8's, 1860	107½
Michigan Southern, 7's, 1860	98
Cleveland, Col. and Cin. 7's, 1859	106½
Cleveland and Pittsburg 7's, 1860	—
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	June 9.	June 16.
Albany and Schenectady	104½	108½
Boston and Maine	109¾	109¾
Boston and Lowell	108½	108
Boston and Worcester	106½	103
Boston and Providence	94½	93¾
Baltimore and Ohio	75	83
Baltimore and Susquehanna	32	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	116	24
Eastern	103½	103½
Erie	86½	88¾
Fall River	99½	99½
Fitchburgh	105	105½
Georgia	—	—
Georgia Central	103	—
Harlem	71½	73½
" preferred	114½	112
Hartford and New Haven	128	125
Housatonic (preferred)	35	35
Hudson River	62	63
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	109	103
Michigan Central	102½	106
Michigan Southern	118	125
New York and New Haven	111½	112½
New Jersey	136	138
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	54½	55½
Ogdensburgh	30½	29
Pennsylvania	44½	—
Philadelphia, Wilm'gton & Balt.	29	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	79½	82½
Rochester and Syracuse	119	121½
Stonington	52	55
South Carolina	—	—
Syracuse and Utica	128	132
Taunton Branch	115	115
Utica and Schenectady	134	134
Vermont Central	18½	18½
Vermont and Massachusetts	22½	22½
Virginia Central	—	—
Western	107½	109½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

For the American Railroad Journal.

Mobile and Ohio Railroad.

The railroad map of the United States, recently published under your directions and from your office, has been executed with great neatness and general accuracy, and meets fully as a guide and office map, the commercial and engineering wants of the whole country.

All Engineers, Railroad Companies, Bankers, Capitalists, and Merchants, will find it highly useful, if not indispensable, in their various relations to the railway system which is spreading so rapidly over the old and new States of our glorious Union.

Upon this map you have fairly delineated the chief enterprise of the day, the railway from Mobile to Chicago—connecting the northern Lakes with the Gulf of Mexico. The northern portion of this line, known as the Illinois Central railroad, has been fully introduced to public notice and favor by its able and energetic directory.

Of the southern portion—the "Mobile and Ohio railroad," but little has yet been said or known.

Having charge of its affairs, I beg leave to improve this opportunity to state a few points of its progress for a column of your Journal.

As exhibited upon your map, the Mobile and Ohio road extends from Mobile to the mouth of the Ohio river, there connecting with the Illinois Central road. Its length 494 miles. In North Mississippi, a branch road extends to the great bend of the Tennessee river, 23 miles, and there joins the Nashville and Alabama railroad, which latter, north of Nashville, receives two lines, one from Louisville, Kentucky, the other from Cincinnati, via Lexington. Thus 340 miles of the Mobile and Ohio road, from Mobile to North Mississippi, forms a trunk for the two great arms, extending via Cairo and Nashville, to the numerous and multiplying railroad connections of Ohio, Indiana and Illinois.

Distance, mouth of Ohio to Mobile, 494 miles—railroad time	17 hours.
Mobile to New Orleans—steamboat time	14 "
Total time of passage	31 hours.
Mouth of Ohio to New Orleans, via river, 1,046 miles—average steamboat time	108 hours.
Difference in favor of Mobile route, 552 miles, and	77 hours.
Distance, Cincinnati to Mobile, via Nashville, 800 miles—railroad time	27 "
Distance, Mobile to New Orleans, as above—steamboat time	14 "
Total time of passage	41 hours.
Distance, Cincinnati to New Orleans, via rivers, 1,546 miles—steamboat time	192 "
Difference in favor of Mobile route, 746 miles, and	161 hours.

These reductions of time and distance, and the incomparably greater safety of transit by railroad cars, than by high pressure steamboats, will control the through transit, interiorly, in favor of the Mobile road.

Exteriorly, the Mobile and Ohio road will terminate 18 miles below Mobile, upon the deep water of Mobile bay, within 15 miles of the open Gulf, and with 20½ feet water, at mean low tide, upon the bar, between the cars and the heaviest cotton vessels of New York and Liverpool. New Orleans, the great port of the Gulf, is 110 miles above the mouth of the Mississippi river, with 15½ feet water at mean low tide, upon the bar of the Southeast pass, which pass, has deeper water than either of the other two channels commonly used.

Comparatively then, the Mobile and Ohio cars will be 92 miles and 19 hours nearer the open gulf, and alongside of 40 per cent. larger vessels *without* towage or lighterage, than are the wharves of New Orleans *with* towage and lighterage of 110 miles.

It is thus seen, the mouth of the Ohio, the agricultural center of the Union, will be placed by the Mobile and Ohio road 626 miles and 97 hours nearer New York and Liverpool by sea, than is now the case with the Mississippi river.

The probable effects of this new channel of trade upon the long travel, exports, imports, and prosperity of the Western and Southwestern States, I submit to the consideration of Statesmen, Merchants and Capitalists, who are best acquainted with the staple productions of the Mississippi valley and the trade of the Gulf.

By reference to your new map, the eye will readily discover the line of the Mobile and Ohio railroad, occupying in its whole length, the country between the (three months in twelve,) boatable waters of the Bigbey and Tennessee rivers, on the east, and the still smaller streams, tributaries of the Mississippi, on the west. No navigable stream is crossed by the road; and the longest bridge required will not exceed 130 feet; while its average distance from the Mississippi river is over one hundred miles. Thus a local population, of over 6 hundred thousand, are cut off from market, and their foreign supplies, during eight to nine months of the year. Two-thirds of these people are now engaged in growing cotton, and get their supplies of breadstuffs, mules, horses, bagging and rope, from the north, via the Mississippi and Bigbey rivers; paying extra freights, profits and commissions; which, upon provisions, frequently amount to as much as the original cost of the articles upon the banks of the Ohio river. Twelve months supplies from other countries, as well as our own, must come to these people, and their crops go out three months after they are harvested, all by the full rivers in January, February and March, or April, if they come and go at all. These disadvantages have kept the country thinly settled, and hereafter, with any degree of population, stimulated as it may be by rails and electricity, will cause nearly the entire way traffic of the country to fall upon the Mobile road.

From these general considerations, from the saving of time and distance as above stated—from the four hundred thousand passengers now annually passing up and down the Mississippi river—and from the carefully collected returns of products sent *from*, and merchandise brought *into* the counties to be immediately accommodated by the Mobile road, I have obtained the following estimate of the annual business and income of the road for the first year—to wit:

From 125,000 through passengers, less than on that of the number now passing by the river, at average of $8 each	$1,000,000
From 110,000 way passengers averaging $2 each	220,000
From 84,200 tons of through freights of merchandize, breadstuffs and live stock at average of $10 per ton	842,000
From 184,500 tons of way freights, including 250,000 bales of cotton, and ⅓ of other crops and supplies of 600,000 people at average of $4	738,000
From United States mail service, $200 per mile	98,800
Total receipts	$2,898,800
From which deduct expenses of repairs and running the road, built as this will be with 65 and 70 lb. rails, and through a wooded, warm country, whose fuel of the best woods nowhere upon the route cost over $1¼ per cord, 44 per cent	$1,275,472
For depreciation 6 per ct.	173,928
Total expenses	$1,449,400
Total net income	$1,449,400

Fifty per cent. of gross receipts is the rate chargeable for expenses upon the long Eastern roads, but the Mobile and Ohio road has greatly the advantage in the price of fuel, its maximum grade going south in direction of heaviest traffic is but 30 feet per mile, and in the opposite direction, 40 feet per mile. Its highest point above tide water only 505 feet, and entire length 11 per cent. longer than an air line. With these characteristics, I believe the expenses will be less than above stated. The country throughout the route is clear of rock, except sand stone at three or four isolated points; and in the prairies, soft lime stone, mostly lying deep below the surface and out of our way.

For a single track road with 10 per cent. of side tracks, a liberal estimate of the cost of the main road, 494 miles, and branch to Tennessee river, 23 miles, total 517 miles, is ten millions of dollars; or an average of $19,342 per mile, with terminal stations at Mobile, the Tennessee and Ohio rivers.

Half of the entire cost ($5,000,000) is in the local work of grading, bridging, buildings, furnishing water, and timber, and laying down the tracks.—The other half is in foreign labor of iron and machinery.

The plan adopted to carry on the work, is for the people of the country through which the road passes to subscribe for five millions of stock, which will pay for the local work; when this subscription shall be made, and the line all or nearly all under contract, then a loan of five millions of dollars for iron and machinery, will complete and put the road in operation as fast as the local work can be executed. The whole road and all the lands granted by Congress being mortgaged to secure the principal and interest of the loan.

The road being thus finished, the net income of $1,449,200 will be dispssed of as follows:

For interest at 7 per cent. on $5,000,000 in bonds	$350,000
For exchange	5,000
For additional cars, engines, side tracks, buildings and fixtures for increasing business	200,000
For 15 per cent. on $5,000,000 of stock	750,000
Total for interest, construction and dividends	$1,305,000
Leaving for contingencies or sinking fund	144,200

To show how far we have progressed in working out this plan, I must state, that the whole line is now definitely located, and 33 miles completed and in operation at the Mobile end, with a terminal city station, of 49 acres, of perfectly level ground; and two wharves upon the river as accessible to vessels as any in the city. The rails used being 65 lbs. per yard of the T pattern, and the cost of the whole $500,000; or $15,180 per mile, including $34,000 in cars and engines.

Two causes have mainly contributed to reduce the cost; 1st., the average lightness and alluvial character of the grading, and small extent of bridging. 2d., the free grants of right of way and donations of lands for stations; whereby the 49 acres and two wharf rights in Mobile, and 70 miles of way to the Chickasawha river, with a large supply

of grounds for way stations thereon, have cost the company only $10,000.

The work of graduation is under contract and in rapid progress upon 55 miles more of the line, and 179 miles in addition will be placed under contract in August and September of this year, making 267 miles from Mobile. The remainder of the line will be contracted out as fast as the local subscriptions are completed therefor.

The means now provided for continuing the road beyond 33 miles are as follows—

1st. Tax subscription of city of Mobile of 2 per cent. per annum upon all the real estate for 5 years, 1852 to 1856 inclusive, which will net	$1,100,000
This amount is based upon the continuance of the real estate assessment valuation for 1852 which is $11,500,000. From the progress of the railroad and other causes the estimated increase of valuation is $500,000 per an.—which in 1855 and 56 will give an av-valuation of $13,250,000—or an average tax of $265,000 per an. for '55 and '56. These two last years taxes are to be anticipated by city 8 per ct. bonds redeemable in April 56 and 57 to the extent of $100,000, in order that the work upon 267 miles of the road may be finished within three years.	
2d. Individual and County tax subscriptions in Miss., up to May 1st 1852 were	$1,000,000
3d. Individual and County tax subscription in Tennessee up to this time	650,000
Net amount realised from sale of a town site of 12,000 acres 13 miles from Mobile	20,000
Estimated amount from one other town site to be sold in November, 33 miles out of the city and 3000 acres	30,000
Total means now secured for roadway	2,800,000
All of which is applicable to grading, bridging and timber beyond and exclusive of the 33 miles of road finished.	
Add cost of the 33 miles	500,000
Total capital for local work	3,300,000

Further stock subscriptions by individuals and counties are now in progress in Miss. Tenn. and Kentucky. The counties along the route subscribing under special tax laws of their respective states, which make it obligatory upon the county officers to levy and collect the taxes and to divide the stock thus taken and paid for, amongst the tax payers. It is thus expected that the whole five millions will be made up within the present year to cover the cost of the roadway, timber, laying the tacks, local buildings and fixtures, and including a sum for contingencies of $250,000.

For *iron and machinery*—from the State of Tennessee, a loan of $8000 per mile, in six per cent. bonds of that state, to run 20 years, has been authorised to the Mobile Company, as fast as the roadway can be prepared. The 119½ miles of road in that state make the loan | $956,000.

From the U. States Government 1,000,000 acres of land, worth after the road is made an av. of *three* dollars per acre	3,000,000
Total amt. of securities for iron, engines and cars	3,956,000
Total amount required for iron and machinery	5,000,000
Divided as follows for rails, chains, spikes, casting for tracks	3,800,000
For engines and cars	1,200,000
All of which it is proposed to raise by a loan on the Tennessee 6 per ct. bonds for 20 years	956,000
By Rd. bonds for 30 years	4,144,000
Total	5,000,000

The Tennessee bonds are to be secured by a mortgage to that state of the 119½ miles of road within the State of Tennessee. The R. Rd. bonds by a mortgage upon 397½ miles of road in Alabama, Miss. and Kentucky, including the two termini—and also the one million acres of land, all of which is situated within 15 miles of the road by alternate sections and from 10 to 250 miles of the city of Mobile.

To the people between Mobile and the Ohio river are desperately in want of this line of road, and no better evidence can be adduced of their sincerity, or of the satisfactory manner in which the affairs of the company have thus far been conducted, than is exhibited by the vote of Mobile real estate owners—834 for, to 7 against a tax of 2 per cent. per annum for five years—also, by the votes of Gibson and Mandison counties Tennessee, taken since the first of the present month.

Gibson Co., adopting the tax of $150,000 in three years by over 500 majority—and Madison a tax of $250,000 in three years by a vote of 371 majority. No county bonds to run several years, to be negotiated at a heavy discount in New York and depending upon the future popular votes of the people for the means of redemption are here to be issued. A subscription of stock in this way is not in fact a tax, except in the modes of apportionment and collection. It is merely a popular and fair method of distributing the stock pro rata over the taxable property of a county; that where all are benefited, each and all may assist in promoting the common good. The whole population along the road thus becoming stockholders is an additional guaranty that the road will be economically built as well as profitable afterward, and the interests of the mortgages protected, even beyond *thirteen millions* (the total cost of the road and value of the lands) pledged to redeem five millions.

The cost and income of the Cleveland and Columbus road in Ohio, (the first railroad west of the mountains systematically built, and emminently successful in *first hands* that projected it,) were estimated by me, and the line located and constructed under my directions.

It was opened to public traffic in Febrnary 1851. The first six months of regular business, June 1st to December 1st, 1851, the company paid their interest, made 8 per cent dividend on the stock, and reserved a surplus equal to 5½ per cent more, all from six months net earnings, or over 7½ per cent upon the entire cost of the road. The earnings of the road for the past month were $70,433 00. An average of $60,000 per month would give an aggregate of $720,000 for the year, allowing 40 per cent for expenses, which is an ample allowance, there would be left $432,000 for dividend upon $3,025,000, or 14¼ per cent, on the above amount. The original estimate promised 12½ per cent per annum.

Now, I know that the Mobile and Ohio road will do as well or better than the above. It will have no competing canal between the same terminii—no parallel railroad within 45 miles of its whole length—and no shorter and more central Baltimore and Philadelphia lines to divide with it the travel of the country, as is the fact in Ohio. But on the contrary it is by 100 miles the shortest *unbroken* line of road that can ever be located between the Ohio river, and any port or harbor upon the Gulf of Mexico. Its charter is perpetual in Alabama, Mississippi and Kentucky, and limited to 500 years in Tennessee. Only one-eighth of the road is in Alabama, and supject to taxes as other property—but seven-eighths in the three other States is exempt from taxation until the earnings give 8 per cent annual dividends upon their cost. It has received a bonus from Congress in land, which will yield, at the lowest valuation after the completion of the road, 25 per cent upon its cost, or sold as wanted for settlement within 25 years thereafter, will yield 10 per cent upon the cost of the road.

Respectfully &c.,

JOHN CHILDE,

Engineer and General Agent, M. & O. R. R.

Are we Building too many Railroads?

In our issues of the 8th and 15th May last, we briefly considered this question, and answered it, satisfactorily to ourselves, in the negative. But as our roads are becoming objects of great interest to foreign capitalists, for the purpose of investment, who are fearful, as well as a class of timid capitalists with us, lest we should push these enterprizes beyond the bounds of prudence; and as the articles referred to, gave rise to questions not fully answered at the time, we believe we cannot offer anything more acceptable to our readers, than some further considerations upon this subject.

The first points to be considered are the *uses* that railroads serve in the United States, and the necessity that exists for their construction. One of the most marked features of this country, which distinguishes it from all others, is, that we have no market for our produce in the vicinity of its growth. Our domestic markets are all on the seaboard, and are confined to a narrow belt of country extending from Baltimore northward. The great producing regions are in the south, and in the Mississippi basin. The people of these great divisions of the country are almost entirely devoted to agriculture. Their markets are at a great distance in the eastern States, or in foreign countries, which involves the same necessity of transportation to our ports of export. Nearly every product of our industry requires to be transported to a great distance to find consumers. The wheat, corn and cured provisions of the west, the hemp and tobacco of Kentucky and Missouri, the copper of Lake Superior, the iron of Pennsylvania, and the cotton, rice and sugar of the southern States, have all to be forwarded from 100 to 2,000 miles, to find the great mass of consumers. Within the territories named, there are no appropriate and sufficient markets.—Neither can their be for many years to come.

The lack of the *variety* of pursuits necessary to create a domestic demand, to which we have adverted, renders a very large import trade into the country necessary. The western farmer, confining himself exclusively to his own soil, is compelled to purchase, and import from abroad, all the necessaries of life which his farm does not produce. The import trade of this country, or the movement of merchandise inward, becomes, as a matter of necessity, the complement of the export trade, or movement outward; because the capacity to *purchase* is exactly measured by the ability to *sell*. Our roads become necessary, therefore, to furnish outlet for our products. These being opened, an equal volume of traffic in the opposite direction, is a result.

The entire absence of domestic markets in many portions of the United States, will be understood from the fact, that at least ten of our States, and some of them the most populous, such as Tennessee and Indiana, each containing in 1850, 1,000,000 of inhabitants, embraced no cities within their limits having a population exceeding 10,000. Only two western and southern States, Ohio and Louis-

iana, had within their limits cities whose population exceeded 50,000, and these were Cincinnati and New Orleans. Even in the eastern States, we find a dense population and varied industrial pursuits, only on the line of tide water.

Such are the general facts in reference to the internal trade of the country, particular illustrations will readily seem to every person acquainted with our geography, with the distribution of our population, and with the cost of transportation over ordinary roads. It is well known that a good road bed cannot be made either in the south or west, out of the soil. In the west particularly, where the soil is composed of a black vegetable mould, resting upon a cluyey subsoil, hardly any but a macadamized or railroad, is passable in wet weather. This explains the reason why the great mass of western population is found within a short distance of the navigable water courses, and why such vast bodies of the finest land in the world, in the states east of the Mississippi river, remain without purchasers, at $1 25 per acre. Both corn and wheat will pay for transportation over the ordinary road, only for a short distance; and the only way that the surplus beyond the immediate wants of the farmer can be made available is to feed it out to stock. In many parts of the country corn is a drug at 15 and 20 cents per bushel, which at the same time sells for 75 cents in our cities. Vast tracts of country in the interior still remain a wilderness for the want of access to market, which with an outlet to one would become the most densely inhabited, productive and richest portions of it.

So much for the want of railroads. While they are indispensable to a proper developement of our resources, there is no country in the world so well adapted to them nor in which they can be brought into so immediate and profitable use. That portion of the United States which is now the great theatre of our operations in railroads, is very nearly a rectangle, surrounded by navigable waters, having the Atlantic ocean on the east, the Gulf of Mexico on the south, the Mississippi river on the west, and the great lakes on the north. To this may be added their tier of states upon the left bank of the Mississippi. This territory embraces an area somewhat exceeding 1,000,000 square miles. A great majority, in fact we may say, that all of our railroads are based upon some one of these great water courses, so that as soon as they are reached, produce comes within the sphere of the cheapest possible transportation. Any road is brought into profitable use from local business, as soon as the first ten miles are constructed. They will become great through routes, when they shall be extended from one of the natural boundaries spoken of to the other, This great result has not yet been realized, but will be accomplished during the coming year. In all of 1853 their will exist two parallel lines of railroad from New York to the Mississippi river, each nearly 1200 miles long. Numerous other lines are in progress from other eastern cities in the same general direction. A number of great lines are also in progress, designed to connect the gulf with the great lake, each of which will be about 1000 miles in extent.

We have thus briefly, but we think clearly explained the great necessity that exists for railroads, in this country, from the absence of domestic markets, the cost of transportation over ordinary roads, which amount to practical prohibition, the reason why the different portions of them as fast as they proceed are brought into immediate and profitable employment.

Admitting the previous propositions, which we presume none will controvert, the main question presents itself: Are we building too many railroad? or, in other words, are we going, with the enterprizes which we have under weigh, beyond the wants, and ability of the country to complete, and to supply to them a profitable traffic? This is a matter of fact, rather than argument. We have in some States a large extent of railroads; in others, with equal resources, population and wealth, presenting equal facilities for their construction, none. The proper way, therefore, is to apply the results already obtained, to such States where there are no railroads, or but very limited extent of line.

Take Massachusets, for example, as this State is generally pointed to, as furnishing the best illustration of what railroads have achieved in the United States. This State has an area of about 7,500 square miles. A population in 1850 of 1,000,000, or 134 to the square mile. It has 1,250 miles of railroad, or one mile to every six square miles. These roads have, in round numbers, cost $60,000,000, and pay on an average six per cent, *net* upon their entire cost.

The influence of these roads upon the growth of the State in population, in wealth, in manufacturing and commercial greatness, has been most astonishing. A majority of these roads have been brought into operation since 1844. The following table will show the increased valuation of the State of Massachusetts and the city of Boston for the period:

Valuation of the city of Boston in 1840.	$94,000,000
" " " " 1845.	135,000,000
" " " " 1850.	180,000,000
State valuation of Massachusetts, 1840.	299,000,000
" " " " 1850.	590,000,000
Increase	291,000,000
No. of miles of road in the the State in 1840	318
" " " " " 1845	628
" " " " " 1850	1130

The State of Massachusetts, though better supplied with railroads than any other in the Union, presents the greatest obstacles to their construction, in the rugged features of the country, and in the obdurate character of its soil and rock formations. The average cost of all the roads in the State slightly exceeds $50,000 to the mile, which is much greater than the cost of those of any other State. In everything but in the character of her people, she will compare unfavorably with every State in the Union, possessing the most sterile soil, the most disagreeable climate, and entirely wanting in mineral wealth, and with very slight agricultural resources. If, with all these disadvantages, she has constructed one mile of railroad to every 6 square miles, at a cost of $50,000 per mile, and derives a good return from them at that rate, why may not other States push these works to an equal extent, with the same success?

The same ratio that we find in Massachusetts, applied to our whole territory where railroads are in progress, would give us more than 161,000 miles of railroads, against 24,000 miles, which is not far from the extent of line in operation and progress at the present time. It would give to the State of Ohio nearly 7,000 miles, where there are not one-half of this number either in operation, in progress, or contemplated. It would give to Illinois 11,000 miles, and nearly the same amount to Virginia. Neither of these States have more than 1,600 miles in operation and progress. It should be borne in mind, that as good roads can be built in Ohio for $20,000 or $25,000 per mile, and in Illinois for $15,000 per mile, as can in Massachusetts for $50,000. There is this reason, therefore, why the States named should have a much greater extent of railroad in proportion to their area.

If the investment in railroads in Massachusetts has proved a good one, there is no reason why an equal investment should not effect the same result in Ohio, with the exception of the fact, that the former has a larger population to the square mile. As an offset to this, it may be stated that a given number of people in Ohio furnish a much larger amount of business to a railroad than an equal number in Massachusetts, a large portion of the population of which consists of laborers in the large towns. In natural resources, and in extent of production in proportion to population, the two States cannot be compared for an instant, so vastly superior is the former. This fact is strikingly confirmed by the comparative experience of the operations of the roads of the two States. The receipts upon the roads of the former in proportion to their cost, are nearly double those of Massachusetts, and there can be no doubt that the construction of roads in Ohio will continue till she has a larger number of miles of railroad, in proportion to her area, than Massachusetts. A much greater necessity exists for them in the former than the latter. They can be constructed at one-half their cost, and must soon do an equal business, not upon cost, but upon their mileage.

There are in progress and operation in Ohio not far from 2,500 miles of railroad. There are something over 1,000 miles in operation, and by the 1st of January next there will be 1,600 miles in operation. Now the present market value of this investment is at least ten per cent above what it has cost the holders of their securities. When we speak of their market value, we mean the prices that would be paid by our most timid and conservative capitalists, who express the greatest fears that we may be going too far. The roads in Ohio that are completed, or on the eve of going into operation, are by all parties pronounced to be of the first class. It is the *new* projects of that, and other States, that create the distrust.

We can see no reason why the State of Ohio should not in time, and in fact as soon as they can be reasonably constructed, have a proportionate number of miles of railroad, compared with Massachusetts. Neither do we see any reason why the western States of Michigan, Indiana, Illinois, Wisconsin Iowa, and Missouri, should not have the same number of miles of railroad, their areas compared, as Ohio. They are equally well adapted to these works, and the same necessity exists for their construction, in the former as in the latter. The only element wanting to secure a similar result, is *time*, which will supply population, and develope their resources to an equal extent. There is no reason why railroads should not keep pace with the progress of the States in population and wealth, nor why, when they have reached the present position of Ohio, they should not boast an equal number of miles of railroad. To effect this result will require a much larger extent of line to be placed under contract than is now in progress.

The area of the States above named is equal to 400,000 square miles. To supply these with railroads, to the same extent that we now find in Ohio, including those in progress, would require 26,000 miles of road. The same ratio that we find in Massachusetts, would require more than 65,000 miles. Now no one acquainted with the resources and wants of the southwestern States, and the char

acter of their people, can doubt that in time an equal area will call for an equal extent of line, and that the construction of these roads will proceed with equal pace with their population.

Let us take another illustration, which perhaps will be still more striking and satisfactory. Take the case of Georgia. This State has now not far from 1,000 miles of railroad in operation, and has become rich and populous through their influence. She is looked upon at the south as the model *Railroad State*; as having set the example worthy to be copied by all her neighbors. Her roads have been built by her own means. She has borrowed little or nothing from abroad. Her works have been economically built and well managed, and pay large dividends. No one pretends that Georgia has gone too far with her roads, nor that her people have been impoverished or embarrassed by building them; on the contrary, it is universally admitted that not only those who have built and own the roads, but the whole community are vastly better off for them. The prosperity of Georgia is a bye-word with all her sister States.

Now the States of North Carolina, Alabama, Mississippi, Louisiana, Tennessee and Kentucky, will all compare favorably with Georgia in population, in wealth, in extent, and in natural resources. Railroads are just as much needed by the former as by the latter. They would cost no more per mile. They would pay equally well, and would accomplish as much in improving the condition of their people. But the aggregate length of line of all these States is not equal to the extent of railroad which we find in Georgia. Here then is a field where at least five thousand miles of railroad are admitted to be needed by the most conservative, for no one can doubt that railroads in the States named will be equally as useful and productive as those of Georgia.

But even Georgia is very poorly supplied with railroad facilities. Not one half of her territory, and hardly one half of her population are within reach of them. A very large proportion of her products are wagoned, or sent down her rivers at great expense, to inconvenient markets. Her area is at least eight times greater than that of Massachusetts. The latter state has one mile of a railroad to every 6 square miles of territory. The same ratio would give to Georgia 9,000 miles of railroad, nearly equal to the whole extent of lines in the United States, and to the states named including Georgia, (embracing an area of 390,000 square miles) more than 65,000 miles of railroad!! Now although there are a few unproductive railroads in Massachusetts, the whole investment has proved to be a good one, yielding a net income of over six per cent, and is constantly improving. There can be no doubt, that in the states named, ten thousand miles of railroad are needed to meet the commercial wants of the people, and that this extent of road would find lucrative employment. It is equally true that this extent of line can mainly be built with their domestic means, and not only those whose money would go into the roads, but the whole community, would be vastly better off for the outlay.

That all our railroads which we are now building are not needed to meet the commercial wants of our people, and will not on the average find immediate and profitable employment, no person acquainted with our country and its resources, and productions can for a moment doubt.

To be continued.

Naval Dry Dock and Railway at Philadelphia.

The United States Dry Dock at this port having recently been completed, was successfully tested during the past month by the lifting and hauling out of the steam ship *City of Pittsburg*, of 2,200 tons burthen. This dock and appendages being the largest in the world, merits more than a passing notice. The lifting power consists of nine sections, six of which are 105 feet long inside, and 148 feet over all, by 32 feet wide, and 11½ feet deep; three of them are of the same length and depth as the others, but 2 feet less in width; the gross displacement of the nine sections is 10·037 tons, gross weight 4,145 tons, leaving a lifting power of 5,892 tons, which far exceeds the weight of any vessel yet contemplated. The machinery for pumping out the sections consists of two engines of 20, and two of 12 horse-power. In connexion with the sections (which form the lifting power of the dock,) is a large stone basin, 350 feet long, 226 feet wide, and 12 feet 9 inches deep, with a depth of water of 10 feet 9 inches at mean high tide.

At the head of this basin are two sets of ways, each being 350 feet long, and 26 feet wide. These ways are level, and consist of the bed pieces, which are three in number, and firmly secured to a stone foundation; the central way supports the keel, while the side ways receive the weight of the bilge; these ways are of oak, and are finished off to a smooth surface. On the top of the bed pieces or fixed ways, comes the sliding ways or cradle, which are also 350 feet long and 26 feet wide, so constructed as to admit of being adjusted to the length of any vessel.

The operation of the dock is as follows:—The sections are sunk so as to allow the vessel to be floated in; as soon as she is secured in the proper position, the pumps are put in operation, when the sections begin to rise, and as soon as they come to a bearing on the keel, the bilge blocks are run in until they fit the ship. When all is secure, the sections are pumped out until the keel is some two or three feet above the water. If repairs that will only require a short time are contemplated, the vessel is kept on the sections, and no other portions of the dock used. But the *Pittsburg* was taken up for the purpose of testing the several parts of the dock, and after she was lifted out of the water the sections carrying the ship were floated into the basin in line with one of the sets of ways. When this is accomplished, the sections are filled with water, and rest on the bottom of the basin, which is of stone. Bed ways are now laid on the sections in line with those before mentioned. When they are secured they are greased, and the cradle is now slid under the ship, and she is blocked up on the cradle, and the blocks on the sections are removed. At this point of the operation a new instrument of power is brought forward for the purpose of hauling the ship from the sections on to the bed ways in the Navy Yard. It consists of a large hydraulic cylinder, having a ram of 15 inches diameter and 8 feet stroke, and a power of 800 tons. On the top of this cylinder, and attached to it, are two vertical direct acting engines, with cylinders 16 inches in diameter and 16 inches stroke, connected at right angles to one shaft, on which are four eccentrics for working four hydraulic pumps of 1¼ inches bore, and 6 inches stroke; the tank which carries the water for the press is also on the top of the cylinder, and forms the bed on which the pumps are secured.—The boiler which supplies these engines with steam, is on a sliding cast iron bed way, some 12 or 15 feet ahead of the hydraulic cylinder, and connected to it by two cast iron rods. This boiler is of the usual locomotive form, and has 85 tubes of 2 inches diameter, and 9 feet long. To get ready for operation, the hydraulic cylinder is slid down to the edge of the basin, its ram is run in, and a connexion made by means of two side rods of wrought iron from the cross head of the ram to the sliding cradle which carries the ship. The central bed way has key holes mortised through it horizontally, every 8 feet, and there are projections from the hydraulic cylinder, which have corresponding key holes in them. Two cast iron keys, 24 inches wide, and 6 inches thick, are slid through the key holes on small wheels; these keys secure the cylinder to the central bed way; the engines and pumps being now put in operation, a pressure is brought on the 15 inch ram, and as soon as the pressure overcomes the resistance, the vessel must move. The estimated weight of the *Pittsburg* was 2,800 tons, exclusive of the sliding ways and blocking; the power required to start this weight on a level, greased surface, was 250 tons. As soon as the vessel has been moved 8 feet, the keys which hold the cylinder to the central way are withdrawn, and by means of a screw which is attached to the head block of the ram, and driven from the engine, the cylinder and boiler are in their turn rapidly slid ahead, (the water in the cylinder being allowed to escape into the tank,) when the cast iron keys are again slid in place, and the vessel moved another 8 feet.—After the first starting of the *Pittsburg*, the power required to remove her was but 150 tons, and she was moved 260 feet in 6 hours. To push the vessel off, the cylinder and appendages are moved to the head of the ways, put on a turn-table and reversed, when it is again brought down to the cradle, and the cylinder being secured as before, the head of the ram is applied directly to the cradle, and the vessel shoved back on to the sections, which requires the same time and power as to haul them off. In docking and hauling out the *Pittsburg*, every part of the work gave the most entire satisfaction, no portion showing the least defect, and the time required to go through the various operations being less than was expected. But six sections were used for lifting in this operation, leaving three unemployed. It will at once be seen that the capacity of this dock exceeds that of the stone docks at New York, Boston, and Norfolk, combined, for united they can take but three vessels, while here, two of our longest war steamers may be hauled out on the ways, and two frigates lifted on the sections. The advantages that must result from the facilities of repairing a vessel elevated into light and air over one sunk in a stone dock, are very great, and have only to be seen to be appreciated.—*Journal Franklin Institute.*

Ohio.

Railroad from Dayton to the Coal Fields of Southern Ohio.—The people of Dayton are agitating the subject of a railroad from that city to the coal fields of Jackson and Vinton counties. Dayton is a large manufacturing town, and the want of coal is now beginning to be dearly felt.

Railroad from Columbus to Chillicothe.—The people of Scioto valley are taking measures to secure the construction of a railroad between the above places. The distance is about 46 miles, and the estimated cost is $16,000 per mile.

Railroad from Xenia to Dayton.—It affords us sincere pleasure to be able to state that steps have been taken which ensure the building of the railroad between this point and the city of Dayton—the first link, it is to be hoped in the road which shall ultimately be built from Dayton to Belpre, on the Ohio river, and opposite the bend in the Baltimore and Ohio road. This step has been taken by the L. M. and X. & C. roads. A meeting of the officers of the above consolidated roads is to be held in Dayton during the present week, for the purpose of agreeing upon the measures necessary to effecting the object, and determining upon the route to be adopted. It is the desire of the L. M. and X & C. companies to have the road completed to Dayton if possible, by the 1st of January next, and for this purpose all the forces necessary will probably be put to work on it as soon as possible. - *Xenia Torchlight.*

Greenville and Miami Railroad.—This road is now opened to Greenville, and is already transacting a large business.

Tuscarawas Branch Railroad.—C. Prentiss, Esq., president of the C. & P. railroad, has advertised to receive proposals for doing the grading and masonry of the Tuscawaras branch of the Cleveland and Pittsburgh railroad. It is the intention to complete this branch as soon as possible, probably during the present year. It extends into some of the richest portions of Ohio, and will prove one of the most important branches along the line.

New Orleans.

The chamber of commerce of the city of New Orleans are about memorializing Congress on the subject of the removal of the obstruction to navigation at the Mouth of the Mississippi river. The obstructions at the bar have been unusually great this year and appear to be unceasing. The memorial estimates that an appropriation, not exceeding $150,000 per annum will be sufficient for the purpose.

Notice to Contractors.

PROPOSALS will be received until 10th July next, for the filling and masonry of "Whetstone," "Arms" and "Vinings" Bridges. Bids for each bridge, earth work and masonry will be considered separately; but should a bid for the whole work (and from responsible parties) be more favorable than separate bids, it will be considered. The work to be commenced immediately, and to be prosecuted under direction of the General Superintendent, so as to insure its completion within one year from the date of letting. The bridges are in a high and healthy section of the country between Atlanta and Marietta, and will contain about 400,000 yards of earth, and 3300 perches of masonry.

Any information relative to the work can be had by applying to the undersigned, or to G. G. Hull, Resident Engineer.

WM. M. WADLEY,
General Superintendent.

Western and Atlantic Railroad,
Atlanta, Ga., June 9, 1852.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE, Chief Engineer.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.

Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York

Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R.R. and Trans.

Evansville and Illinois R. R.

SALE OF $350,000 SEVEN PER CENT MORTGAGE and Convertible Bonds, of the Evansville and Illinois Railroad Company.

The Evansville and Illinois Railroad, commencing at the city of Evansville, Indiana, on the Ohio river, extends up the Wabash valley, and will connect more or less, directly with all the railroads converging at Indianapolis the capital of the State.

It is an important link in the central line of railroads connecting the Northern lakes with the Southern seaboard. The whole of this chain of roads is either already in operation or approaching completion, excepting the Henderson and Nashville Railroad, to which a sufficient amount of stock has been subscribed to insure its early construction.

The main trunk of the E. and I. R. R., reaches from Evansville to Terre Haute, a distance of 107 miles, and the Company is authorized also to construct a divergent line from any part of the main trunk direct to Indianapolis. It is intended at once to complete the line to Terre Haute, where it will intersect the Terre Haute and Indianapolis and the Terre Haute and St Louis roads.

The present issue of bonds provides for the completion and equipment of the first section of the road, extending from Evansville to Vincennes, a distance of fifty-one miles, where it joins the Ohio and Mississippi Railroad. The engineers' estimate of the cost of this section, ready for the cars, does not exceed $10,500 per mile.

More than one half the distance, 27½ miles, is finished and in successful operation, its earnings being more than enough to pay the interest on the bonds now offered. The residue is already under contract, or being let; 11 miles extending to White river will be completed in time to secure the early fall business, and the remainder during the ensuing winter and spring. The iron for the whole 23½ miles has been purchased, and a considerable portion is now going forward. The contracts have all been made below the estimates.

The means at the disposal of the company, applicable to the construction and equipment of this section of the road, are as follows:

Stock subscriptions	$345,300
Earnings to 1st April, from transportation and other sources	16,500
Present issue of bonds	350,000
Total	$711,800

Evansville is the depot of the Southern trade of the Wabash valley and of Green river, Kentucky. It is the most rapidly growing city in Indiana, and now contains 7,000 inhabitants. The population has doubled, and the taxable property trebled, in six years. The arrivals and departures of steamboats at its wharf in 1831, were 5,398. The Wabash is the most fertile of all the western vallies, and produces more corn and hogs than the same area in any other section of the country. It is also marked out by nature as a great route of travel.

The position of the E. and I. railroad guards it against competition for the through travel of a vast region of country in and adjacent to the lower Ohio, while its local business must be sufficient to well support the road. When completed to Vincennes, it will give a cut off railroad route from the Ohio at Evansville, to the Mississippi, at St. Louis, of 196 miles, against the present river route of 370 miles, and from Evansville to Cincinnati of 241 miles, against the present river route of 350 miles. In either case, the distance will be performed in less than one third the time now required by the river.

The bonds are for $1,000 each, redeemable 1st January, 1862, principal and interest payable at the Phenix Bank in New York, the coupons for the latter on 1st January and 1st July. They are convertible into stock up to 30th April, 1857, and are secured by a first and only mortgage on the whole road from Evansville to Vincennes, its machinery, franchises and appurtenances. The mortgage also covers the real estate purchased by the company for depots, etc., which cost $10,000, and is now worth more.

The trustees for the bondholders are Evan R. Bebb and John F. A. Sanford, of the city of New York.

Sealed proposals for the whole or any part of these bonds, endorsed "Proposals for Evansville and Illinois Railroad Bonds," will be received at the office of Cammann, Whitehouse & Co, No. 56 Wall street, until three o'clock on the 19th day of June, inst., when they will be absolutely disposed of to the highest bidder.

Printed exhibits of the road, etc., with a map showing its location and connections, can be obtained on application at the above named office.

JOHN INGLE, Jr.,
Secretary and Financial Agent E. & I. R.R. Co.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS, AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES. { Late Davenport, Bridges & Co., Fitchburg, Mass.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILL, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg

—

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga, Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.
June 2, 1852.

Notice to Contractors.

LEXINGTON AND DANVILLE RAILROAD.

SEALED proposals for the construction of this road will be received as follows:

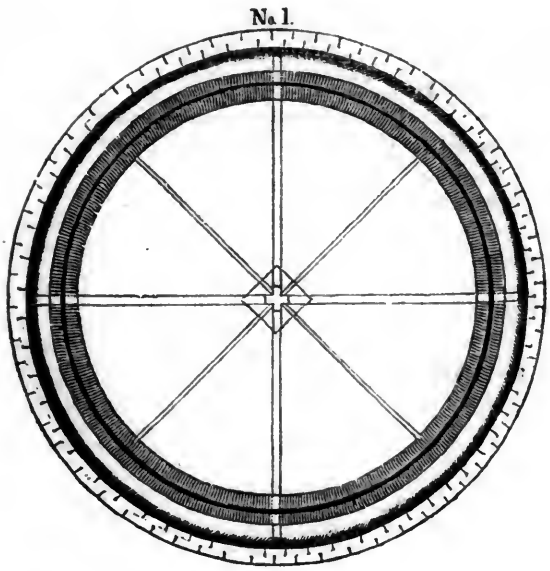
At the Office in Lexington, from 1st to 15th of July, for the grading and masonry of 12 miles of the road between Lexington and Nicholasville.

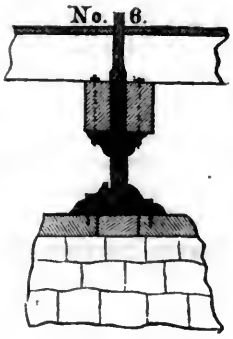
At the Office in Lexington and at the office in Danville, from the 1st to the 15th August, for the grading, masonry, and bridges of the remainder of the road (22 miles) from Nicholasville to Danville.

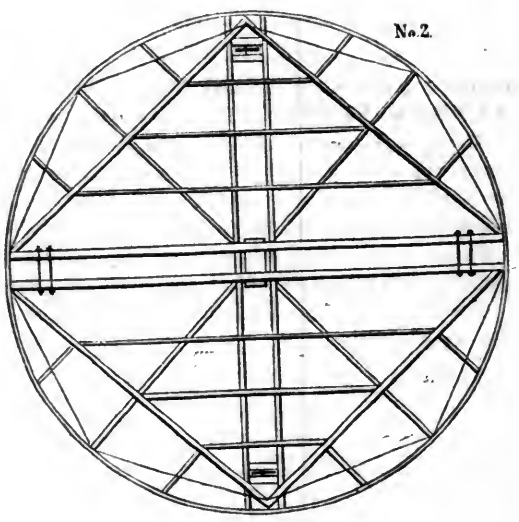
Plans, profiles, specifications, &c., may be seen at either of the offices within the times specified.

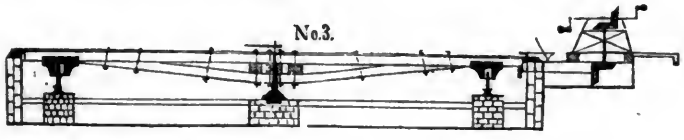
GEORGE C. SCHAEFFER,
CH. ENG. LEX. & DAN. R. R.
Danville, Ky., May 28, 1852

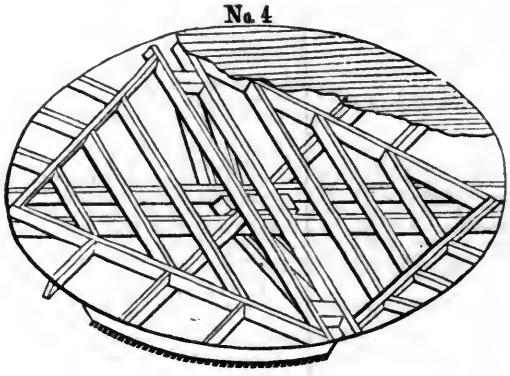
CARHART'S IMPROVED TURNTARLE.

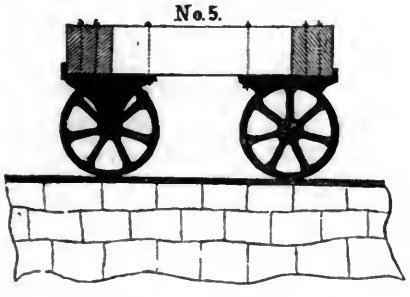


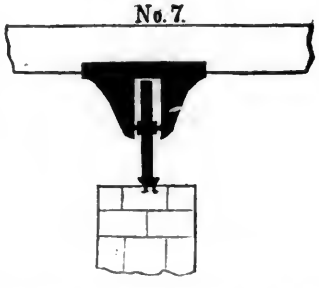














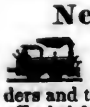
THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies, Contractors etc. It has been in use on the Hudson River Railroad during the last three years since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are its *cheapness durability* and *capacity*. It is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of $5 a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the band and track walls; centre pier, cross-timber for bolting the step of pivot to the track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the arcass framing. Fig. 3 gives a side view of onec main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J., or at Wooster, Ohio.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK. Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.

Do. for Bridging, of great strength.

Flat Rock, Boiler and Flue Iron, rolled to pattern.

Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer,*

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 26] SATURDAY, JUNE 26 1852. [WHOLE No. 845, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

New York and Erie Railroad.....401
Bellefontaine and Indiana Railroad.....403
Railways in the Provinces.....405
Peru and Indianapolis Railroad.....405
Montgomery and West Point Railroad.....406
Railroads in Louisiana.....406
English Railroad Statistics.....407
Sandusky and Newark Railroad.....407
Ohio Central Railroad.....407
Milwaukee and Mississippi Railroad.....408
Taft and Gleason's Wrench.....408
Florence and Nashville Railroad.....408
Memphis and Charleston.....408
Pacific Railroad.....408
Chester Valley Railroad.....408
Stock and Money Market.....409
Are We Building too many Railroads.....410
Indianapolis and Bellefontaine Railroad.....411
Railroads in Ohio.....411
Susquehanna Railroad.....411
Henderson and Nashville Railroad.....412
Cincinnati and Chicago Railroad.....412
Texas Central Railroad.....412
Covington and Lexington Railroad.....414

American Railroad Journal.

Saturday, June 26, 1852.

Erie Railroad.

The directors of this road have declared a dividend of three per cent, payable on the 1st proximo, from the earnings of the past six months.

The subject of this dividend has created a good deal of talk in the street, and is one upon which, we have good reason to believe, the directors themselves were divided in their views. The amount of dividend declared, is looked upon as a sort of a compromise between the conflicting opinions.

We presume that the directors will publish no statement of the condition of the company till their annual meeting in January next; so that we shall have no means (excepting the decision of the directors,) of knowing whether a dividend has been earned, or not.

In determining the question of the propriety of a dividend, there are two points to be considered:—

1st. Has one been actually earned?

2d. If a dividend has apparently been earned, should it be applied to this purpose, or the liquidation of the floating debt of the company?

In considering the above questions, we shall invert the order of the inquiries, and examine the first one last.

The directors represent, and are the legal agents of the stockholders. The bondholders have another and distinct interest. The interests and rights of those holding *mortgage* bonds are represented by the *trustees* under the mortgage. The holders of the *convertible* and *income* bonds are mere creditors of the company, without any present legal interest in the company's property. They stand in the same relation to the company, as does a holder of the company's notes, or acceptances.

The three last loans of the company have been negotiated under the most positive assurances that only the sum asked for at each time was needed to complete the road.

Each additional loan, therefore, weakened the security of the previous one, as it increased the sum upon which interest must be paid.

The present board of directors have made five different estimates of the cost of the road. viz:

1st estimate in		1845	$8,350,000
2d	"	1848	11,850,000
3d	"	1850	17,178,000
4th	"	1851	20,500,000
5th	"	1852	23,750,000

If either of the above estimates were correct, then all subsequent excess has been lost or misapplied.

In making each loan, the company, either in express or implied terms, pledged the revenues of the road to the payment of the interest upon them.

The last sale of the company's bonds left a large floating debt, which stands upon exactly the same principle as the $10,000,000 income and convertible bonds, and may be made to take precedence of these securities at the option of the company.

The question then which presents itself is this: Have the stockholders a legal or moral right to divide among themselves the earnings of the road till they shall have paid off the incumbrances which exist over and above what was represented as necessary to complete the road; and until it shall be fully ascertained by experience in the operation of the road, that the revenues of the company *will* meet *all* its liabilities?

We answer, no. Speaking for the last bondholders, we reply: "You" (the company) "represented to us that you wanted a certain sum to complete the road. You were the only persons who had any means of knowing the amount necessary for this purpose. Your representations were found to be erroneous, or you have misapplied our money. You have weakened our security by borrowing other sums, which you assured us would not be wanted, and by placing us in the same position with subsequent creditors. From the great increase in the cost of the road over your estimate, it is uncertain whether you can perform your engagements to us. We claim, therefore, that we have an equitable lien upon the revenues of the company until your pledges are fulfilled, and until our security becomes as good as you represented it to be; and until all doubt is removed as to your ability to do this, we claim that you have no right to appropriate any portion of the income of the road to your own use."

If this is not a correct mode of reasoning, we are unable to appreciate what correct reasoning is.

But the stockholders, or what is the same thing, the directors, say: "This is all very true, provided we could not meet our obligations; but we can do this, and so long as we are able to do so, it does not concern our creditors whether we owe ten or twenty millions. So long as we are able to meet all our liabilities as they fall due, our creditors have no right to inquire into our acts."

But this answer assumes the whole case, and is one which, thus far, has been totally disproved by the past history of the company. The estimates have gone up from $8,350,000 to $24,420,000,* with the fullest means each time of arriving at a correct result. This shows that no safe reliance can be placed upon the opinions of the directors. Their *opinions*, therefore, should be laid entirely out of the case, being already impeached by the result.

The directors stated in their report, dated February 15, 1851, that the amount then necessary to complete the road was $3,500,000. This sum was raised by sale of the company's bonds to that am't. The public took it for granted that the above statement was correct. The road was opened May 14th, 1851. On the first day of January last the company declared a dividend of four per cent upon the capital stock, amounting to $210,000, claiming at the same time that a surplus of net earnings of $72,307 remained.

The last report of the company stated the increased cost of the road over the estimate of the

* The last report of the company stated the cost of the road at $24,000,000. The discount on the last sale of bonds added $420,000 to that amount.

previous year to be $3,500,000. Allowing the estimate of January, 1851, to be correct, the result of the operations of the year were as follows:

Total sum necessary to complete the road as per estimate of 15th of February, 1851	$20,500,000
Amount expended up to Jan. 1, 1852	24,420,000
Excess over estimate	$3,920,000
Net earnings of the company 1851 (one half of receipts)	1,388,459
Excess of expenses over receipts	$2,531,541

This is the statement that should have been made by the company to have placed their affairs in a proper light.

The increased cost of the road over the estimate of December, 1851, resulted from two causes: 1st, the actual excess of cost over estimate; and 2ndly, charging to *construction*, what was properly chargeable to *running* account.

We submit, therefore, that the dividend in January last was in violation of the rights of the bondholders, and of all correct business principles; and as the debt created in 1851 is still unliquidated, a dividend for the first of July is equally unwarranted.

But this is not all. There can be no doubt that the floating debt of the company has been growing very rapidly since the first of January last. Upon this floating debt, the company have been accustomed to pay a rate much exceeding legal interest. These excessive rates absorb money that should go to the bondholders; and certainly the stockholders have no right to diminish the value of their securities by paying extra interest, when they have it in their power to discharge the principal.

If we are asked our reasons for believing that the floating debt of the company is rapidly increasing, we answer—

1st. It has always increased between the several estimates of the company, and the precedents already established, warrant the belief of a similar increase at the present time.

2d. The works of the company are still in an unfinished state, and require very large sums for their completion.

3d. Extraordinary causes the past winter have tended to an extraordinary increase of expenses.

4th. Common report, and the fact that a large amount of the company's paper is in the market.

II. Has a dividend been earned?

The above inquiry involves another which must first be answered. Has the construction account of the road been *closed*, or what is equivalent, is the amount now provided sufficient for this purpose? If *closed*, then all subsequent expenditures should be charged to the running account. If *not* closed, then it is manifestly improper to declare dividends upon a basis the extent of which is entirely undetermined.

The construction account of the road is not closed. The actual cost of the road is still a matter of conjecture. Until we first ascertain what the road is to cost, can we tell whether a dividend has been earned? The ultimate cost and earnings of the road are mere matters of conjecture which it is useless to discuss at the present time.

For ourselves, we doubt whether the road will ever be able to *earn* a dividend upon its stock, even under the best future management. The reason for this opinion, is the fact, that there must have been lost up to the present time, in construction, at least ten millions; a sum greater than the capital stock by four millions. We need no better evidence of this, than the various estimates of the company, made under circumstances most favorable to entire correctness. Our own views are sustained by the opinions of our ablest engineers, none of whom, we believe, doubt that the same results which we now witness could have been accomplished by the economical expenditure of fifteen millions.

Now a railroad, no more than an individual, can lose money and have it at the same time. What is lost cannot be made a source of revenue. When economically built and well managed, railroads can be expected to yield no greater rates of income than other kinds of *permanent* investment. Neither can they be expected in the long run to average, in the eastern States, more than six or seven per cent. The reason of this is obvious. In the first place, competition of different roads will so far reduce the rates charged, as to produce an income only sufficient to pay a fair dividend upon their cost. Such is always the result of free competition in all pursuits. Another reason why our eastern roads cannot average more than seven per cent net earnings, is the fact, that so great is the desire to enjoy the benefit of these works, our people are always ready to make great sacrifices to obtain them, which of itself implies a low rate of charges. Public opinion will not, as a general rule, allow directors to adopt rates that shall yield exorbitant returns: and there are in every portion of the country roads economically built, and well managed, the stockholders of which are willing to do business at a rate that shall return but a moderate interest upon their investment. The charges on such roads become the standards by which those on other roads are, and must be regulated, whether they cost much or little.

The Erie road has a good but not an extraordinary line for business. Its receipts are not large compared with other roads of equal cost per mile. Now the net earnings of our roads doing the largest business, and of the same class with the Erie, as far as their cost is concerned, and those too which have been economically built and well managed, will not average over eight per cent, if they will over seven. The Erie road cannot do better. We do not believe under any management it can earn over eight per cent upon its actual cost, which cannot in our opinion have exceeded fifteen millions. It can earn a dividend on what has been well expended, but never upon what has been lost. No road can do this. Such a result is not in the nature of things. A live plant cannot come out of a dead seed.

It is very easy to figure out prospective dividends. It is very easy to declare them, so long as the money for this purpose can be borrowed. The past year's operation of the road is looked upon as giving a very favorable result. Two dividends, amounting to 7½ per cent, were declared. Yet in face of this generally received public opinion, and of the dividends that have been paid, the company at the end of the year found themselves $2,531,541 worse off than at the commencement.

All the above data we have drawn from the published report of the company. We are not aware that we have disposed of them in any manner calculated to conv[illegible] an incorrect impression. We believe they faithfully represent the history and condition of the company at the present time, and that any remarks added by us, are fully sustained by the facts of the case.

We are therefore constrained to believe that the directors were forced into declaring a dividend by an outside pressure; and that such step was not the result of their own convictions. It is this outside pressure which is the greatest obstacle to success, that the company have to contend with. So vast an interest has this great work become, so interwoven with every interest and class in community, so extravagant have been the expectations formed of the success of the road, so dependent have a large portion of the community become upon its dividend for support, and so disastrous would be the consequences of any considerable fall in the stock and securities of the road, that the directors are in great danger of being swayed by the considerations stated, rather than a single eye to the *ultimate* good of the company, and in fact to their future reputations. Capitalists have purchased its stock and securities for investment. By business men they are made the basis of the means by which they sustain themselves. Vast quantities of the stock is carried by speculators in the street, and should it turn out that the public mind has been led astray as to the value of this property, the most disastrous consequences could not fail to ensue, and affecting by sympathy all other securities of a similar kind.

In view of the facts stated we think we are fully justified in suggesting fears that everything may not be right with the affairs of the Erie railroad company. If we are mistaken, no one can be more gratified than ourselves. But if our fears are partially correct, the sooner the danger is pointed out, the sooner can the evil be remedied. We have certainly no reason to be otherwise than on the best terms with the company. We have spoken our convictions plainly, but we are not so weddeed to our opinions, particularly in the case before us, as to not be gladly convinced of the right, when we are in the wrong, and for this purpose our columns are always open to any party who is, or may feel himself aggrieved by anything we may say.

From Lake Superior.

We have the Saut Ste. Marie Journal of the 20th ult.

A cargo of iron from the Marquette Works—1,905 blooms, averaging 126 lbs. each—had been received at the Saut by the Baltimore. It was on its way to Pennsylvania to be rolled, there being no rolling mills more convenient.

The Bruce Mine, (on the St. Mary's river, 40 miles below the Saut) had despatched the schooner William Gordon with a cargo of Copper Ore for Swansea, England. The ore is a yellow sulphuret, estimated to yield 20 per cent. and to be worth $60 per ton.

From Isle Royal, favorable mining accounts had been received by way of a small vessel which visited the Isle from Eagle Harbor. No mail or other direct advices had been received at the Isle for seven months.

The Lakes are all remarkably high this spring, owing to the hard winter reducing evaporation and the rapid melting of the heavy deposits of snow after the late opening of spring.

The steamboat Ontonagon, [90 feet long. 16 wide, draft 16 inches,] was being towed up the Saut when the Journal went to press. She is intended to run on the river Ontonagon from its mouth to the mines, [14 miles,] and will be a great convenience to that thriving region. A plank road is also being built between the same points. The contractor saws up the timber which he cuts out of the road-bed into plank for the road, by means of a steam saw mill which he pushes ahead as the ground is cleared before it. Four other steam saw mills are at work on the Ontonagon [two at the mouth and two

at the mines,] but are unable to produce lumber so fast as it is wanted for building.

Bellefontaine and Indiana Railroad.

REPORT OF THE DIRECTORS TO THE STOCKHOLDERS.

GENTLEMEN: In presenting this our second annual report, it is gratifying to be able to state that the subscriptions to our capital stock have been largely increased during the past year, and now amount in the aggregate, to $910,000; a sum very nearly adequate, with prompt payment of the remaining instalments, to the completion of the work of the entire line, and to furnish a sufficient equipment for the first year's business. The small additional sum which may be required, I have no doubt will be readily obtained.

The graduation, masonry, etc., on the entire line, has been under contract since Feb. 6th, 1851. Between Galion and Marion, (20¼ miles) the grading is ready; nearly all the cross-ties are delivered and the track laying will be commenced during the present month, and pushed forward without delay, so as to open this part of the road in July. Between Bellefontaine and Sidney, (22 miles) but little grading remains to be done, and the cross-ties are rapidly being delivered. This division will be in readiness to commence track laying about the first of July. Between Sidney and Loramie Creek, [10 miles] the road-bed is very nearly prepared, with the exception of the deep cut section immediately west of Sidney, in which about four months work remains to be done. The track laying can be commenced on this division in August. Between Loramie Creek and the State line, [25 miles] the grubbing and clearing is finished, but the graduation has barely been commenced. Fortunately, however, the work on this division is very light.—The whole amount required to finish it ready for the cross-ties, being only $46,121,99. To complete the entire western division from Bellefontaine to the State line, [57¼ miles] ready for the cross-ties, $99,625,04. The only remaining division, is that between Marion and Bellefontaine, a distance of 40 miles, on which the work of grubbing, clearing, grading, etc., has been slowly progressing since last spring. To complete this division ready for the cross-ties, will require work to be done, amounting to $74,320,30. The cross-ties are all contracted for, a large portion already delivered, and the remainder in progress of delivery. No delay is apprehended in this particular.

In the spring of 1851, a contract was entered into with Messrs. Thatcher, Burt & Co., bridge builders, for furnishing materials, and constructing all the bridges on our line west of Marion, making an aggregate length of between sixteen and seventeen hundred feet. Portions of the timber for these structures have been procured in Canada, to be shipped across the Lake, but most of it has been obtained at the saw mills along and near the route, through stockholders, in payment of stock. From the well known ability and energy of the contractors, I entertain no doubt that their work will be ready in good season.

In July last, a contract was made with Messrs. J. and S. Chamberlin, responsible contractors, [who have had the contract on the whole length of the Cleveland and Pittsburgh railroad, and other important lines,] for furnishing a portion of the cross-ties, distributing materials, laying the track and gravelling complete, from Galion to the State line. They are also to furnish 100 gravel cars, 80 freight cars, and to build the Depots, Water Stations, etc.

A contract was also made with the Cuyahoga Steam Works company, for ten first class, 20 ton locomotives. But some six weeks since, I received a notice from their agent, that they could not furnish us the first three or four according to contract. We were obliged therefore, to make purchases elsewhere. Accordingly, a contract has been made with the Boston Locomotive Works, for one four wheeled 12 ton engine, to be delivered at Buffalo by the middle of July, and with the Taunton Locomotive Manufacturing company, for six 20 ton engines, one of which is to be delivered in Buffalo the last of July, two others in the fall, and the remaining three during the summer of 1853.

During the month of July of last year, contracts were made for 2,000 tons of T rails, to be delivered in New York, and for its transportation to Cleveland. This lot of iron is intended to cover the first division from Galion to Marion, and had it arrived in this country in time, as was anticipated at the time of its purchase, it would have been laid down during the past winter. The iron is now being shipped from New York to Cleveland, and will arrive it is believed, in time to be laid down during this and the ensuing month of June. The contractors are prepared to lay it with dispatch. Ten thousand tons of T rail were purchased during the past winter, to lay the remainder of the track from Marion to the Indiana line, which is to be delivered in New York at several times between this and the first of September next. A contract has also been made for its transportation from New York to Cleveland, Sandusky and Toledo, immediately on its arrival in New York. Contracts for chairs and spikes have also been made, and every arrangement requisite, entered into for opening the entire line of the road for use during the ensuing summer and fall.

Seven hundred thousand dollars of the mortgage bonds of the company have been disposed of in New York, on as favorable terms as those of any Western company, whose work was in an unfinished state. The remaining $100,000 of the mortgage bonds, have been disposed of mostly at par, in the several contracts for machinery, etc., before referred to. The $200,000 of Real Estate bonds issued by the company, were also disposed of a few weeks since in New York. So that with prompt payment by the stockholders of the remaining instalments due upon their stock, the means of finishing the entire work will be at the disposal of the board during the ensuing summer and fall.

As the third great link in the continuous chain of roads between the Eastern cities and the Mississippi valley, our line has lost none of its importance relatively, or otherwise; on the contrary, it is more firmly established in public favor, and more generally regarded as *the East and West road.* Herculean and successful exertions have been put forth by the different railroad companies along the lake Shore, from Buffalo to Cleveland, to push onward their respective works, and the railroad connexion is already effected eastward from Erie, with New York and Boston. Eastward of Cleveland, the Lake Shore road has been urged forward with almost unexampled energy, and in little over a year from its commencement, 40 miles have been finished and opened, leaving a gap of but about 63 miles to be completed this year. With this gap closed up, the line is continuous from Galion to the eastern seaports. Every hour after the line is rendered continuous from Galion eastward, our road will, until completed, be losing trade and travel, which will then legitimately belong to it, and which, without our link, must be forced around us on more circuitous routes. The Ohio and Pennsylvania railroad has also been advancing with rapid strides, and 107 miles, extending from Pittsburgh to Massillon, has been opened for use, passing Alliance where it intersects the Cleveland and Pittsburgh railroad, which has been completed during the present year from Cleveland to Wellsville, so that *there is now a continuous railroad route from Galion, through Cleveland and Alliance, to Pittsburgh.*

The Pennsylvania railroad has also been prosecuted with unceasing vigor, and it is now open for business between Pittsburgh, Philadelphia and Baltimore, with an uncompleted gap of only 28 miles, which is to be closed up during the ensuing summer. With regard to our eastern connexions, the promises of the past are the realities of the present. Neither have our friends in the *west* been idle. A company has been formed in Illinois to construct the road from Terre Haute to St. Louis, with John Brough, Esq., one of the most talented and energetic railroad men of the west at its head, who are taking measures for the rapid construction of this part of the line. From Indianapolis to *Terre Haute,* [72 miles] the road is already opened, and from Indianapolis in this direction, 42 miles are finished and in daily use, and I learn from the President of the Indianapolis and Bellefontaine company, [Hon. O. H. Smith,] that they will open 18 miles more of their line for use during the present month, and that the remainder, [23 miles] will certainly be completed to our connexion by the first of December next. The closing of this short link in Indiana, will bring to our western terminus, an immense amount of trade and travel from Terre Haute, Madison, Lafayette, Louisville, in short, from almost every part of the great producing state of Indiana. When we reflect that ours is the only line of road which promises to furnish anything like a direct outlet for this immense trade and travel to the Lake and the great produce markets of this country, New York and Boston, it would be rank injustice to our co-laborers, the Indianapolis and Bellefontaine company, and our other friends in Indiana, to leave them for a single hour without this, to them, indispensable outlet True, they can do a local business of some consequence between Union and Indianapolis, but a local business on a *local* road, is a very different thing from a local business on a great *thoroughfare,* and as for through business, there can be none without our road for a year or more to come, and then, if any, only by a very circuitous route; for if the Piqua and Columbus line should be finished, there is no market at Columbus for anything Indiana may desire to sell. The town of Union is nothing without the union of our road with the Indianapolis and Bellefontaine road—nothing but a name. But with our road completed, connecting the roads of Indiana with Cleveland, Pittsburgh, Boston, New York and Philadelphia, by their nearest and best outlet, the flood of commerce will flow freely through that western gate, of which we hold the key, and the currents still westward, will soon show themselves converging towards Indianapolis, to be drawn thence through this great channel. This is not a fanciful picture, but the plain deduction of common sense.

But delays are not dangerous and injurious only to the companies in Indiana. We are in danger from rival roads in our own state, if we maintain not the vantage ground which we now hold in our power of being the first to approach the western gate. What though other routes may be longer, the current of trade so long pent up, will seek the first outlet that is offered, and these currents of trade when once formed, cannot be changed in a day. But taking it for granted that our line will be finished the present year, (which it must and will be,) I will ask attention to the position it will then hold among the railroads of the Union. It is so located as that it receives at its eastern terminus, the vast business accumulating on the great through lines from New York and Boston, by way of the lake shore; and from Philadelphia and Baltimore, by way of Pittsburgh. It is the shortest, straightest, and most direct outlet for the vast trade and travel from St. Louis, Indianapolis, and the country tributary to these important centres of trade, to the eastern cities, combining with this directness of allignment the important advantage of access to the great navigable waters of the lakes, the New York and Erie and Welland canals; the charges for transportation upon which, (especially after the contemplated enlargement of the New York and Erie canal,) will be merely nominal. It crosses the Mad River and Lake Erie railroad at Bellefontaine, and connects with the Dayton and Michigan railroad, now in progress of construction, at Sidney, Ohio, and crosses the Miami Extension canal at Loramie creek. What railroad has more desirable connections, or is more accessible in every part of the line—add to this, its passage through one of the most productive and fertile portions of the most productive country in the world, (the resources of which are scarcely, as yet, half developed,) and but little that is desirable remains, that is not attained on this line.

In addition to the advantage which our line possesses over any line south of us, by means of our convenient access to, and connexion with the great lakes and navigable canals of the north, and this is by no means a small advantage, as in my judgment, heavy freights will always have a strong tendeney to seek the navigable waters at the most convenient points, we have the choice of great routes to the eastern cities, which no other route possesses without encountering a circuity which is fatal to its pretensions as a competing line. I allude here to the great Pennsylvania, and Lake shore, and New York lines. Philadelphia in view of her great western connexions, has been, and still is engaged in a commendable and noble effort to establish first class lines of steamships, one of which is already in successful operation. It is the only mode by which she can hope to secure any

considerable share of the shipping business of the country and attract western produce to her wharves; and it is a matter of no little surprise, with her means and advantages, she has not attempted this before. In my opinion, no single railroad will be competent to pass all the trade and travel between the east and west, and keeping in mind the immensity of the country and its rapid augmentation in wealth and population, it is not going too far, perhaps, to say that all the lines now in the course of construction will be required, and if properly managed, will, whilst benefitting the whole country, produce a handsome remuneration to the stockholders. Whether this shall prove true or not, one thing is obvious, namely: that the course of trade will be through those channels which form the most convenient connexions between the extreme points of interchange. Pennsylvania raises more produce than she consumes. It is therefore clear, that all the western produce passing through her improvements, must be for shipment. That may, and no doubt will be a large amount, but at the same time we cannot shut our eyes to the fact that New York, from a variety of causes, is likely to be *for many years to come*, the principal shipping port of the United States; and although from Galion to New York, through Philadelphia, is about 60 miles nearer than through Buffalo or Dunkirk, yet even when the chain is made continuous through Pennsylvania, New York will still continue to receive the bulk of her western business through her own improvements, whilst the large consumption of domestic prodece in the manufacturing states of New England, will always keep up a strong current of trade from the west through the lake shore route. At the same time, Philadelphia, with a good steam marine, connected with the west by first class railroads on shorter routes, will hold an enviable position, and with the application of the requisite energy and means, and with proper foreign connexions, may gradually draw to herself a large share of this trade, which, without these advantages, will be divided mainly between New York and Boston. It must be remembered however, that every where in the west are to be found Pennsylvanians and their immediate descendants, who entertain the strongest attachments to the land of their nativity and of their fathers. There must ever therefore be an extensive social and commercial intercourse between Pennsylvania and the west. This will doubtless be greatly stimulated by the completion of the great railroads now in progress of construction between the old Commonwealth and the west. The chief of these for the present, and probably for some years to come, is the Ohio and Pennsylvania railroad, extending from the flourishing manufacturing city of Pittsburgh, into the very heart of the great state of Ohio, and connecting with our road at its eastern terminus.

Railroad rivalries will exist however, and there is now in western Pennsylvania and Virginia, a rivalry of railroads, which in view of certain proposed connexions, it may be proper for us to attend to. From Greensburgh on the Pennsylvania road, 31 miles east of Pittsburg, it is proposed to strike Ohio opposite Wheeling, by means of what is commonly called the Hempfield road. The Pittsburgh and Steubenville company, propose to connect with Ohio at Steubenville. Another connexion is proposed by extending the Cleveland and Pittsburgh railroad from Wellsville, down the Ohio, through Steubenville to Wheeling, and up the Ohio from Wellsville to Beaver, and thence by the Ohio and Pennsylvania railroad to Pittsburg. Should the Pittsburgh and Steubenville road be constructed, and the line carried west through Ohio as is proposed by the Steubenville and Indiana company, to Cosbocton, and thence branching off to Newark on the one hand, and Mt. Vernon on the other, it will obviously become the interest and duty of our company to seek a connexion with this line, by inducing its extension from Mt. Vernon direct to Marion, thus opening up the shortest route from Pittsburgh to Indianapolis. The Ohio and Pennsylvania company are also looking to a connexion with Mt. Vernon from the extreme southern bend of their line, at Loudonville, and thence through Deleware and Springfield to Cincinnati. This offers an additional inducement for a connexion with Mt. Vernon.

I call your attention to these matters, to show you that whatever is contemplated, or whatever may be done in the way of improvements around us, our road possesses advantages and connexions which render its position impregnable as one of the great permanent thoroughfares of trade and travel between the east and the west. The most friendly relations subsist between us and all the railroad companies with which we come in contact. The basis of a most satisfactory connexion has been agreed upon with the Cleveland, Columbus and Cincinnati railroad company, by means of which a continuous line for business is arranged from the Indiana line over our road and theirs, to Cleveland, which latter place must forever be the great depot of our trade on the lake shore. We have the offer of simillar arrangements with the Indianapolis and Bellefontaine railroad company, which will be embraced, and the details arranged as soon as I can possibly leave the line to give it my attention. No doubt is ascertained of a satisfactory arrangement being obtained with the Ohio and Pennsylvania company, while the officers of the Mad river and Lake Erie railroad company, give assurances of a disposition on their part to enter into a satisfactory arrangement for the interchange of business between the two roads at Bellefontaine.

The finances of the company are now in a quite satisfactory condition, and orders have been given to the Engineer department to accumulate the maximum amount of force which can be profitably employed on every part of the line, and the prompt payment of the remaining instalments of stock, (which knowing, our people, I am satisfied, will not be longer withheld,) we shall be enabled to open the entire line for business by January next. The report of the treasurer will show the amount received and expended during the year. But this does not by any means show the amount expended by the company, as the amounts to be paid to contractors in the stock of the company, and the amount of payments made by stockholders in cross ties, bridge timber, stone and other materials, &c., &c., &c., not included—none of these accounts being yet closed.

I refer you to the report of the chief engineer, as a document containing much valuable information and many useful suggestions. It affords me the greatest satisfaction to bear testimony to the continued faithfulness, ability and zeal, with which this valuable officer and all the engineer corps have performed their duties during the past year.

Respectfully submitted,
By order of the Board,
JAS. H. GODMAN,
May 3, 1852. *President.*

Below we give some extracts from the report of the Chief Engineer, showing the general characteristics of the route, and his estimate of the prospective business of the road.

TOPOGRAPHICAL FEATURES OF THE LINE.

The whole length of the line is	118·08	miles.
Length of straight line	107·84	"
Length of curved line	10·24	"
Length of curves with radii varying from 2865 to 11,460 feet	8·77	"
Length of maximum radius (1146 feet)	0·67	"

GRADES.

Level line	20·54	miles.
Level and less than 5 feet per mile	30·67	"
" and less " 10 " "	37·70	"
" and less " 15 " "	51·17	"
" and less " 20 " "	61·49	"
" and less " 25 " "	68·65	"
" and less " 30 " "	80·64	"
" and less " 35 " "	87·10	"
" and not over 39·60 feet per mile.	118 08	"
Length of maximum grades [39·60]	23·56	"
Longest continuous maximum grade.	3·00	"

On the whole route, the total increased distance over an air line, drawn from Galion through Bellefontaine and Sidney to the western terminus at Union, is but four miles.

The principal summit is on Dickinson's farm, 4¼ miles east of Bellefontaine, which is 177·72 feet above the starting point at Galion, [Galion is 595 feet above Lake Erie.] Marion is 192·75 feet below Galion, Bellefontaine is 44·72 feet above Galion, Sidney is 211·68 feet below Galion, Loramie Creek level is 237·58 feet below Galion, and Union at the Indiana State Line, is 62·67 feet below Galion.—The difference in elevation between the lowest and highest points is 435·97 feet.

Probably no eastern, and few western roads, present better topographical features, taking grades, curvature and cost into acccunt. Its geographical position on a line between the city of Indianapolis and Dunkirk, is remarkably favorable. The Lake Shore lines, and the line from Cleveland to Galion, present advantageous characteristics equally striking, and as a whole, the route from Dunkirk through Cleveland, Bellefontaine and Indianapolis, to Terre Haute, a distance of 493 miles, can scarcely be equalled in any part of the Union. It must forever remain a part of the great main route between Boston, New York and St. Louis. But your line is not only a part of the shortest railroad connexion between Boston, New York and St. Louis, it forms also the most direct south-western extension of the Ohio and Pennsylvania railroad, and is part of the great leading thoroughfare between Philadelphia, Pittsburgh and the great west. This important line is now finished from Pittsburgh to Massillon, 108 miles, leaving but 77 miles, which is already in an advanced stage, to complete the connexion. But 28 miles of staging now remain between Philadelphia and Pittsburgh, and but 41 miles are unfinished between Terre Haute and your western terminus. Sixty-two miles along the Lake Shore, which will be completed next summer, will make the line continuous to your eastern terminus, from New York and Boston.

The grades, curves and original cost of railroads, have much to do with their dividends; and those which at a moderate cost approach nearest to a level and straight line, other things being equal, must be the most profitable.

OF THE PROBABLE BUSINESS PROSPECTS OE THE ROAD.

In preceding reports, I have referred to the peculiar and highly favorable geographical position of your line, as a component link of the most extended line of thoroughfare ever yet undertaken. It is so happily situated, that its eastern end will receive the main trunk lines from Boston and New York on the one hand, and of Philadelphia and Baltimore on the other; whilst at its western end it will receive through the Indianapolis and Bellefontaine railroad, the immense business that may be concentrated at Indianapolis, which will be one of the greatest receiving and distributing railroad depots in the United States. Its direct extension from Indianapolis through Terre Haute to St. Louis, and through Missouri to Independence, and at some future period to the Pacific, on the shortest line likely ever to be constructed between Cleveland and St. Louis, putting it also in connexion with the Illinois Central railroad, and with the lines leading to Cincinnati, Madison and Louisville, give it character as a great main trunk route, which no competition can ever destroy. For all the railroad business that may be concentrated at Indianapolis in all time to come, this line will present the most advantageous outlet to New York and New England.

The precise character and extent of the business to be done on a line thus situated, placed in the midst of an immense and but partially developed commercial field, no man can estimate. But the reasons, which are peculiarly and forcibly applicable to this line, may be given to show that it must do a more than common business, and prove to be more than ordinarily lucrative as an investment. I submit them as arguments in its favor.

1st. Because of its position as part of the great east and west main trunk line, and because its cost per mile is only about *one third* of the average cost of roads of a like class in the Eastern States.

2d. Because immediately on its opening, it will receive the full tide of a heavy business throughout its whole length; and if finished, as it ought to be, this year, it will be at first without any competition in the field to divide that business.

3d. Because the producing capabilities of the regions through which it is located, and to which it runs, are now sufficient, even if there we no rich back country west of it, to make it profitable.

4th. Because the back country that must be tributary in Indiana, Illinois and Missouri, is already well settled, and abounds even now, in all the ele-

ments of railroad traffic, which will find its most convenient outlet to the seaboard through this channel; and because it is increrising with unexampled rapidity in population, business and general wealth.

5th. Because the construction of a main trunk railroad thoroughfare into the very heart of the garden of the world, will give a fresh and powerful impetus to its great agricultural interests, and cause a quick and permanent *augmentation* of trade and travel.

6th, Because, owing to its favorable grades and curves, and the cheapness of fuel on the route, a heavy railroad business can be accommodated upon it at low rates of charges with profit.

7th. Because, on the opening of this line, there will be presented to the country an entirely new and striking feature in the history of interior trade—a winter business connexion by railroad, between the great west and the importing and exporting markets in the Atlantic cities; a connexion that will work a complete revolution in the whole system of commercial ttansactions in the Union—equalizing throughout the year, the prices of produce and merchandize, and adding immensely to t he annual aggregate business of the counrry.

The opening of the New York canals and railroad, revolutionized the vast regions surrounding our great Lake country, and for half the year, the growing population tributary to the Lake business have enjoyed the advantages of these magnificent improvements; but here we are to witness the opening of a mighty "Iron river" into the heart of the almost boundless valley of the Mississippi, embracing within its area, every variety of climate and soil, whose unlimited resources will have free scope for development all the year round.

The east and the west have never yet been brought i nto close and intimate relationship, but the day is now approaching when they are to be united and brought together by the brotherly bond of a continuous railroad. Duriug the last year, the opening of the New York and Erie, the Cleveland and Columbus, the Ohio and Pennsylvania, the Cleveland and Pittsburg, the Pennsylvania Central, and parts of the Lake Shore lines, leaving only small unfinished sections to complete the communications between the eastern seaboard and Ohio, has given a foretaste of what may be expected when the last link shall be added to the chain. When that great railroad chain shall be complete, and not till then, will the people of the east be made acquainted practically, with the western world.

Within the present year, the grand schemes of Indiana will be so far advanced, that the business of a large portion of the State of Indiana may be concentrated at Indianapolis, ready for railroad shipment to the east—and it must be sent across Ohio.

The first east and west railroad across this state, which shall connect Indianapolis with Boston, New York, Philadelphia and Baltimore, will be sure to encounter from the very day of its opening, a *limited trade;* but that trade will be limited only by the capacity of the companies to transport it. I am not more certain of anything in the future, than I am of the truth of this prediction—that from the period of the opening of the continuous railroad, until the close of the first business year. we shall see one continued struggle to accommodate the trade that will be offered. Not one of the companies will be prepared for its proper and speedy transit. Assuming that your company may provide during the first year, a sufficient number, to average 150 eight wheeled, or 300 single cars for freight, and passenger cars for two trains each way per day, which will assuredly be required in the very beginning. Allow a day for the passage of each freight train over the 118 miles of your road, [a very convenient distance] and 30 cars to each train; one-half of the whole number to be calculated as standing, and the other half running; and assume the *average* load in each car at only two tons, this would make 300 tons carried once over 118 miles, which at 3 cents per ton per mile, would be.....$1,062 00

Allowing 35 through passengers and 70 way passengers over half the road to each train, equal to 140 through passengers at $3.....	420 00
280 way passengers at $1 50.....	420 00
Add transportation of express goods, mails, etc.....	50 00
Daily receipts.....$1,952 00	
Yearly income.....$610,976 00	
Deduct for expenses and repairs, [40 per cent].....	243,904 00
Net income.....$367,072 00	

From which to pay interest on bonds, dividends on stock, etc.

The above net income would be about 18¼ per cent. on $2,000,000, a sum more than adequate to complete the road, and furnish the rolling stock to do that business. This is not a very heavy trade. compared with the amount carried on some of our railroads.

The number of passengers here assumed, is only about *one third* of the average carried daily, on six of our principal eastern roads, and about one half the number carried on the Michigan Central road. Two trains of freight per day each way, with 75 tons of loading each, is not an extravagant amount to assume on a main east and west thoroughfare.

Railways in British North America.

In our issue of June 12th we spoke of the return of the provincial delegates, Messrs. Hinck's and Chandler, from their mission to England, and of the refusal of the home government to grant the assistance required. The effect of these negotiations will not be without its influence upon both the commercial and political opinions of the colonists.

We find in a Halifax paper, the *British American*, a statement, purporting to give the offers made by English capitalists to build certain provincial lines which would seem to render the completion of the European and North American line, as well as the Montreal and Hamilton road, and the Quebec and Richmond railroad a matter of certainty. The arrangements proposed contemplate the building of all three of them. The *British American* says:

We had an opportunity of learning the precise nature of those arrangements, which although varying in detail, are substantially the same for both provinces, and as great public interest is felt in the subject, we lose no time in placing them before our readers. The delegates have succeeded in obtaining offers from eminent British contractors of a different character from any hitherto made, and which are not open to the grave objections entertained to former propositions.

It has not been deemed expedient by the delegates to connect the construction of the railroad with any extensive scheme of placing large tracts of the public domain at the disposal of the contractors. The road is to be built and fully equipped by the contractors at a certain price to be stated after proper surveys have been made. The contractors, who are parties of the highest respectability, including in their numbers Mr. Peto, M. P., Mr. Brassey, Mr. Betts, and Mr. Jackson, M. P., pledge themselves to construct the works on the same terms, as to profit, as they have recently done similar works on the continent of Europe, where they have been exposed to active competition. They will of course be guided *as to the description of the work* by the wishes of the parties employing them. The works in Canada are to be constructed on account of companies which have already been incorporated, and which are entitled to the benefit of the railway guarantee act, that is, to bonds of the companies guaranteed by the government for one half of the cost, and which bonds form a first charge on the revenues of the road. These bonds the contractors are to receive in payment for one half the cost of construction. They are to the bonds of the company for three-tenths the amount, which will form the second charge on the revenues of the road. They are likewise to take one-tenth in the stock of the companies. This leaves only one-tenth to be provided by subscription to stock, and in the event of any portion of this one-tenth being subscribed for by municipal corporations, or by the government, bonds are to be taken for the same at par. Such, briefly are the terms offered to Canada. The tenders of the contractors are to be submitted to two disinterested engineers, one appointed by the government, the other by the contractors, who are to endeavour to reconcile any difference, and reduce any overcharge, and in case any insurmountable difficulty should arise, then the contractors are to be paid what is deemed reasonable by such engineer, for their plans and estimates, which are to become the property of the companies.

With regard to New Brunswick, the road is to be constructed by the company already incorporated, and owing to the forethought of the government of that province the facility bills were passed last session, and will be immediately assented to, so that nothing need prevent the company from commencing operations immediately. The offer to New Brunswick is substantially as follows:—Assuming the cost of the road at a million sterling the contractors will take £100,000 in stock, which in addition to that subscribed by the province (£250,000) and whatever has been or may be obtained from the public in New Brunswick, will constitute the total stock of the company. A loan of £250.000 on the same terms as the Canada loan, which will be a first charge on the revenues of the road, is to be given by the province. and the remainder of the million is to be provided by bonds of the company, all which securities are to be taken at par, and are to bear at 6 per cent interest, and to be payable 20 years after date.

Such are the propositions which the delegates have brought out with them, and we believe that they will be received with favor generally throughout the three provinces. After the main road through New Brunswick has been completed, the contractors have agreed to construct a branch to Miramichi, on precisely the same terms of payment, in proportion to the cost. We understand that the delegates have also obtained an offer from the same parties, for the construction of the Nova Scotian section of the line, and that owing to their doubts as to the wishes of the government of Nova Scotia, they deemed it expedient to give them the option, in case they thought proper to co-operate with the sister provinces. of having the road constructed either on provincial account or by means of a company. In the former case, the bonds of the province will be taken for the whole amount at par. In the latter the payments will be arranged precisely in the same way as for Canada. We have no doubt that the cordial co-operation of the government and people of Nova Scotia may be relied on as to the construction of our section of the line on some plan, but at present it would be premature in us tn say more than, that the scheme as a whole seems a perfectly feasible one, and we congratulate the delegates on the successful issue of their mission, believing that their arrangements will be even more satisfactory to the public at large than those which it was the immediate object of their mission to effect. It is likewise gratifying to know that our enterprising neighbors in Maine and Massachusetts will hail the result of the late mission with the greatest satisfaction—and that they will be stimulated in their efforts to complete the Maine section of the European line, which will give uninterupted communication at all seasons of the year, between Halifax and the Detroit river, as well as at Boston and New York.

Indiana.

Peru and Indianapolis Railroad.—The President of this company, says the State Journal, on Wednesday concluded a contract with Messrs. A. DeGraff & Co., of Ohio, for the furnishing of all materials and the completion of the entire line of the road from Noblesville to Peru. It is to be in running order to Tipton by the 1st of January, 1853, and to Peru in the year following. The contract is said to be a highly advantageous one for the company.

The well known character of DeGraff & Co. for energy and ability, is a sure guaranty of success.—They have built more railroads than any other western firm, and never put their hands to the work and look back.

Montgomery and West Point Railroad.

REPORT OF THE DIRECTORY TO THE STOCKHOLDERS.

The president and directors respectfully submit to you the following statement of the affairs of the company for the past year.

By reference to the annexed statement of the secretary, marked No. 1, it is shown that the receipts of the road have been,

From pessengers	$91,229 84
From freight	61,206 29
For transportation of the mail	21,106 32
The whole amounting to	$173,542 43
And the expenses of management have been, as per statement No. 2	97,463 19
Leaving a profit of	$76,079 24
From which is to be deducted the amount of interest paid on loans	24,790 73
And the sum of	$51,288 51

is shown as the nett income from the operations of the company for the year ending 1st March, 1852, equal to 8¼ per cent on the capital stock.

The expenses have been heavy, but unavoidably so, in consequence of the necessity of renewing within the past and present year, almost the entire superstructure of the road between Notasulga and Montgomery, a distance of 47 miles. The larger portion of the timber on this part of the road, has been in use between five and six years, the extreme limit to which we can safely rely on the durability of it in this climate. In consequence of the high price of cotton at the close of the year 1850, and the consequent advance in the value of labor, the work of renewal, last year, had to be conducted at great expense. It was found necessary to keep in service a force of upwards of one hundred hands, and for which we had to pay an average hire of $180 per hand. The price of provisions has been full as high, in comparison with former years, as the price of labor, and in the hire of the road hands and their support, and the advance on the price of engine fuel along the whole line of the road, will be found the largest increase in the road expenses of this, as compared with any former year.

The work of renewal this year is progressing rapidly with a force of 125 hands, as will be more fully placed before you by the accompanying report of the chief engineer, and the board feel assured that, by the 1st of December, the entire road will be in the very best condition, and fully equal to sustain any service that the increasing business may require.

Since the 1st of July last we have performed double daily mail service, receiving for it $21,337 per annum; an increase upon our pay for the old service of $8,737 per annum, which does not, however, pay for the extra train.

By the 1st of July the Atlanta and Lagrange railroad will be completed to within 30 miles of West Point, after which time there will be but little necessity for retaining the day train, and exertions will be made to prevail on the post office department to allow us to discontinue it.

The increasing number and weight of trains to be passed over the road, demands that early preparation should be made for a reconstruction of that part between Montgomery and Notasulga, with a new and heavy rail, whenever the superstructure, now being laid down, shows signs of decay. To provide for this, without embarrasment to the company, has been a subject of deliberation with the board, and they have instructed me to purchase from the South Carolina railroad company 4000 tons of their old iron, which has been offered to us at $27 per ton, delivered on shipboard in Charleston, or $30 per ton delivered in Philadelphia, payable in the 7 per cent bonds of the company, redeemable at twelve years, provided I can make a satisfactory arrangement with some responsible iron house in the United States, to re-roll it into a T rail, and have it delivered in Mobile during the next winter and spring. To accomplish this object I shall leave for Charleston and the north as soon after the annual meeting as I can make arrangements to do so.

Upon reference to the statement of the secretary marked No. 3, you will notice the net profits on the operations of the company for the past three years have amounted to $160,776 07, which upon the capital stock of $623,800, is equal to 25 5-6 per cent.

With an average crop in the country, along the line of road, the board feel great confidence in estimating the gross receipt for the year ending 1st March, 1853, at not less than	$210,000
The expenses of management, including repairs and renewal, will be covered by the sum of	$100,000
Interest on loans will amount to.	28,000
	128,000
Which will leave a net increase of	82,000

Upon reference to the receipts of the past six years, it will be seen that the estimate is for about an average of the annual increase for that time.

The receipts for years ending on the 1st March, of each year since 1847, show as follows:

1847	$55,787 97
1848	79,706 83
1849	95,665 90
1850	123,781 61
1851	140,057 09
1852	173,542 43
And for the month of March, 1852	$16,766 36
Against	12,342 68

for March, 1851. Showing an increase for the first month of this railroad year of $4,223 68, equal to 33⅓ per cent.

An arrangement has recently been made with the roads east of us, by which merchandise comes thro' from Charleston or Savannah, at $2 25 per 100 lbs. This has increased considerably the receipts of the road during the month of March, amounting for the month to upwards of $1000, whereas the whole receipts for the same ddscription of freight, only amounted to about $600 for the whole of the last year, ending on the 1st of March.

This is destined to be a heavy and profitable business to this road, as soon as we are connected with the roads east of us; and will, with the heavy amount of groceries passing up the road, amply compensate us for the quantity of cotton which may be drawn from us by the better prices which occasionally prevail in the markets east of us. The directors have not convened you under the authority conferred upon them at your last annual meeting to do so, whenever they deemed it proper to have your action upon the building of a branch road from Opelika to Columbus, for the reason that they deemed it prudent to provide fully for a renewal of heavy iron on the main road, before assuming responsibilities for building a branch. Believing now that within a short period this will be provided for, they would urge upon you the importance of acting on this matter, and of passing such resolutions as will enable the board to take the necessary steps to promote the building of this branch as speedily as possible, a work demanded as a protection from rival roads, and which will add largely to our receipts.

CHARLES T. POLLARD, President.

The construction account gives the following statement of the financial condition of the company:

Capital stock	$688,610 88
Debt	642,318 80
	$1,330,959 68

New-York.

Genesee Valley Railroad.—At a special meeting of the Common Council, held last evening, a resolution was adopted authorising the Mayor to announce to the officers and directors of the Genesee Valley railroad that the City authorities were ready to perfect the obligations of the city to the amount of $300,000, and to tender to the board this aid in the prosecution of the work in question.

The directors met at the Eagle hotel this forenoon, and there can be no doubt but the necessary forms, from and to the city, will be at once complied with; and that this evening the Common Council will proceed to designate directors on the part of the city, to act in conjunction with those chosen by the individual stockholders.—*Rochester American.*

Louisiana.

Our Great Railroads.—We are happy to state that the prospects of both of our great projected lines of railway—North and West—are at the present time, in the highest degree, encouraging. This is as it should be, and betokens a bright and glorious future for our city and state, when a revival of commerce, an augmentation of trade, and general and healthful activity in all of the multifarious pursuits, which go to make up the sum total of human industry, and which constitute the only basis of safe, permanent and progressive prosperity, shall make our fair crescent city the queen of the south and west, resplendent in the diadem of commerce, and first in all the elements of greatness. We understand that the board of directors of the New Orleans and Jackson railroad have determined upon adjudicating the contracts along the whole route on the first of next September. Engineers are to be appointed very shortly, who will at once proceed to locate the road, and prepare the various specifications, etc., necessary for the objects in view. It is contemplated to commence the work on the road at three points—at New Orleans, Jackson, and some other intermediate place not fixed upon. This plan will give more satisfaction than any other, even if it be not absolutely the best. Some of the friends of the road are in favor of commencing the work at Jackson, others at New Orleans, whilst not a few have convinced themselves that *the middle* is the most appropriate place to begin. Now, that the Board of directors have come to the conclusion to begin at *both ends* and be digging away at *the middle* at the same time, we hope all parties will be satisfied. If they are not, it will be useless to attempt to satisfy them. Give them their own way, and such men would grumble and growl.

The contract work is to be performed under the management of two engineers and their deputies, who will be well distributed along the whole line of the road.

The stockholders of both roads—the New Orleans and Jackson, and the Opelousas and Western—have very promptly met the call of the directors and paid in the first instalment; and liberal subscriptions of stock still continue to be made. This is decidedly encouraging—a good omen. Letters from the most intelligent and influential citizens of Mississippi and Tennessee, give strong assurances of substantial assistance in prosecuting the northern road, and at the same time exhibit a zeal in behalf of the great object which ought to arouse the people of New Orleans and Louisiana to energetic, determined *and liberal action.* We are most interested, and should, consequently, be foremost in the work.

In regard to both of the roads spoken of, there is no doubt, the country parishes and counties will contribute their full quota—will subscribe more than their share towards constructing these grand improvements. In fact, there can be no doubt of that. The people of the interior have exhibited a spirit which cannot be misunderstood, and if they are properly seconded by New Orleans at the election next Monday week, the completion of the two roads may be set down as beyond the reach of contingency.

We have so often adverted to the duty which will devolve upon the property holders on the 21st inst., that we shall not do so, at length, at this time. We have shown, beyond the power of refutation, that it would be immensely to their interest to pay the tax, even were it a contribution for which they would receive no scrip, or any evidence that *that* outlay would be refunded in dollars and cents.—The appreciation of real estate, the demand for store houses and residences and consequent advance in rents, the increase in business in every department, the augmentation of commerce necessarily attendant upon rapid and safe intercommunication with all parts of the mighty valley of the West, of which New Orleans is the natural *entrepot*, at all seasons of the year, at high water and low water, the influx of great numbers of handicraftsmen and manufacturers, who as certainly go where their skill and industry are needed as water regulates its own level, and they are always required in cities where great lines of railway centre—building up thereby the different trades and avocations, and creating a permanent *resident population*, so much

needed in New Orleans—would pay back, a thousand fold, the contribution asked at the hands of our property holders, and which, we trust, willl be granted by an unanimous vote on Monday week next.

Let this tax be carried, and the good work of improvement will very speedily commence. The first spade put into the ground will have its influence. Let it be defeated, and a deeper gloom will come over our prospects than has ever been witnessed for many a long year, and some of them have been gloomy enough in all conscience. There is everything to gain by voting for the tax, and and everything may be lost, by not voting for it.—Under such circumstances, can it be possible that any considerable number of our citizens will hesitate as to the course which should be pursued, and the vote which ought to be given? We trust not. —*N. O. Commercial Bulletin.*

English Railway Statistics.

Accidents and Extent of Passenger Traffic.

A return to the House of Commons (dated 10th inst.), by the Railway Department of the Board of Trade, formerly the Railway Commissioners, has just been made, showing the number and description of accidents, and the extent of passenger traffic during the past half year, that ending the 31st December, 1851.

From this return it appears that the total number of persons killed on all the railways in the United Kingdom during the half year was 113, and the number injured 264. During this period the railways carried 47,509,392 passengers.

Beferring to a similar return (by the railway commissioners) for the previous half year—namely, the first half of the year 1851—we find the total number then killed was 105 persons, and the number injured 173. The number of passengers carried was then 37,881,703. So that during the whole year 1851, the number killed was 218, injured 437, passengers conveyed 85,391,095.

But small as this proportion of accidents to passengers carried is, the public must not run away with the notion that 218 *passengers* were killed, and 437 injured by the railways in the course of last year. The 218 persons killed are made up principally of servants of the companies, navigators, trespassers, and persons who were pleased to use the railways as a means of self-destruction. The number of *passengers* killed by the railways, and for which the system is justly blameable, was during the last half year only 8, the number of passengers then conveyed having been as many as 47,509,392. Therefore in last half year only about 1 person in 6 millions carried was killed. Throughout the year the number of passengers killed was 19, while the number carried was 85,391,095. Therefore in the year the proportion killed to those carried was about 1 in 4½ millions.

It appears from these figures that fatal accidents are on the decline—a most gratifying circumstance.

If we look at the worst side of the picture, and consider the number of fatal accidents during the whole year, which was 1 in 4½ millions, and not the results of the *last* half year, when the proportion was only 1 in 6 millions, still how apparent is the great safety of railway travelling. In moving about double the population of London and its suburban districts they kill *one* person. In doing the same extent of work how many would the old coaches have killed? Nay, let double the population of all London move themselves on their own legs, and more than one might be killed even by the orange peel on the pavement. If so, railway travelling is, notwithstanding the accounts of "frightful and fatal railway accidents," with which the newspapers teem, quite as safe as walking itself.

But we look forward to the time when a railway accident will be a wonder. For be it observed that the accidents which occur are very seldom accidents arising from the *machinery* of the railway system, but they are due almost entirely to the gross negligence and folly of the servants. A reckless engine driver, in a drunken fit, dashes away at a furious pace, knowing that another train is immediately before him, or seeing a danger signal neglects to obey its directions; a train is signalled not to stop while another on the same line is ahead standing in the station; a pointsman leaves the points in such a position that the next train (coming up at full speed) must run into a siding; the keeper of a level crossing allows a wagon to cross the rails at the moment a train is due; proper time in the arrival and departure of trains is not kept; these and other irregularities of the men employed on railways court accidents, and is it to be wondered at that they occur? But as respects accidents which are properly the result of defects of the machinery of the system, when do we now ever hear of an engine, though driven at the top of its speed, jumping off the rails, a boiler bursting, an axletree giving way, etc.? In point of fact the machinery itself of the railway system is adapted for *perfect* safety. A man is as safe in a railway train as in his bed, provided the railway servants or managers do not misconduct themselves.

The safety of the railway system is one of the best features in it; and one, too, that in the course of years will greatly increase the value of railway property.

The number of persons conveyed by railway is truly astonishing. Here are about 85½ millions of persons carried in one year! Taking the population of the United Kingdom at 29 millions (and probably from the Irish Exodus it is not so much), the railways would move in one year about three times the population! The English railways alone no doubt perform even a greater feat than this: for England is better supplied with railways than Wales, Scotland or Ireland. What will be the extent of travelling when every part of the United Kingdom is provided with railway accommodation, when all fear of accidents has ceased, and when the public has become more familiar with railway travelling? Why, the railways will move in the course of a year a few more populations of Great Britain and Ireland.

A great deal has been said about the 'enormous' number of extra passengers the exhibition of last year produced. No doubt a few railway companies derived considerable benefit from the exhibition—such as the London and North Western, Great Western, South Western, and others which have their termini in London. But on the whole of the railways, the following facts will demonstrate that the increase was not very large:

	No. of passengers.
Half year ending Dec., 1849	35,073,672
" " " 1850	41,087,919
" " " 1851 (Exhibition period)	47,509,392

Thus the increase in 1850 over 1849 was about 6,000,000, and the increase of the exhibition 1851, over 1850 was under 6,500,000; so that the exhibition would appear to have created on the whole not so many as half a million passengers, as the addition to a traffic of about 47 millions. The London railways may have had many more than half a million additional passengers, for most of the country railways had their passenger traffic diminished by the exhibition.—*Herapath's Railway Journal of May 29th.*

New Hampshire.

Sullivan Railroad.—The present board of directors of the Sullivan railroad is as follows: Charles Thompson, president; John H. Dexter, treasurer; F. H. Simpson, and J. B. Upham, of Boston, town, N. H., and J. Livingston and Aurelius Dick-Henry Hubbard Jr., and J. M. Gedden, of Charlesinson, ot Claremont N. H.

Portland, Saco & Portsmouth Railroad.—At the late annual meeting the following directors were chosen:

Ichabod Goodwin, of Portsmouth, N. H.; John Howe, of Brookline, Mass.; Albert Thorndike, of Beverly, Mass.; Josiah Calef, of Saco, Maine; John D. Lang of Vassalborough, Maine; Thomas West, of Haverhill, Mass., and C. E. Barrett of Portland. This board is the same as that of last year, with the exception of Mr. Thorndike, the present president of the eastern railroad, whose name was substituted for that of Mr. Neal, the former president of that corporation.

Ohio.

Sandusky, Mansfield and Newark Railroad.—We publish in our commercial column, to day, a statement of the business of this road, from the 12th of February, 1852, to June 1st. The produce traffic, it will be perceived, has largely increased this year, over a corresponding period last year. During the above period, three months and a half, the amount of wheat received in store from cars, was 332,998 bushels; the total amount received, up to the 8th inst., was 413,066 bushels, of other grains, 6,500, making a total, since February 12th, of 419,566 bushels. During the same period last year, the total amount of grain received was 287,955 bushels, showing an increase, so far, of 131,611 bushels, in 1852, over the receipts for the same time in 1851, in this branch of the business of the road—being an increase of 45 per cent.

In the transportation of flour, the gain is vastly greater, as will be seen by reference to the statement. From January 1st to June 8th, 1852, 61,307 barrels passed over the road, being 38,709 barrels more than during the same period last year, or an increase of 170 per cent.

The merchandize sent inland over the road in 1852 is quite 40 per cent. more in tonnage, than during the same portion of 1851. These evidences of the rapidly increasing prosperity of the road are very gratifying, and afford a satisfactory indication of its future business and success.—*Sandusky Register.*

Ohio Central Railroad.

New Bridge over the Muskingum.—The railroad bridge to be built over the Muskingum at this place the contract for the building of which we stated in yesterday's paper was awarded to Messrs. Douglas, Smith & Co., of this city, is to be an iron one, invented and patented by Wendell Bollman, the master of road on the Baltimore and Ohio railroad. It is to be 528½ feet in length, having four spans 124½ feet each, containing 67 tons of wrought and 130 tons of cast iron. The only timber used will be in the floor, which will require 65,000 feet of lumber.

A bridge on the same plan as this one has been erected at Harper's Ferry, being the span that connects the Winchester and Potomac railroad with the Baltimore and Ohio railroad. Several others have been erected on the B. & O. railroad, and the Washington branch railroad, and are considered the best bridges now in use.

The contractors obligate themselves to have the bridge ready for the passage of a train by the first of December next.—*Zanesville Courier.*

North Carolina.

Cheraw and Darlington Railroad.—We had the pleasure of a conversation a few days ago, with L. J. Fleming, resident engineer of the Wilmington and Manchester road, who had been reconoitering the proposed route of the Cheraw and Darlington road. It affords us much pleasure to be able to state, on the authority of one so competent to judge, that upon the whole, the route is a highly favorable one. From the proposed junction with the Wilmington and Manchester road to Darlington courthouse, there is not an obstruction to be overcome, and the road can be built at the very lowest figure. From that point to Society Hill, the country is more undulating, and, consequently more grading would be required; but no trestle or other expensive work to increase the general average. From Society Hill to Cheraw, the route is of the most favorable character, over which a road can be built at the very lowest figure.

This reconnoissance is made with a view to a critical survey of the route, which is soon to be made after which, we have the strongest assurance, that the stock will be taken, the company organized, and the work put under contract.

When we reflect upon the importance of the road, not only to the citizens of Cheraw and vicinity, but to those of the adjoining counties of North Carolina, and the Wilmington and Manchester road, and the merchants of Wilmington, our only wonder is, that the stock should remain unsubscribed for one hour. Upon the most moderate calculation it would pour into the Wilmington market, either for sale or shipment to other markets, 30,000 bales of cotton, in addition to whatever

may be carried there by the Wilmington and Manchester road.—*Cheraw Gazette.*

American Railroad Journal.

Saturday, June 26, 1852.

Wisconsin.

Milwaukee and Mississippi Railroad.—The Milwaukee and Mississippi railroad, connecting the great lakes with the Mississippi, occupies one of the *natural* routes of trade and travel in the United States. Above the point where the road will strike the Mississippi river, are at least 800 miles of navigable water courses, which traverse, what is destined ere long to be, one of the finest and best settled portions of the country. The tendency of the trade of this vast region is toward the east, by the *lake* route, and the road connecting lake Michigan and the Mississippi, will intercept this trade at the vasious points of intersection with the latter. This fact is what gives such importance to the Milwaukee and Mississippi railroad, as it is the most *northerly* line which will for some years be constructed from lake to river, and must of course command the trade of the country *north* of its western terminus.

While this road has all the advantages of position as above stated, its prospect from a *local* business are not exceeded by any western road within our knowledge. It will accommodate at least 200,000 people. That part of Wisconsin traversed by it, will compare favorably in resources, and in possessing a dense and thrifty population, with any portion of the west. It is so recently that this state has been settled, it is hardly possible to believe that a large portion of its territory south of the Wisconsin river, contains 40 inhabitants to the square mile. Yet such is the fact; and this population will turn out as much business to a road, as an equal number in any portion of the United States. The local business of the above, road promises a very large income upon its cost.

Upon striking the Wisconsin, an outlet will be opened for the lumber of that river, from which source a greater part of the state is soon to be supplied with this important article. When this point is reached, the road will not only secure a most lucrative through business, but must prove a great boon to the whole state.

This company are now in the market for a loan with which to complete the first division of their road, as will be seen by an advertisement in another column. We can recommend the securities as well worth the attention of capitalists.

Taft and Gleason's Screw Wrench.

Attention is directed to the advertisement of Messrs. Logan, Vail & Co., the manufacturers of Taft and Gleason's new Screw Wrench. One of the chief peculiarities which distinguish it from others is, the main bar is square, having the thread cut on the corners. The lip of the wrench is moved by a detatched thumb screw. We have examined a specimen of this wrench, and believe it to be a very great improvement over any other in use, combining in an eminent degree, strength, durability and convenience. We believe they are universally approved wherever used.

Tennessee.

Nashville and Chattanooga Railroad.—The cars are now running on this road to within three miles of the tunnel. The road will probably be completed to the tunnel by the 3rd of July.

The Great Boring Machine.

A correspondent of the Springfield Republican gives the following account of the state of operations at the projected Hoosack tunnel: "the boring machine is on the ground, but as yet hardly resolved into its component parts. A mass of cast iron spokes, cogs, wheels, shafts, bolts, etc., etc., lay around us, out of which the workmen were slowly (for nearly every piece required a derrick and pulleys to get it into place) re-constructing the ponderous wonder. The carriage for operating the machine is in place, facing a perpendicular side of solid rock, just off the actual line of the road, which has been prepared for the first actual experiment. The immense shaft was being hoisted into position and then would come the wheel, and its accompaniments, and then the driving power, which consists of engines of 100 horse-power, and for which a building was being erected. There have been many delays in getting the machine upon the ground, and in place, and we were told it would probably be six weeks at least before anything would be ready for a start."

Pacific Railroad.

We learn from the St. Louis papers that the executive committee of the board of directors of the Pacific railroad company have ordered the engineer to resume the surveys on the work immediately, as follows:

1. To commence at Kansas and come eastward, and make all the connections and new surveys necessary on the northern (or Missouri and Jefferson city) route.

2. To commence on the dividing ridge between the Meramec and the Bourbeuse, in Franklin county, and carry the surveys to Springfield in the south-west, and thence to make a reconnoissance to the south-west corner of the state. The engineer is directed to prosecute this work with all possible rapidity, and simultaneously on the two routes indicated.

The reasons governing the executive committee are the following, and they will meet with general and hearty concurrence:

1st. That on the route to the southwestern corner of the state, much the most land will be obtained under the late grant.

2nd. That on the northern of Jefferson city and Missouri river route, the largest amount of stock may be secured.

3rd. That at no distant day *both* of these routes must be built.

4th That if the Governor shall convene the Legislature, it is possible that both these routes may be taken up at the present time: and it is desirable to have the surveys for both complete, and ready for early action in building them.

The engineer was directed, in the prosecution of these surveys, to obtain all the information necessary, in regard to vacant lands that would come within the scope of the grant by congress, on either route.

In connection with this subject we may say that the board of directors of the Pacific railroad, at their last meeting, had laid before them a proposition by a sound and competent company of New York railroad contractors, to build *the entire line of the Pacific road*, commencing at the termination of the first division, and completing it to the western line of the state, by December 1855. They propose to build the entire extent of the road as indicated, at the rate of $24,000 per mile, equipping it for service, and indeed paying all costs except land damages and office expenses. The whole contract would amount to about $6,000,000, which the company propose to take, one-third in cash, one-third in stock, and one-third in state bonds.

The board passed the subject by without a positive determination in regard to it, whether it would be seriously entertained or not.

Pennsylvania.

Chester Valley Railroad.—One of the best securities now offered in the market are those of the Chester Valley railroad, which are offered for sale by J. A. Underwood & Son, No. 22 Merchants Exchange, on the 28th instant. We published the report of the company a few weeks since, which gave a full account of the route, condition and prospects, of the road. The bonds are convertible into 8 per cent. preferred stock.

The above road extends from Downingtown, on the Central road, to Norristown, where it will form a junction both with the Reading and Norristown roads. The whole length of new road to be built will be about 22 miles. From the city of Philadelphia to Downingtown, the distance will be but slightly greater, than by way of the Columbia, or State road, with much better grade. As the Reading, and Philadelphia and Norristown roads, have much more convenient entrances into the city than the State road, the Chester Valley must become one of the most, if not the most, important avenue into the city, for the former. It will prove of great benefit to the city of Philadelphia, in opening another outlet to its western trade, and in preventing too great an accumulation of business at the city terminus of the State road. For a great road, like the Pennsylvania Central, it is highly advantageous to have a number of entrances into the city, to avoid the irregularity and confusion which is unavoidable, when sufficient accommodations for forwarding from the depots are not provided.

The Chester valley railroad is important, both as a local road accommodating a very rich and highly cultivated section, and as the connecting link between the State and the Reading and Norristown roads. It is believed that the local business of the route will afford a good income. Its coal traffic must be very large. Over 100,000 tons of coal are annually carted from the Reading, to supply the country traversed by the State road; all of which would pass over the Chester valley road, with a largely increased amount, from the greater cheapness with which it can be delivered.

On the whole, the road is not only very important to the interest of Philadelphia, but to the roads it will connect and the country it will traverse.—We cannot understand why it has not been sooner completed. We are happy to learn that the work of construction has passed into the right kind of hands. Those interested in the road may expect to see the work carried forward with energy and dispatch.

Florence and Nashville Railroad.

We learn from the Florence Gazette that the directors of the Florence and Nashville railroad company, on the 7th inst., elected Thomas I. Foster, Esq., President, and Mr. John J. Craig, Secretary of the company. To Nashville and to Middle Tennessee, its construction will give the most easily accomplished railroad connection with Memphis by means of a connection with the Memphis Charleston road.

Alabama.

Memphis and Charleston Railroad.—The Huntsville *Advocate* states that the Memphis and Charleston railroad company took possession of the Tennessee valley railroad on the 1st inst. The contractor for that purpose commenced relaying the road with T rail at Tuscumbia landing on the 5th inst., and will accomplish *eight* miles per month. This will ensure the completion of the road to Decatur by November next.

Evansville and Illinois Railroad.

The President of this railroad company advertises for contracts to grub and grade the road between Vincennes and Columbia, and also for proposals to construct the bridge across White river. The iron for the section between Princeton and Columbia has been purchased and the grading on that part of the road is nearly completed.

Lake Superior.

The Lake Superior *Journal*, of the 22nd ult., states that an extensive coal bed has been discovered in the vicinity of L'Anse bay, Lake Superior. The greatest excitement prevails in consequence. Capt. Samuel Peck, of Detroit, has been appointed keeper of the Ontanagon light. A correspondent from the Ontanagon district says that all the mines look better than they did last fall.

Virginia.

Norfolk and Petersburgh Railroad.—The city of Petersburgh, has by a vote of 400 to 57, decided to subscribe $200,000 to the above road.

Mobile and Ohio Railroad.

The people of Madison county, (Tenn.) have voted by a majority of 371 to subscribe $260,000 to the Mobile and Ohio railroad.

Crawfordsville and Wabash Railroad.

The Crawfordsville and Wabash railroad is now completed from Crawfordsville to Lafayette, twenty-six miles, and is doing a good business.

Cincinnati and Marietta Railroad.

The city of Wheeling has obtained authority to subscribe $250,000 toward the extension of the Cincinnati and Marietta railroad to that place.

Stock and Money Market.

The money market continues without change. It is very easy, and the first class securities continue high and in demand. The fancy market too has ruled high during the week.

For the best class western securities the demand exceeds the supply. But a large amount are offering, which hardly come up to the standard which we have laid down as the condition of a good security, viz: that the basis of the loan should be equal to the amount sought to be borrowed. We again repeat what we have so often stated, that a new project, that can show an outlay, or an undoubted subscription list equal to one-half the cost of the road, can borrow the necessary balance upon fair terms. But many of our roads insist upon coming into market before they have placed themselves in this condition. They must therefore expect to submit to sacrifices in proportion to their weakness.

Our distant readers must not suppose that all sales of bonds represented to be made here have actually been effected, otherwise they may be very much misled.

The public sales of bonds since our last have been $350,000 of the Evansville and Illinois railroad, by Messrs. Cammann, Whitehouse & Co., $200,000 of the Canandaigua and Corning, $200,000 8 per cents of the Peoria and Oquawka, and $32,000 of the Corning and Blosburg by S. Draper.

The bonds of the Evansville and Illinois were taken as follows.

Bonds offered by Messrs. Cammann, Whitehouse & Co., were taken as follows:

Thos. Patterson	$3,000	93·30
Corcoran & Riggs	20,000	86·51
J. F. A. Sanford	60,000	85·53 *a*86·26
Gibson, Stockwell & Co.	44,000	85·50 *a*39
N. M. Beckwith	6,000	87·50
Geo. Cohen	30,000	86·07 *a*88·28
H. Webster	25,000	86·50 *a*86·25
H. B. Glover	2,000	85·67 *a*86·62
B. & Rainsford	20,000	85.55 *a*86·55
J. M. Stockwell, Pres't.	50,000	87·01 *a*88·01
C. P. Leverich	10,000	86·50
Geo. Barclay	5,000	86
C. & Vermilyea	25,000	85·75
Gilbert & Johnson	50,000	85·50
Total	$350,000	

The sales of the Canandaigua and Corning averaged 87·20. Those of the Peoria and Oquawka 87·05. The Corning and Blossburgh 83.

Name.	Cost.	Earnings. May, 1852.	May, 1851.	Incr'se.
Long Island	$2,339,938	$18,310	$15,518	$2,792
West. & Atlantic	.....	40,899	20,369	20,530
Harlem	4,822 524	68,846	58,045	10.801
Ogdensburgh	5,200,000	57,200	37,058	20,142
N. Y. and N. H.	4,800,000	59,227	55,869	3,358
Pennsylvania	.....	161,583	.....	.....
Clev. & Colum.	3,008,016	70,433	.....	.....
Mich. Central	.....	180,000	140,000	.....
Ohio and Penn.	.....	20,307	.....	.....
Noo. and Wor.	.....	20,448	23,747	.....
Erie	24,420,000	369,285	174,345	194,940
Balt. and Ohio.	.....	174,874	.....	.....
Hudson River.	10,345,805	61,000	.....	.....
Rochester and Syracuse	4,868,361	98,291	91,448	6,843
Macon & West.	1,279,000	18,257	12,672	5,585
Little Miami & Xenia	3,607,821	65,682	.....	.....
Albany & Schenectady	.....	23,861	20,737	3,124
Mad River	.....	47,170	38,346	8,824

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JUNE 26, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¼
U. S. 6's, 1856	106¼
U. S. 6's, 1862	112¼
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	117
U. S. 6's, 1868	116¼
U. S. 6's, 1868—coupon	127½
Indiana 5's	99
Indiana 2½	52
" Canal loan 6's	91
" Canal preferred 5's	49
Alabama 5's	—
Illinois 6's, 1847	81½
Illinois 6's—interest	49½
Kentucky 6's, 1871	110
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	100½
Maine 6's, 1855	—
Maryland 6's	105
Michigan	—
Mississippi	—
New York 6's, 1854-5	—
New York 6's, 1860-'61-'62	110½
New York 6's, 1864-'65	116
New York 6's, 1 y., 1866	117
New York 5½'s, 1860-'61	107
New York 5½'s, 1865	—
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	104
New York 5's, 1866	105
New York 4½'s, 1858-'59-'64	—
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	103
Ohio 6's, 1860	106
Ohio 6's, 1870	111
Ohio 6's, 1875	112
Ohio 5's, 1865	102½
Ohio 7's, 1851	—
Pennsylvania 5's	99
Pennsylvania 6's, 1847,-'53	96
Pennsylvania 6's, 1879	108
Tennessee 5's	91½
Tennessee 6's, 1880	109½
Virginia 6's, 1886	112

CITY SECURITIES—BONDS.

Brooklyn 6's	109
Albany 6's, 1871-1881	108
Cincinnati 6's	100½
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	102
New York 7's, 1857	109
New York 5's, 1858-'60	101
New York 5's, 1870-'75	104
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	103½
Baltimore 1870-'90	105
Boston 5's	102½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115½
Erie 2d mortgage, 7's, 1859	107
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	99
Hudson River 1st mort., 7's, 1869	107
Hudson River 2d mort., 7's, 1860	94½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	87½
Reading mortgage, 6's, 1860	93½
Michigan Central, convertible, 8's, 1860	107½
Michigan Southern, 7's, 1860	98½
Cleveland, Col. and Cin. 7's, 1859	106½
Cleveland and Pittsburg 7's, 1860	—
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	June 24.	June 16.
Albany and Schenectady	109	108½
Boston and Maine	104½	109½
Boston and Lowell	108½	108
Boston and Worcester	103½	103
Boston and Providence	89½	93½
Baltimore and Ohio	75	83
Baltimore and Susquehanna	32	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	127	24
Eastern	103½	103½
Erie	88½	88½
Fall River	99½	99½
Fitchburgh	105	105½
Georgia	—	—
Georgia Central	103	—
Harlem	73½	73½
" preferred	114½	112
Hartford and New Haven	118	125
Housatonic (preferred)	35	35
Hudson River	67	63
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	103	103
Michigan Central	106	106
Michigan Southern	123	125
New York and New Haven	111½	112½
New Jersey	136	138
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	54½	55½
Ogdensburgh	30½	29
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	22	32
Petersburg	—	—
Richmond and Fredericksburg	93	93
Richmond and Petersburg	35	35
Reading	84½	82½
Rochester and Syracuse	122½	121½
Stonington	54	55
South Carolina	—	—
Syracuse and Utica	132	132
Taunton Branch	115	115
Utica and Schenectady	135	134
Vermont Central	17½	18½
Vermont and Massachusetts	22½	22½
Virginia Central	—	—
Western	107½	109½
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Are we Building too many Railroads?

Having shown conclusively, as we believe we have, that we are not building railroads in advance of the wants of the country no more than will find constant and profitable employment, the last question to be considered is, whether we are going beyond our means, and investing in railroads the money that is needed in the ordinary channels of business, and consequently, whether there is any danger of embarrassment or loss to the community from this cause.

The answer to this question, in our opinion, depends mainly upon the one just disposed of. If it can be shewn that our roads will pay on an average of seven per cent, there can be no danger from an over-investment in them. Seven per cent on long loans is a very high rate of interest, and a perfect security of this kind will always command *par* in any state of the market. A security that will command, under all circumstances, its par value, is never a burden upon the market. No person is embarrassed by holding it, because it stands for all the offices of *money*. Our undoubted securities, too, have an exportable value, and a foreign demand is, and will continue, to take them off from our hands, so long as they continue to pay the present rates of interest. Capital is not restrained by the boundaries of a State or nation, but flows wherever attracted by the prospect of the best return. For our best known railroad securities, the foreign demand already exceeds the supply, and were the condition of our companies, and the entire safety of most of the loans effected by a vast majority of our roads, fully understood by foreign capitalists, the demand created would continue to exceed the amount that will ever be offered to the public. In discussing this subject, we are thus thrown back upon the great question above suggested: will our roads pay? We propose, in our present number, to enlarge still further upon this point.

The railroads that we are now constructing will not, on an average, cost more than $20,000 per mile. We have either completed, or have provided the means for all of our expensive lines of roads. The only works of this last class in progress, are the Pennsylvania, and Baltimore and Ohio roads. The great mass of our new roads are in the south and west, where the cost of construction is very slight, and where, at the same time, there is but a small amount of accumulated capital. They run through agricultural sections, where all the means of the people are needed to make the necessary improvements upon their farms. These portions of the country are vastly productive, but their products are to a great extent unavailable for want of an outlet to market, to secure which is the object of the roads to be built. If, therefore, the people interested in a road prepare it for the iron and equipment, they have to a certain extent exhausted their means available for the work, a considerable portion of which never existed in the shape of money. If they have *money*, they can better afford to hire the small amount necessary for the rails and rolling stock, than to part with means absolutely essential to the improvements which they wish to make. When in the construction of a road, therefore, they have brought it to a point that offers a perfect security to the capital necessary to complete it, they then prefer to go into the market for such capital, in preference to using their own.

The above statements explain briefly, but clearly, we think, why our new works come so universally into the market for money, and why the sums sought to be borrowed for different roads are so uniform in amounts. They are generally equal to the amount required for the iron and equipment, which cost all the way from $5,000 to $10,000 per mile. Experience in the operation of our roads has clearly proved, that a road bed prepared for the above articles, is sufficient security for a sum equal to their cost. The mode of providing means for our roads is now reduced to a *system*, as detailed above.

As a considerable portion of the means expended for the grading, bridging, etc., of our roads, was never converted into *money*, its expenditure exerts but little or no influence in the circles of the ordinary business of the country. The farmer puts into the road what he has in *kind*. He is immediately repaid many fold, by the appreciation of every article of property he possesses. The road is equivalent to a market, which he lacked before, and at once stamps a *commercial value* upon every thing he possesses. Any agricultural community in the United States, that can, with their own means, secure the construction of a low cost railroad, can well afford to lose what they are usually called upon to contribute, and be vastly better off for the sacrifice; and in fact possess a greater amount of *available* property the moment the road is opened. In discussing, therefore, the effect that the expenditures for our railroads are to have upon the business of the country, we may lay out of account at least one half of their apparent cost, for reasons above stated.

We are probably building 3,000 miles of railroad per year, and shall continue to do so for an indefinite period. These roads will require us to borrow on an average, say $10,000 per mile upon the length of their lines, or a yearly sum of $30,000,000 in the aggregate. The questions are: will this expenditure injuriously effect our other industrial interests, or is it a greater sum than will find profitable employment in our roads?

The ordinary rate of interest upon our loans is 7 per cent. This upon $10,000, gives $700 per mile as the necessary net earnings of our roads, to meet the interest on their loans.

Below we give a table of the nearly gross and net earnings of several of our new roads, and of the same class as those that are now coming into market for money.

	Total earnings as per last report.	Net do.	Per mile.
* Cleveland and Columbus	$341,680 96	$230,969 28	$1,710
Little Miami	487,815 89	297,457 57	3,541
Columbus & Xenia	211,631 37	150,055 58	2,778
Michigan Central	1,100,043 00	461,364 80	2,116
Madison and Indianapolis	386,078 80	185,080 60	2,378

* For six months only.

We select the above, because being all new roads they are exactly in point, and afford the best and most correct illustration of the point we wish to make. We think that this table will convince any person who reads this article, that our new roads *can* earn an amount ample to meet the interest on their bonds, and we also believe that he will be made readily to understand how the people on the line of a railroad can afford to lose one half the cost of a road in securing its construction, and at the same time be vastly benefitted by the operation.

We require thirty millions yearly for our roads in progress; certainly not a large sum for a nation like ourselves to invest annually in works which not only promise to pay well, but which develope the resources of the country to an extraordinary degree. There cannot be a doubt that the *cash* value of the property of the country has been increased by an amount 500 per cent greater than the whole investment. Without railroads, we are a country without markets. Vast bodies of the finest lands in the world, and lying in the States east of the Mississippi, still remain a wilderness, for want of an outlet for their appropriate products. A railroad, by furnishing an outlet, is equivalent to a market at all seasons of the year. They therefore exert a direct influence in the creation of wealth, and that, too, to a much greater extent than their cost; and there never were more absurd and groundless fears, than that our railroads, even at the rate we are now building them, are calculated to embarrass us, or to produce a financial crisis. They are our greatest safeguards against the state of things most feared, as they enable us at a comparatively slight cost, to avail ourselves of our vast resources which now lie dormant for the want of means to make them available. The more roads we build, the stronger and steadier we become, the more abundant our cash capital, the cheaper all the necessaries of life. When our present schemes shall be accomplished, and every portion of the country connected by these iron bonds, the effect upon the prosperity of the country will be incalculable. We shall then become fused into one people, enjoying practically one climate and one soil. A person in the interior of the Mississippi basin will then be able to spread daily upon his table the products of every variety of soil and climate, the fruits of the tropics and of high northern latitudes. The vicissitudes of climate which, though they may cause a dearth in one portion of the country, yet secure an abundant aggregate in the whole, will cease to be felt, so that our railroads will not only make us an united and homogeneous people, but will secure to each section the aggregate advantages enjoyed by the whole.

It is very generally supposed that our eastern States, where are found the great majority of our railroads, contain a much larger population to the square mile than the southern and western States. Such is not the fact, as will be seen by the following table of the area and number of inhabitants of a number of States taken from the different divisions named.

States.	No. of square miles.	No. of inhabitants per square mile.
Vermont	10,300	30
New Hampshire	9,380	34
Pennsylvania	46,000	50
Virginia	61,352	23
Georgia	58,000	15
Alabama	50,722	15
Kentucky	37,680	26
Ohio	39,964	50
Indiana	33,809	29
Illinois	55,405	15

Of the above, Vermont, New Hampshire and Pennsylvania are eastern, Virginia, Georgia and Alabama, southern, and Kentucky, Ohio and Indiana, western States. It will be seen that in density of population Ohio and Pennsylvania are equal, and that Vermont, New Hampshire and Indiana are nearly so. One reason of this equality is found in the fact that in the eastern States is found a large quantity of waste land, while in the western States there is comparatively none.

Believing that the bonds of nearly all our roads offer perfectly safe investments for capital, and that they will acquire such reputation among capitalists in Europe as well as in the United States, we have no fears that the large demand created by the

great number of works in progress, will be attended with any injurious results, in withdrawing too much of our capital from our other industrial pursuits. We admit that we can only make the most rapid and satisfactory progress when the wants of all our great interests are equally supplied. They should all move forward with equal pace. But considering that we draw only some thirty millions from our cash means for our roads, and the vast addition to the property of the country that every new road creates, this is certainly not a large sum for yearly investment in railroads, by a nation of at least twenty-six millions of people. Our annnal accumulations of capital must be five or six fold greater. Great Britain, with a population about equal to our own, and which are not half so well and profitably employed, wastes eighty millions upon her army and navy alone! The total annual appropriations for the support of that government, (to say nothing of church and poor rates, and thousands of other charges upon property not known with us) average two hundred and fifty millions! against thirty-five millions for that of the United States: or, adding fifteen millions for the expenses of our State governments, fifty millions in the aggregate. Capital is abundant and every department of industry is well supplied, and we see no way in which we can so well dispose of our surplus capital as to invest in our public works.

Railroad Celebration.

Indianapolis and Bellefontaine Railroad.

H. V. Poor, Esq.,

Editor Railroad Journal:

Dear sir: Having just enjoyed the privilege of witnessing, for the first time, a railroad celebration in Indiana, I cannot permit the occasion to pass without giving you a brief description of some of the leading characteristics. I came in company with other gentlemen, from the interior of Ohio, by private conveyance to this place (Muncie,) passing through Bellefontaine and Sidney, along or near the route of the Bellefontaine and Indiana railroad, which is now rapidly drawing towards completion, and to be opened abont the close of the year, to its terminus at Union, on the State Line, between Ohio and Indiana. We visited Union, where a commencement of the new town has been made by the erection of a steam saw-mill and two or three houses. It is yet partly in the woods, but when the four railroads which terminate at this point shall be completed, with their respective depots, machine shops, station houses &c., it will soon grow to be a respectable village. The location is healthy, and favorable in every respect, and the country in the vicinity is very fertile.

Ten miles from Union, we passed through Winchester, the county town of Randolph county. The land is gently rolling between these points, well timbered, and admirably adapted to farming purposes, as the improved farms which we passed through at intervals on the route show. The grading and bridging of the railroad from Union to Winchester is nearly done. Between Winchester and Union, a distance by the commonly travelled road, of about 23 miles, the country is still more improved, and the lands lying in the valley of White river are generally rich. The agricultural capabilities of this part of Indiana, are certainly very great, and nothing but a convenient means of conveyance, such as the railroad now nearly completed will afford, is needed to induce more thorough farming, and an abundant yield of corn, wheat etc.,—food for railroads.

Muncie is the county town of Delaware county, situated in a pleasant bend of the river, 54 miles by railroad from Indianapolis, and 29 miles by railroad from Union. The railroad is finished and in daily operation from this place to Indianapolis; and yesterday, in accordance with previous notice, was devoted to its formal opening. The town was crowded with visitors the evening previous, and at an early hour in the morning, thousands of the inhabitants assempled to celebrate the occasion. At half past six, the regular passenger train started for Indianapolis. At half past seven, two long trains of open cars, arranged with temporary seats, drawn by two locomotives, moved off in gallant style, loaded with over 1500 of the yeomanry (and families) of Hoosierdom. This large party was carried in a few hours to the seat of government of the State, and brought back in the evening. At about the same hour in the morning, two trains of similar character left Indianapolis, bringing their living freight to Muncie, greeting the various towns along the route where other thousands were congregated to cheer them on their way. On the arrival of the trains at Muncie, Mr. Sample of this place, who had been duly deputed by the citizens, tendered to the vast concourse the hospitalities of the town, in an address to the Hon. O. H. Smith, president of the railroad company. The address was neat, appropriate, and well delivered. President Smith made a brief, but happily conceived response, and then notified the strangers that after dinner other speakers would address them.

In the afternoon, the crowd gathered together in the new depot building, and listened attentively to speeches suitable to the occasion made by President Smith, President Godman of the Bellefontaine and Indiana road, in Ohio, President Mitchell of the Columbus, Piqua and Indiana road, and Mr. Roberts engineer of the Bellefontaine road. The speeches were occasionally interrupted by the shrill whistle of the locomotive, and one of the speeches was cut in two by the return train from Indianapolis, which passed through the depot building, adding thereby nearly a thousand auditors to the large number which crowded the building. Quite a large proportion of the whole number consisted of well dressed ladies, affording the stranger a fine opportunity of looking at the belles of North Eastern Indiana. To see so many substantial farmers, hearty young men, and fine looking women and children, was something more than one would anticipate in a country so new. But they are certainly here.

The railroad between Muncie and Indianapolis passes through a fine section of country, and on most favorable ground. The grading and bridging has been completed in a thorough manner, for the trifling sum of $2,500 per mile. The whole cost of the road, which with a first class 60 lb. T rail. is but $10,000 per mile. The gentlemen who have had this work in charge, deserve great credit for the energy, perseverance and good judgment they have displayed in prosecuting it. It is to be finished entirely through to the State line on or before December next.

The railroad from Terre Haute to Indianapolis is doing a very good business, and a considerable portion of the travel from central Illinois now passes over it to Indianapolis, and thence to Madison, Cincinnati, Pittsburgh and Cleveland. Next winter, when the line shall be continuous through to Cleveland and Pittsburgh, by the way of Bellefontaine, it will nearly all be carried on the direct route across Ohio. Yours truly, X.

Muncie, June 18, 1852.

Ohio.

Cleveland and Pittsburgh Railroad.—We learn that the directors of this road, at their recent meeting, declared a dividend of eight per cent, from the nst earnings of their road, prior to the 1st of January last, and six per cent. for the six months ending June 30th inst., both to be paid on the 1st of July next.

Few if any roads in the country can show so flattering an opening, and that too, under great embarrassments. The rolling machinery has been entirely inadequate for the business offering: hence no effort has been made to secure increased freighting business. The company are now increasing their machinery, of the first class, and will, ere long, be prepared to recommend constantly increasing business of the road. They hope by September to commence running coal from the rich mines along the line of the road.

Toledo, Cleveland and Norwalk Railroad.—The Toledo Republican of the 9th inst., says: the President of the above named company, Mr. Bolt, informed us yesterday that the work along the whole line from Toledo to Wellington (where a junction is formed with the C. and C.) is going ahead rapidly. A portion of the iron is now on the way from New York, and the quantity required for ironing the whole road will be landed at Toledo and Cleveland by mid summer.

We are much gratified to learn that the line between Toledo and Monroeville will be completed, and cars running in all of October. This will give us continuous railroad communication with Cleveland.

The division of the road between Toledo and Fremont will be completed early in July, but the entire line is to be gravelled, and it is not now contemplated to open any portion of it for passenger travel until cars can be run to Monroeville.

Scioto and Hocking Valley Railroad.—The Tribune and Clipper states that at the annual meeting of the stockholders of this road, held in Portsmouth last week, J. V. Robinson, C. A. M. Damarin, P. Kinney, J. L. McVey, Joseph Riggs, Jacob Westall, and Francis Campbell were elected directors for the ensuing year.

Susquehanna Railroad.

The Sunbury American of Friday last says—

The engineers commenced the location of the Susquehanna railroad on Tuesday. One division is in charge of Kimber Cleaver, Esq., well known as a scientific, prudent and efficient engineer; the other is directed by Geo. P. Worcester, Esq., who made a preliminary survey of all the route last summer. Both parties are full, and will be able to have the ground ready for the workmen in a few weeks. The location is very easy, the route lying entirely along the bank of the river. The grade from this place to Bridgeport, opposite Harrisburg is 2½ feet to the mile. Mr. Cleaver located that part, 15 miles in length, from the mouth of the Mahoney creek to Millersburg, two years ago, for the Mahoney and Wisconisco company. This leaves only 35 miles yet to be gone over by the engineers.

The cost of the road from Bridgeport to this place is estimated at one million of dollars. This is a high estimate. About $1,200,000 has already been subscribed to the stock, and the list steadily increases. Perfect confidence is felt that the road will be pushed on to a speedy completion, economically managed, and be one of the best paying roads in the United States.

Henderson and Nashville Railroad.

At a meeting of the stockholders of the Henderson and Nashville railroad company, held at Madisonville, Hopkins county Ky., on Monday the 7th inst. Archibald Dixon, Alexander B. Barrett, James Alves, John H. Lambert, E. D. McBride, and Jackson McLain, of the county of Henderson, P. M. Robinson, and John L. Wolfolk, of the county of Hopkins; Robert Torian, of the county of Christian; and Elisha Sebree, of the county of Todd, were elected directors, and the directors, and the directors unanimously elected Archibald Dixon, president, David Banks treasurer, and C. M. Pennell secretary for the ensuing year.

Mad River and Cincinnati, Hamilton and Dayton Railroad

We learn from the Cincinnati Gazette of yesterday evening, that a joint arrangement between the Mad River and the Cincinnati, Hamilton and Dayton railroad companies, for running their roads in connection with each other, upon such terms of union as cannot fail to conduce greatly to the interests of both companies. This arrangement is similar to that existing betweeen the Little Miami and Cleveland roads, which, says the Gazette, is "such as the interests of both companies demand, and being made, must reduce largely the expenses, which are requisite without it. Many thousands per year have been saved to the companies hence to Cleveland, and many will be, on equivalent arrangements hence to Sandusky. Besides the interests of the public are better subserved."

[*From the Newcastle Courier.*]

Cincinnati and Chicago Railroad.

Judge Elliot and Mr. Holland, two of the committee appointed by our railroad board to visit Logansport, in connexion with Mr. Shoemaker, the chief engineer, to select depot grounds and a proper crossing of the Wabash river at that place, have returned home, after placing matters in train for a satisfactory adjustment of these difficult questions. —They represent to us that the work on the line at the various points between here and Logansport is progressing finely. The heavy jobs, what few there are of them, will be finished this fall, and as much of the light work as possible; but the great portion of the road, is of so light and easy construction, as to offer no impediment to an early completion. From four to six hundred hands are at work on this end of the line, and from the character of the contractors for go-ahead, and energy, every assurance can be placed upon the fact of the work being prosecuted as fast as may be desired by the company.

From this place to Richmond the contractors are going ahead nobly. We are informed there are now five hundred hands at work, and daily additions being made to the force. There can be no mistake, we think, in the announcement we made last week, that ten miles will be put in running order this fall, in time to carry off the hog crop.

Mr. Coyner, who took the heavy work, crossing the river west of here, last week, being the only unlet section on the entire line of 107 miles, has commenced active and vigorous operations; so that we have now the pleasure of saying that the whole *line is under contract and every contractor at work.*

To show the estimate placed upon the importance of this road, it is only necessary to state the amount of forty thousand dollars have been subscribed in Cincinnati within the last month—making our stock subscribtion in that city over one hundred thousand dollars, subscribed by the leading business men of the city.

Commerce on the Lakes.

The editor of the Cleveland Herald, who has been making a tour up the Lakes and the St. Lawrence, from Cleveland eastward, furnishes his paper with some very interesting facts in reference to the commerce of these great water courses, some extracts from which we give below.

A brief sketch of Messrs. Crawford & Co's Northern railroad line will illustrate the magnitude and rapidly growing importance of one branch of commerce through the Welland Canal. The line was formed during the winter and spring of 1851 and was then called the Erie and Ontario line. It consisted of six steam propellers, running to ports on the western and north-western lakes in connexion with the Ogdensburgh railroad, Vermont Central, and Rutland and Burlington railroads from Ogdensburgh to Boston, and *via.* lake Champlain, Troy and Whitehall canals from Rouse's Point to New York.

This line was found to be inadequate to meet the increasing demands of business, and the enterprising proprietors, Messrs Crawford & Co., had built during the last winter seven first class propellers expressly for this trade. The line now consists of twelve propellers, and the name has been changed to Northern railroad line. It is the most extensive line of steam vessels now traversing the lakes, giving constant employment to 250 men as officers and crews. The propellers are especially adapted to the transportation of freight, which can be transported to or from either Boston or New York by this route at lower rates, in less time, and in better order, than by any other. But a single transhipment is required between Boston and any lake port from Buffalo to Chicago. The boats have also good conveniences for passengers, being fitted up with comfortable upper deck cabins, with state rooms.

Take the *Michigan*, one of the propellers forming the Northern railroad line, as an illustration of this class of steamers. Her dimensions are: length of keel 138 feet, breadth of beam 24 feet 10 inches, depth of hold 11 feet, and measuring 354 2 95 tons burthen. She is capable of carrying 3,500 barrels of flour, or 12,000 bushels of wheat, and has neat upper deck cabins containing state rooms, with every appurtenance necessary for the convenience and comfort of passengers.—She is propelled by a powertul engine, cylinder 22 inch bore, with 3½ feet stroke, revolving a wheel 10 4 inches in diameter 70 times per minute, and can run 9 to 10 miles per hour, unaided by her sails. Capt. Wetmore is an experienced, prudent seaman, and an obliging trust worthy man.

Five of the new propellers of Messrs. Crawford and Co's line were built at Cleveland, and two at Buffalo. Three of the engines were made in Detroit, two at Cleveland, and two at Buffalo. Cost of propellers about $13,000 each; of engines $7,000 each. The average time required on a trip to Chicago and back from Ogdensburg is 25 days. Distance round, nearly 2,800 miles.—Time to Cleveland and back from Ogdensburgh, from 9 to 12 days, Distance sailed 800 miles.—The boats can make eight trips to the upper lakes during the season, and fifteen trips to Lake Erie. They will average 275 tons of merchandize up, and 3,000 barrels bulk of produce down. The last trip up, the *Michigan* delivered 228 tons of merchandise at Detroit in 12 days from Boston and New York, notwithstanding she first visited Cleveland, Toledo and Monroe, and discharged considerable freight at each of these ports.

The tolls on the Welland canal on merchandize are—light, 90 cents per gross ton; heavy, 45 cents per gross ton. Down freight, flour and other produce, 45 cents per gross ton. Average amount of tolls on a propeller up, $175; on a propeller down, $140. Large quantities of railroad iron pass through the Welland caual for the western tracks, on which the tolls this season have been reduced. Tolls on iron generally have been reduced, that the St. Lawrence route may continue to successfully compete with the low rates of the Erie canal for this important carrying trade.

Texas Central Railroad.

Below we give a circular, addressed by Gen. M. Hunt to Mr. Williamson, in reference to a great project which is now attracting attention in Texas, to which we invite attention. It is not only a very strong line upon its own merits, but it presents a most attractive scheme to capitalists from the large grants of land connected with it. We commend the project to public attention.

J. B. Williamson, Esq.,

The charter authorises the commissioners named in it (of which I am one) to form and organize the company in person or by proxy; and I have full authority from the other six commissioners, to form said company, and to do all acts and things that they could, would or might do if they were personally present at the doing thereof, to facilitate such organization and arrangements for a speedy construction of the road, which I am now desirous of doing at the earliest practicable period. Gentlemen wishing to communicate with me will please do so as early as convenient, at the Astor House, New York, where I shall be by the 19th inst.

It will be seen by the charter, that the road is to commence on Galveston Bay, or Galveston Island, and that the company formed under it can terminate said road anywhere on the Brazos, Trinity or Red rivers, and construct such branches as they may deem expedient. The point proposed for its terminus is at or near Preston, or Red river, a distance of about four hundred or four hundred and twenty-five miles from Galveston. The route suggested as the best for the road, is for it to commence on the Island of Galveston, and cross the bay at Caroncua Reef, or the Deer Islands, the former of which is about ten miles west of the city of Galveston, and the latter about six miles, thence in a direct line towards the Brazos river, to a point near the southern or lower line of Fort Bend county, thence near and parallel to the Brazos river to a point opposite the great Falls of the Brazos, or Waco Village, a distance of about twenty-five miles above, and thence by Dallas on the Upper Trinity, to or near Preston, on Red river. Galveston Island is situated just above 29° north latitude, and, where it is proposed to establish the road, it will approach to within a few miles of the Brazos river, in about 30½° latitude, at the distance of about thirty miles from the crossing of the bay. The bottoms or alluvial lands of the Brazos river average about three miles in width the whole distance—it is proposed to establish the road parallel to it (about 240 or 250 miles)—and continues in extensive bodies of alluvial or bottom lands for more than one hundred miles above. The road, in ceasing to run near and in a parallel line to the Brazos river, gradually bears off in a line to Dallas, on the Upper Trinity, a distance of about seventy five or eighty miles. From Dallas to Red river, at or near Preston, it is about one hundred miles; making the whole distance from Galveston to or near Preston—according to a map compiled by R. Creuzbaur, Draftsman of the General Land Office of Texas, called De Cordova's map of Texas (the best authority)—four hundred or four hundred and twenty five miles.

The road, after bearing off from the Brazos river at a distance of about two hundred and forty or two hundred and fifty miles from Galveston, passes the residue of the distance—about one hundred and seventy or eighty miles—through *one of the most fertile upland territories* in the United States. Its terminus on Red river is below 34° latitude, and is very productive in cotton, the whole distance, and affording, in the valley of the Red river, one of the finest wheat regions in the United States. In addition to the uncommonly abundant yield of wheat, I have been credibly informed that wheat grown in that region has weighed as high as seventy pounds to the bushel.

It is impossible to give anything like a correct estimate of the quantities of sugar, molasses, cotton, Indian corn and flour, wool and live stock, that would be immediately transported upon the road after its completion, besides the rice, tobacco, and other articles (the production of which the soil and climate along the route of the road are adapted) that may be eventually produced.

The valley of the Brazos river and its tributaries

alone are capable of producing upwards of a million of bales of cotton above the sugar region, besides the productions of the valleys of the Upper Trinity and Red rivers and their tributaries; and, also, the valley of the Upper Colorado river, the productions of which will doubtless find the Central road the readiest and cheapest transit to the seaboard, and to which valley it may be expected a branch road from the Central road will be soon constructed.

The return freights of merchandise and lumber would be commensurate with the agricultural productions from the interior, as also would be the passengers travelling in both directions, besides the immigration to the interior, which would be considerable There being no growth of pine nor cypress in the immediate vicinity of the line of the road, the population throughout its whole distance will doubtless resort to the transit of it on the road from Galveston, for dwelling houses, furniture, etc., which will add considerably to the income of the road. The transportation of military supplies for the United States army will also afford an item of considerable profit. Preston is, at this time, a large military depot for the supply of the troops in the southwest.

The quantities of sugar and molasses now made on the Lower Brazos are considerable, and their productions are rapidly increasing.

The estimate of the yield of cotton in the valley of the Brazos may seem large, but it is greatly below its real producing capabilities of the great staple. For instance: supposing the Brazos bottom and alluvial lands to average three miles in width for three hundred miles, (and this is a low estimate) it would give between one million three hundred thousand and one million four hundred thousand acres. These lands produce from one to two bales of cotton, of five hundred pounds each, to the acre, when properly cultivated; hence, it is manifest that the bottom lands of the Brazos river alone are capable, if it was all in cultivation, of producing from 1,500,000 to 2,000,000 bales, to say nothing of the very extensive and fertile uplands embraced in its valley. Reference is especially requested to all persons who may have a personal knowledge of the extent of the Brazos bottom lands, and their productiveness in cotton, for the verification of the foregoing statement.

Along the whole distance of 170 or 180 miles, from the Falls of the Brazos river, or from Waco Village (which is 25 or 30 miles above), by way of Dallas, to Preston, is, as has been previously suggested, if not the very richest upland country in the United States of the same extent, at least, considered to be second to none, and embraces what is considered the best latitude for cotton in the United States.

By reference to De Cordova's map, it will be seen that the road can be constructed the whole distance proposed without its being necessary to cross a dozen streams of water, although it may be to the interest of the company to cross a larger number of very small streams. Of these, the first water course of any importance is the Navisoto, opposite to Washington, which is believed to be less than one hundred feet in width. The next is Big creek, then Richland and Chambers' creeks, all of which are believed to be less than sixty feet in width at the crossings proposed. The last is Trinity river, at or near Dallas, believed not to exceed one hundred and fifty feet in width. From or near Dallas to or near Preston, the whole distance of about 100 miles, with comparatively slight variations, can be traversed without crossing any streams of water.

The topography of the country over which it is proposed to establish the road is believed to be unequalled in advantages, considering that its course is at right angles from the sea. There are a few hills on the line of the proposed road, in the vicinity of the proposed crossings of Richland and Chambers' creeks, and the immediate approaches of Trinity and Red rivers. With these exceptions, very inconsiderable, the face of the country generally is either nearly level, or gently undulating along the whole route of the proposed road.

The level country from Galveston, which continues for 75 or 100 miles, with very slight undulations, is as well adapted, and has as few obstacles to encounter in the construction of the road, as can be found. The grounds are similar to those upon which the city of Galveston is situated; and such is its compactness, in the city of Galveston, after being used for a short time, that it has not been found necessary to pave the streets.

The bay at the Deer Islands is about three and a half miles across. The depth of water varies at ordinary tides from a few inches to about seven feet in depth, and occasional small islands are formed all along across the bay. It is only for a very short distance at the Deer Islands, that the bay is as much as seven feet in depth. The bay at the Caroncua Reef is about the same width, and the water is from a few inches to about five feet in depth in ordinary tides.

Suitable timbers for cross ties and other purposes in constructing the road, can be readily obtained from where the road approaches the Brazos river, (about 30 miles from the bay), all along up the Brazos river to opposite the Falls and Waco Village.

After the above general remarks, and to avoid being too tedious in this paper, I will briefly sum up some of the superior advantages of this road.

1st. Its commencement is at what is considered the best harbor in the United States west of the mouth of the Mississippi river.

2d. This road must be the main or trunk road for the transit of the most productive and largest portion of the agricultural territory in Texas; and also the medium by which most of the supplies for the army of the United States in the Indian Territory, in and contiguous to New Mexico, will be transported, together with all productions and supplies westerly to the Rocky Mountains.

3d. The mildness of the climate will prevent the frosts during winter from damaging the road.

4th. The climate and territory through which the road is proposed to pass are considered superior to any in the United States for health east of it, in the same latitude, and also in fertility for the production of the great staples—cotton and sugar.

5th. The health of the country, the richness of the soil, and the variety of productions and the facilities of transportation to all the Gulf, Atlantic, and European cities, along this road, will naturally lead to greater emigration from Europe and the States of the Union than to any other State or Territory.

6th. The first 80 or 100 miles of the road and its fixtures, it is believed, can be made for $10,000 per mile, and the profits on the first hundred miles of the road would yield the first year a large per centage on the investment.

7th. The State of Texas, as will be seen by reference to the charter, has donated eight sections of land, of six hundred and forty acres each, for every mile of road that may be completed, which, for the construction of 400 miles, will entitle the company to 2,048,000 acres, to be located upon any of the unappropriated public lands of the State—and the quantity of unappropriated and vacant lands in the State are estimated from the best sources of information at about 110,000,000 acres.

8th. The donations of lands by the citizens in the interior of the country, near where the road is expected to pass, it is believed, will be comparatively very large, but it is impossible to make anything like a correct estimate of what they might be. It is very important, however, to secure liberal donations along the line of the road, that the route be speedily surveyed, and public meetings be called, and addresses be made at short intervals of distance to the land owners all along the line of the road.—There are many large tracts of land owned by persons who would make very liberal donations at present, but owing to the rapid and increasing immigration into the country along the whole line of the proposed road, sales are constantly being made in *small tracts* to actual settlers, who, it is believed, would be much less liberal in donations of lands to the road than the original owners. Hence, the very great importance of an immediate organization of the company, the survey of the route, and an active and energetic effort to secure the donations of all the lands it is practicable to obtain, as every month it is delayed the quantities will be considerably lessened.

9th. The absence of the successful competition of any water communications from this extensive interior country with the Texas Central railroad is manifest.

10th. The character of this road, which is herewith inclosed, is as liberal a one as could be asked for, and speaks for itself.

In addition, all that I have to add is, that you and all others who may read the foregoing statements are requested, if they have any wish to own an interest in the road, to make particular inquiries of all persons who are acquainted in Texas, in reference to the correctness of the statements herein set forth.

I am, very respectfully,
Your obedient servant,
MEMUCAN HUNT.

West Point, June 17, 1852.

Woolen Manufacture of Great Britain.

The London correspondent of the National Intelligencer states some of the principal facts connected with the woolen manufactures of Great Britain, for which he acknowledges his indebtedness to the Leeds Mercury, a paper of high character, published in the very centre of the business upon which it treats, and therefore undoubtedly correct in its statements. He says:

"The woolen manufactures of Great Britain were estimated in 1699 to amount in value to £8,000,000, or about fourfold the value of the raw material. In 1844, the value of these manufactures was stated by Mr. McCulloch at £24,000,000; in 1851 its amount was over £30,000,000. In 1699, the weight of wool manufactured was estimated at 50,000,000 pounds. In the year which ended 5th January, 1852, it was 325,000,000 pounds. Relatively to population, the quantity of wool manufactured in 1852, compared with 1699, is as seven to four.—Owing to the superior fineness of the woolen fabrics now produced, the mass of goods, estimated in yards, has augmented in a degree greatly exceeding the simple increase in the quantity of wool used or the money value of the manufactures. In 1850, the whole import of foreign wool was 8,609,793 pounds, of which nearly 8,000,000 pounds were from Spain and Portugal; the only other countries from which wool was received, were Norway, Prussia, Germany, Holland, Italy, Turkey and the United States. In 1825, the imports of German wools alone was 29,000,000 pounds. Now the entire foreign importations is only 30,000,000 pounds, the colonial wool imported last year having been 51,000,000 pounds; and the entire importation last year both of foreign and colonial wool a trifle above 81,000,000 pounds.

The entire consumption of wool in Great Britain in 1846, was 260,000,000 pounds, of which 209,000,000 pounds were produced in the United Kingdom and colonies In the year which ended 5th January, 1852, the entire consumption was 325,000,000 pounds, of which 295,000,000 pounds were home and colonial produce. In 1616, the whole amount of woolen cloths exported was only £60,000; last year it was £8,371,824; to which add £1,484,435 for the value of the woolen yarn exported. Relativelp to the other great staple manufacture of the country, the total value of the woolen manufactures stands as about three to five—the cotton manufactures being valued by competent authority in Manchester at 50,000,000 sterling per annum. Regarding, however, the value of each manufacture, in proportion as that value arises from the use of British labor and capital, the difference is not so great as those figures indicate. In the cotton manufactures £20 000,000 are paid for raw material, produced in great measure in foreign countries, leaving £30,000,000 as the wages and profits of British industry applied in its fabrication. The woolen manufacture includes £11,958,323 paid for British and Colonial raw material, and £17,374,999 paid for wages and profits of British manufacturing industry, together £29,333,332; so that, as far as the two manufactures are to be considered as British products, cotton would stand to wool as thirty does to twenty-nine. We leave this question to be settled by our friends at Manchester and Leeds, satisfying ourselves with stating the figures as we find them; having every confidence in their correctness, but feeling quite certain that many other elements than those here adduced must enter into a correct estimate of the relative value of the two branches of manufacture as portions of British commerce."

Kentucky.

The Covington and Lexington Railway.—R. M. Shoemaker, Esq., has received and accepted the appointment of chief engineer of the Covington and Lexington railway, and he has therefore re signed his place on the Cincinnati and Hamilton road, which is now nearly completed. Our Kentucky friends have secured the services of a competent and energetic man.—*Cin. Gazette.*

Turfing a Railroad.

Last week we took a short excursion East, on the Michigan Central railroad, and were gratified to observe, at different points, a large number of laborers engaged in filling up, levelling and turfing the road bed. Where the work had been completed, the cars appeared to be running over a beautiful green ridge, with no indication of a road but the black iron rail. Mr. Brooks, the enterprising superintendent, is wide awake to everything calculated to render his road a popular thoroughfare, and he is not unmindful of the fact that one of the greatest drawbacks to the pleasure of travelling over the railroads of the United States, is the clouds of dust and flying sand which fill the lungs and nearly destroy the eyes of passengers whenever they open a window to get fresh air. So much has this become a source of annoyance on the Eastern roads, that some of them have a sprinkler run ahead of the rain and lay the dust with a copious sprinkling of water. Mr. Brooks' plan of turfing will probably cost more to commence with, but not so in the end, while it will be altogether a more certain and effective remedy.—*Chicago Tribune.*

Canada.

Toronto and Lake Huron Railroad.—The iron is being received for this road and it is contemplated to have it opened to Barrie on the first of October next.

Charles Berczy, Esq., has recently been elected president of the company, instead of the Hon. H. J. Boulton, who has resigned.

$200,000 EIGHT PER CENT. MORTGAGE and CONVERTIBLE BONDS OF THE MILWAUKEE AND MISSISSIPPI RAILROAD COMPANY.—Sealed proposals will be received for sums of not less than $1,000, at the office of Messrs. DELANO, DUNLEVY & Co., No. 39 Wall-st., until WEDNESDAY NEXT, the 30th day of June instant, at 3 o'clock P. M., for $200,000 Eight per cent. Bonds of the Milwaukee and Mississippi Railroad Company, convertible into the stock of the company at the will of the holder any time within five years from the 5th May, 1852, interest coupons attached payable 1st Jan. and 1st July each year, in New York city, at the Banking House of Messrs. Duncan, Sherman & Co., and the principal at the same place in 1862.

These Bonds are a part of an issue of $600,000, secured by mortgage on the road from Milwaukee to Rock River, in Wisconsin, a distance of seventy miles, and covers depot grounds, depots, car and machine shop, and the road equipments. They are issued to meet the expenses incurred and to be incurred in the construction and equipment of the road. Thirty-six and one-half miles are completed and now opened, and the whole is under contract to be completed by first of November next. Thirteen and one-half miles more from Eagle to Whitewater will be opened by the first of August next, and twelve miles more from Whitewater to Milton, in September. The iron and ties are purchased for the whole distance, and a considerable portion of the grading done. The estimated cost of the road to Rock River is $1,250,000, about eight hundred thousand dollars of which has already been expended in its construction and equipment. The 36½ miles now opened is earning $200 a day, and the receipts for June will be about $5,000. The receipts for August, when the road will be opened to Whitewater, are estimated at $12,000.

These Bonds differ from most others in the market, in the fact that they are not only amply secured, but bear eight per cent interest, and may by the free banking law of Wisconsin form the basis of banking in lieu of State Stocks for one-half the capital of a bank. This provision adds greatly to the value of the bonds, as it will create a home demand, and for this purpose they are equal to any State Stocks now in the market. Wisconsin contains a population of about four hundred thousand and is rapidly increasing, and as yet has no chartered Banks. The Legislature at its late session opened the door for the establishment of Banks, (heretofore prohibited,) by passing a General Banking Law, which offers greater inducements to bankers than the law of any other State in the Union.

For Banking purposes in Wisconsin they are on a par with State Stocks, which are now considered about ten per cent. premium. The trustee in the mortgage is George S. Coe, Esq., of the city of New York, Cashier of the Ohio Life and Trust Company. The Bonds draw interest from the 1st of July next. Twenty-five per cent. will be required on being notified of acceptance of bid, and the balance in the month of July next, and interest to be adjusted and averaged according to the time of payment. Exhibits giving full particulars in relation to these securities, may be obtained of Messrs. Delano, Dunlevy & Co., No. 39 Wall-st.—New York, June 21, 1852.

JOHN CATLIN, Pres't. M. and M. R.R. Co.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES, { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES, { Late Davenport, Bridges & Co., Fitchburg, Mass.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.

Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York

Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

Notice to Contractors.

PROPOSALS will be received until 10th July next, for the filling and masonry of "Whetstone," "Arms" and "Vinings" Bridges. Bids for each bridge, earth work and masonry will be considered separately; but should a bid for the whole work (and from responsible parties) be more favorable than separate bids, it will be considered. The work to be commenced immediately, and to be prosecuted under direction of the General Superintendent, so as to insure its completion within one year from the date of letting. The bridges are in a high and healthy section of the country between Atlanta and Marietta, and will contain about 400,000 yards of earth, and 3300 perches of masonry.

Any information relative to the work can be had by applying to the undersigned, or to G. G. Hull, Resident Engineer.

WM. M. WADLEY,
General Superintendent.

Western and Atlantic Railroad,
Atlanta, Ga., June 9, 1852.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE, Chief Engineer.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintenden
Motive Power for N. J. R.R. and Trans.

To Contractors & Engineers.

A SITUATION is wanted by a Civil and Mechanical Engineer, a good calculator and accurate draughtsman. Address G. D. H.,
31 Jay st., New York.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg

—

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly. HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

To MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south. JOHN CHILDE,

Chief Engineer and General Agent.

New York, June 14th, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.

June 2, 1852.

Notice to Contractors.

LEXINGTON AND DANVILLE RAILROAD.

SEALED proposals for the construction of this road will be received as follows:

At the Office in Lexington, from 1st to 15th of July, for the grading and masonry of 12 miles of the road between Lexington and Nicholasville.

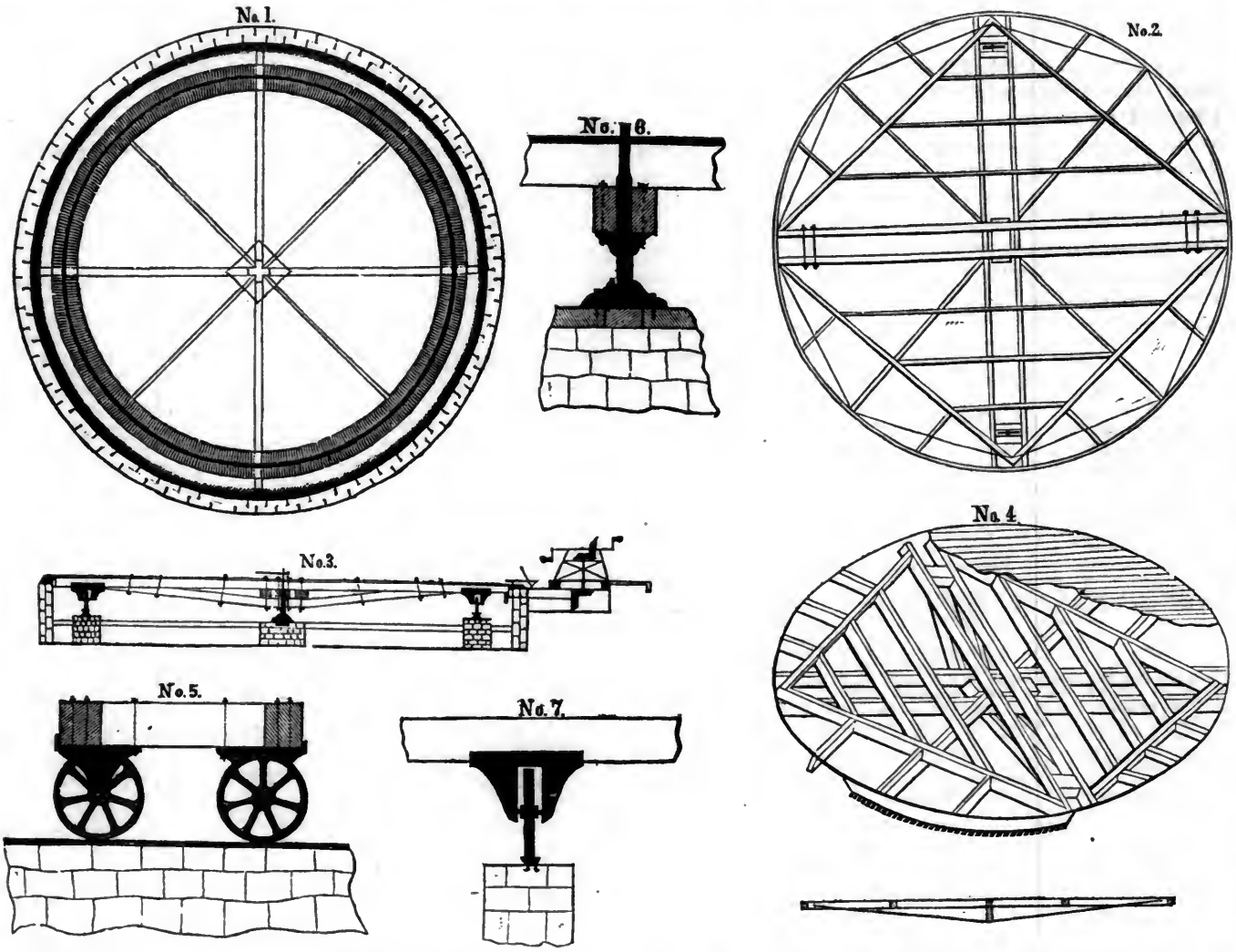
At the Office in Lexington and at the office in Danville, from the 1st to the 15th August, for the grading, masonry, and bridges of the remainder of the road (22 miles) from Nicholasville to Danville.

Plans, profiles, specifications, &c., may be seen at either of the offices within the times specified.

GEORGE C. SCHAEFFER,
CH. ENG. LEX. & DAN. R. R.

Danville, Ky., May 28, 1852

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies, Contractors etc. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are its *cheapness durability* and *capacity*. It is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of $5 a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the band and track walls; centre pier, cross-timber for bolting the step of pivot to the track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J., or at Wooster, Ohio.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Travellers and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 27] SATURDAY, JULY 3, 1852. [WHOLE No. 846, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Negotiation of Railroad Securities.....417
Northern Railroad.....419
New Orleans and Jackson Railroad.....419
Exhibit of the New Castle and Richmond Road.420
Great Western Railroad.....421
Milwaukee and Mississippi Railroad.....421
Steam Marine of the United States.....423
Ship Canal to Albany.....423
New York as a Railroad Terminus.....424
Cincinnati and Chicago Railroad.....424
East Tennessee and Georgia Railroad.....424
Little Miami Railroad.....424
New Albany and Salem Railroad.....424
Winchester and Potomac Railroad.....424
Stock and Money Market.....425
Canal Railroad.....425
European and North American Railroad..429, 426
Memphis and Charleston Railroad.....426
Ogdensburgh Railroad.....727
Baltimore and Ohio Railroad.....428
Ohio and Mississippi Railroad.....429
Genesee Valley Railroad.....429
Lake Superior Railroad.....430

American Railroad Journal.

Saturday, July 3, 1852.

Negotiation of Railroad Securities at Home and Abroad.

No person accustomed to read our domestic or English newspapers, for the past few weeks, can have failed to notice that our railroad securities have recently received considerable attention in the London market. The general tone of the English press has been very strongly adverse; many of their journals, the Times in particular, dealing in wholesale denunciations, and pronouncing the great mass of our securities as worthless as were many of the bubbles of 1835, without present basis or prospective value, and cautioning the English public to beware lest they should be caught the second time with worthless American securities, as they were in 1837.

Such is the general tone of the English press. But even these journals find a few bright spots in this general mass of corruption, a few grains of gold in a vast heap of sand, which have been collected from the rubbish, nicely boxed up, and, out of special favor, sent to John Bull. Whereat all these journals are filled with great gratitude, and say grace over the feast to which they are invited, with an unction and fervor in exact inverse ratio to the abundance and variety of the dishes. Thankful for the small favors received, their gratitude knows no bound when they contemplate the danger they have escaped. They have secured the *kernel*; what remains left is nothing but the crust, the shell.

Now John Bull is being a little humbugged in this business of bond-selling, and will very likely be a good deal so, before it is through with. Having made some bad bargains in times past, he has adopted as a general maxim, that the great mass of our securities are good for nothing, and will not take the trouble to inquire into their character, nor inform himself as to their real merits. He consequently remains in almost entire ignorance of what we are doing, of the mode in which our works are constructed, and of their success when brought into operation. The shrewd operator, knowing his frame of mind, goes to him, humors his way of thinking, blows up in the English papers our whole system of doing things, echoes every sentiment and whim of the old fellow, until he has secured a strong hold on his good graces. John Bull begins to think his new acquaintance a mighty fine fellow; and so much like himself, that his opinion can certainly be relied upon. Having got into *position*, the operator tells him that his opinion of our securities is correct, quite correct, entirely correct; that too great caution cannot be used in reference to them, and winds up by gently suggesting that there are some few things that *are good*, one of which he has, out of great regard, brought with him, for Mr. Bull's special use, "*seeing its him.*" In this manner the capitalist, who is obstinate through ignorance, and whose timidity is based upon no well reasoned conviction, is induced to buy a security in direct defiance of all properly established business principles; and by violating such rules, will be very likely to make a bad bargain, as he certainly will, if he continues to buy of parties who go to England to peddle out our securities, for no other reason than that they cannot be sold in this market. To the operation of the kind of machinery we have described, is to be attributed the coincidence between the articles in the English papers in reference to our railroads, and the recent sale of certain securities in the English market.

We have labored for years to bring our railroad securities to the favorable notice of foreign capitalists, for the reason that we need their money to assist in developing our resources, and because we have believed the great mass of our securities to be perfectly safe. We wished to attract foreign capital into this country, for the purpose of lessening our rates of interest, which are much too high. We can afford to pay well for money, and we have felt assured, if foreigners would study our condition and resources, inform themselves as to the character of our public works, and their influence in the creation of wealth, they would become very large investors in our securities, to the mutual benefit of all parties.

While all this is true, we have endeavored to pursue such a course as should secure us the greatest amount of capital in the long run. We are exceedingly anxious that nothing should be palmed off upon foreigners that has not a real and intrinsic value, something that would be safe for the purchaser to keep under all circumstances, and conditions of the market, knowing that the amount of future investments would depend entirely upon the confidence felt in our securities, and that this confidence must result from an *experience* of their value.

Now as a condition of safe investment, we would always recommend that they should be made *thro' houses in this country*; we mean, of course, those of the highest respectability. The reason for this is obvious. A person residing in New York, and competent to conduct a banking house, can hardly make a mistake as to the character of a project before the public. He is, or can make himself acquainted with the route of a road, its local resources and the relation it bears to the commerce of the country. He knows, or can easily know, the persons who have charge of the work, their integrity, and capacity to manage its affairs properly and successfully. He can also avail himself of the opinion of others who have, from their position and relation to the work, and the parties connected with it, the best means of forming a correct opinion in reference to it; and lastly, he has all those aids to the forming of a correct opinion which can only be picked up in a thousand different ways, by a person having daily and hourly interconrse with the parties themselves, and moving within the sphere where all public projects are daily discussed, and all their weak points, if they have any, exposed and laid open.

Now our transatlantic friends may rely upon it, that *none* of our securities are taken abroad by *first* hands, that can find a market at fair rates *here*. The only reason why they are taken abroad is that they will not sell at *home*. Our houses who buy on foreign account do not like them. So with the domestic purchasers, "They may be good, but I can do better," is the reply. Shut out from our own market, the holder goes in quest of one abroad, where his project is not so well known, and where his statements cannot be so readily disproved, as at home.

We do not pretend to say that many securities that are carried abroad, and sold directly to the purchaser in England, for instance, are not perfectly sound; but we do say, that merchandise is seldom shipped by the manufacturer to a foreign port, without orders, when there is a good market at home; and that as far as the above rule is concerned, there is no difference between a bale of cotton goods and a railroad bond. We always suspect an invoice of goods sent out at the risk of the foreign manufacturer, well knowing that he would sell them at home, if he could find a purchaser.

Another reason why it is better for foreigners to purchase through an American house is, that he constitutes such house his agents, to apprise him of any change that may threaten in the value of his security, thus giving him an opportunity to dispose of it, should the retaining it involve present or prospective loss.

By adopting and adhering to the plain common sense rules that we have given, foreigners can always keep themselves on the safe side; for we assume that our companies will always pay their debts so long as they have the means to do so. Those investing, therefore, must be careful to buy into roads that *will* pay. Now it may be set down as a safe rule, that where the amount borrowed, or sought to be borrowed, does not exceed the sum paid up as *capital*, such a loan is perfectly safe. The reason is this: the lender has a double security for his money; but a still stronger and more satisfactory one is, that our people will not contribute one half the means necessary to build a road, and pledge this sum for an equal amount, unless they feel perfectly secure that the project is a good one. We are no more fond of wasting our money than the foreigner, and the latter may rest assured, that when we have so much at stake, and involved in the proper management of a road, we shall take good care of it.

In commending railroad securities to public attention, we have, and shall, confine our commendations to such as come within the rule laid down. Where those interested in a road contribute one half of its cost, and make this sum the basis of a loan, it ceases to be a merely speculative project. When the country through which a road runs cannot do this, the construction of a road is not demanded by the business of such section, and will not probably *pay*. The ability of the people to contribute, is the best test of their ability to sustain a railroad. The rule that we have laid down, therefore, is a good one, for it not only secures good management to a road, but furnishes the proper evidence of sufficient business upon its line to sustain it.

We do not mean to say that there are no exceptions to this rule. There are, but these exceptions better remain at home, where the character of the project, and the men managing it, are well understood, and when the value of these securities depend upon causes that cannot be appreciated abroad. We have, too, an abundance of the first class securities, so that there is no necessity for foreigners taking those about which there shall be the least risk.

Such are the grounds upon which we commend our securities to the foreign purchaser, and for the foreign market. We shall recommend none that do not come up to the standard we have set up. It is bad faith to send abroad an unsound security. If *our* people will purchase them, possessing the fullest means of informing themselves, it is their concern, not ours. If we do not think well of a security, this is no reason why *we* should condemn it. Our convictions may be wrong; and where we do not *know*, we are in duty bound to be silent.

A great flourish has been made about the recent loans effected in England for the Illinois Central, and Erie railroads. It is a matter of general congratulation in the streets. We do not so regard it. Upon the Central road, the first blow has hardly been struck. The whole cost of the work is estimated at some $17,000,000. The capital stock of the company is $1,000,000!!! The company, to be sure, have a large body of land; but the value of these is indefinite and uncertain. To obtain them, the company have made a sacrifice of the appropriate routes for their road, and have entirely abandoned the great thoroughfares of travel. The project is a speculation, owned by a few individuals, who are determined that the *public* shall build the road. If anything is to be made, they get it. Should the speculation turn out disastrously, the public are to be the losers. The bonds of the company were sent to Europe, because they could not be sold here where the project is best known. We do not profess to discuss the intrinsic value of the security offered, only to show that it by no means comes up to the standard which we have set up, as the safe one for foreigners to be governed by.

So with the Erie road. Here is a road that has probably cost $27,000,000, represented by $6,000,000 stock and $21,000,000 debt!! We showed in our last, a much larger sum than that represented by the *stock* of the road, to have been lost in construction. Such being the fact, the last bondholders have no security whatever. They guarantee the safety of their own loans. This rests entirely with the success of the work. If the project be a good one, and well managed, they are safe. If not, they must lose. They have nothing to fall back upon. But this does not fairly state the case. The person who now lends to the company, cannot get anything till the two mortgages for $7,000,000 are taken care of. He does not come in for a pro rata share with all the bondholders. The project may be partially successful, and he get nothing. We have always thought, and still think, Wall street to be the proper place where Erie securities should be held; and we are by no means pleased to see new issues going to Europe. Should the company be unable to meet the interest on the new loan, the result would be most disastrous for the credit of all our securities. The reason for our opinion as to the inability of that company to meet the interest upon its *stock*, as well as its more recent debts, are given in full in our last issue.

Again, it is stated that the Dauphin Coal Co. of Pennsylvania has followed in the footsteps of its illustrious predecessors, and negotiated its loan in London. This, in our opinion, is a little too much of a good thing. This Dauphin Co. is one of the greatest bubbles ever introduced into Wall street. It was got up by a few veteran speculators two or three years since, who, upon the strength of a certificate from Mr. E. K. Collins, who burnt a few bushels of its coal by way of experiment, blew this bubble into the most extraordinary dimensions. It at last burst, carrying dismay and distruction with it. It was the cause of the failure of a number of leading men in this city. It then dropped into obscurity, till the recollection of its disasters were forgotten, when, again encouraged by the great abundance of money, the ignorance that exists as to the value of the property of the company and the oblivion of its past history, some new hands have again commenced at the bellows, and for fear of striking some bad spot here. they wisely go to London to make a raise. Report says they have succeeded. If so, John Bull has "caught a Tartar" this time, or we are no hand at *guessing*.

That English capitalists will make some unlucky investments in our credits now offering, is very probable. They are just in that frame of mind to be imposed upon, and led astray. They have, as already stated, adopted as a maxim, that our securities are unsafe, consequently they will not examine into their character. In any negotiations into which they may be pursuaded, they labor under the disadvantage of dealing in a new business, of purchasing a kind of merchandise without experience, or skill as to difference of *quality*. Their only safety consists in purchasing through houses that possess what they lack—the means of forming correct opinions.

The French and German buyers adopt a more sensible course. They follow in the line of safe precedents. All their orders come through responsible American houses. But their precaution is not confined within this limit. They send out to this country competent men, who critically examine all our public works, and study their condition and prospects, until they are enabled to form a correct opinion as to their merits, and the value of the securities upon which they are based. Their prejudices do not preclude investigation, nor warp their judgment. The consequence is, that knowing what they are purchasing, they take our choicest securities, leaving the others to the less fastideous, or less informed buyer. Were an American to take one of our *unknown* securities to Germany, he could not give it away unless it had the endorsement of a responsible American house.

We apprehend that very few Americans would take the securities of a petty German State, upon the guarantee of some unknown gentleman, however respectable he might in fact be. If he did so, and lost, he would only get laughed at for his losses. We must not expect a foreigner to do with us what we would not with him, neither must he find fault if he gets overreached, by neglecting the precautions which we have advised.

In a future number we propose to discuss the relative value of the different kinds of securities offered in this market for railroad purposes.

New York.

Northern Railroad.—At the late annual meeting the following directors were chosen:

T. P. Chandler, R. G. Shaw, Benj. Seaver, H. M. Holbrook, of Boston, Mass.; Isaac Spaulding, of Nashua, N. H.; G. V. Hoyle, of Champlain, N. Y.; Hiram Horton, of Malone, N. Y.; John Leslie Russell, of Canton, N. Y.; George N. Seymour, H. Van Rensselaer, of Ogdensburg, N. Y.; James H. Titus, Samuel J. Beals, of N. Y.

At a meeting of the directors, T. P. Chandler of Boston was unanimously re-elected President: Wm. T. Eustis, Treasurer; and James G. Hopkins, Secretary.

ADDRESS

Of the Board of Directors of the New Orleans, Jackson and Great Northern Railroad Company to the Citizens of New Orleans.

FELLOW CITIZENS:—In view of the election to be held on Monday next, for the purpose of determining on the adoption or rejection of the ordinance for subscribing to the stock of the company confided to our administration, we deem it our duty to lay before you the present position of the enterprise, the prospects of success, and the probable returns of the road, with its influence on the progress and prosperity of our city.

It is known to you that this road is not intended merely to connect New Orleans with the town of Jackson, in the State of Mississippi, but that it is the only link now required in the great chain of roads already in progress, which will bring us in immediate contact with a population of fifteen millions of souls, thereby extending to an incalculable amount the social and commercial intercourse between New Orleans and all that portion of the confederacy lying east of the Mississippi river. There is no exaggeration in this statement. Charters are already granted, subscriptions already made, State aid in Mississippi and Tennessee already accorded, by which the extension of our road from Jackson to Florence, and from Florence to Nashville, is secured. This line of road from New Orleans to Nashville intersects the Mobile and Ohio railroad, and the Charleston and Memphis road, thus giving us direct railroad communication with the Atlantic seaboard, and with the Mississippi and Ohio valleys; and it will also, by its connection with the railroads now in actual progress through Virginia, conduct us in almost an air line to Washington, Philadelphia and New York.

We have been actively engaged since the organization of the company in preparing the measures necessary to put the entire road between New Orleans and Jackson under contract during the present year. As fast as it can be located by engineers who have been engaged, and whose arrival is expected within a month, it will be advertised for contract, and we entertain no doubt that by the 1st of January, 1854, the entire road from New Orleans to Jackson will be graded in readiness to receive the iron, and that the whole road will be in active operation before the end of that year.

The spirit which has been awakened on the entire route through the State of Mississippi is based on the conviction that you will respond to the action of your municipal council, and that you will not falter now that success is within your grasp. In the single county of Monroe, in that State, we confidently anticipate aid to the amount of five hundred thousand dollars, more than half of which has already been subscribed. In other counties the subscriptions are advancing with almost equal spirit: and in Tennessee, the State itself has agreed to give eight thousand dollars per mile for providing the iron. The whole of this vast scheme, so pregnant with important results on your prosperity, your fortunes, and the future growth of your city, depends on your vote on Monday. If you sustain us in our efforts, an unequaled career of extended commercial enterprise with all its train of benefits is before you. If you reject the golden opportunity, the reaction will be as sudden as it will be ruinous; three months will not elapse before the effects will be felt pervading all branches of business and affecting all kinds of property. The confidence inspired by the mere hope of obtaining the road and the effect of which is already evident in the increased activity among our mechanics and merchants, in the increased number of buildings now being constructed, and the increased value of real estate, will disappear as if by magic, and not a few of your enterprising citizens, disheartened at the failure of all their efforts to awaken you to a sense of what is due to yourselves and your families, will abandon their homes in this city, and seek elsewhere communities where their enterprise will be met in a different spirit, and their energies secure suitable reward.

In two or three years from Monday next, if your voice shall respond favorably to the call made upon you, long trains of cars will be hourly entering your city, laden with the produce of fifteen States, and bringing you passengers from the extremes of the republic in less than three days. New Orleans, from her climate, her manners, the frank, social and hospitable character of her citizens, and the attraction of her public amusements, will become the fashionable winter residence of thousands of wealthy citizens with their families from the north and west. Her stores and hotels will be crowded with these visitors, as those of New York are now in the spring and summer months. Our merchants will become importers as well as exporters; our direct trade with Europe will acquire a sudden and rapid extension as soon as the western demand, from which we are cut off by the want of sure and speedy communication, shall find permanent stock of foreign goods in the stores of our dealers, accessible at all seasons, and all stages of water. Our increased population will secure steady employment and liberal wages to the mechanic, the drayman, the laborer of every kind. Our markets will be abundantly and cheaply supplied at all seasons. Life in New Orleans will become more agreeable and attractive as the comforts of home are augmented and cheapened. And, above all, our citizens will cease to be mere birds of passage, migrating at each season, but will become permanently fixed among us, augmenting our wealth by their home expenditure, and our influence by the weight always attached to a large stable population.

These are but feeble and inadequately expressed views of a portion of the great benefits you are to derive, and what is the cost? A mere annual investment in the stock of this road, for a term of six years, of one half dollar in every hundred dollars that you own in real estate. For years past you have been burdened with far heavier special taxes levied to pay the interest on an old debt entailed on you by mismanaged city affairs. A special tax for that purpose of one or two per cent per annum has been no unusual call on you, and has been promptly met without the least prospect of return. How then can you hesitate in view of the enormous advantages to be derived, to submit to so small a burden as one half of one per cent, to be returned to you in a work which will encourage labor, multiply the resources of industry, increase your population and augment the value of your property, even if you obtained no direct dividends from your stock. But so far from this being the case, you are merely asked to make an investment of this trifling amount in a stock which will yield heavy returns in dividends. We can demonstrate to you that no work on this continent ever offered a surer guaranty of large profits, and we will give you the estimates for your own examination, that you may appreciate the reasons which induce this conviction.

Before doing this, however, we will remark that by no other plan than the one which is now proposed for raising the means to build the road, can justice and equality be obtained. About one-third of the property of this city, amounting to more than twenty millions of dollars, is owned by absentees, by companies, or by successions of deceased persons. All of this property will be greatly increased in value, and its revenues augmented by the proposed improvement, without one dollar of contribution from the owners, unless this tax be voted. The St. Charles and St. Louis hotels, the banks and their property, the insurance companies and their property, the successions of such men as Mc Donogh, Fowler and Paulding, the buildings owned by the wealthy men who live abroad on the rents of real estate in this city, will all be exempted from aiding in such works, but will reap the benefit of the enterprise, the capital and the labor of those who remain here identified with the fortunes of the city, unless this tax be supported by your votes. Such a result is repugnant to common justice, and ought not to receive your sanction.

We will now proceed with the statistics of the road, and leave you to judge whether we overstate its probable profits as a mere investment or speculation. In doing this, we will take the whole line to Nashville as one road, although the capital required to be raised from here to Jackson is only three millions of dollars. We do this because propositions are already made to us to convey to us the charters and subscriptions of all the other links in the line, and to give us the control of the entire road and its resources.

The distance from Louisville to Nashville by way of Florence is assumed to be about 550 miles, and the entire cost of the construction and equipment of a railroad of a single track over this distance is estimated at ten millions of dollars. By its intersections and connections with other roads, it will furnish the facility of travelling from New Orleans to Memphis in twenty four hours, to Cairo in twenty four hours, to Nashville in twenty four hours, to Louisville in thirty hours, to Cleveland, on Lake Erie, in forty eight hours, to Baltimore via the Memphis and Charleston, or the Virginia roads, in forty eight hours; and at Chattanooga, by diverging on to the Georgia roads, the passengers from New Orleans can be landed at Charleston or Savannah in forty eight hours. In short, the extension of this road to the Tennessee river will place New Orleans in contact by railroad communication with the capital of every state in the Union east of the Mississippi river, reducing the average time of travel to the most remote to seventy-two hours, and diminishing the expense in like proportion.

Our city, from which the road is to start, has a population of 130,000, and the cost of the road will not exceed ten millions of dollars.

The system of South Carolina railroads starts from Charleston, with a population of 40,000, and at a cost of near nine millions of dollars. Our road runs through an eminently fertile and productive country for its entire length, after traversing some twenty miles of low ground near the city. Their roads, for great distances, pass through regions entirely insignificant in population and production. Our road is about five hundred and fifty miles in length. Their whole system is only 210 miles in length. Yet the gross receipts of these Carolina roads, in the year 1851, reached one million of dollars, and after deducting expenses, interest on loans and a reserved fund of more than one per cent, yielded a dividend of seven per cent to the stockholders. If such be the results of the enterprise of Carolina; if roads in other states have been self-sustaining and dividend-paying roads, at an original outlay always double, and frequently fourfold that of ours, what results may not be anticipated from our improvement, passing through a country of gigantic resources, full of wealth, of produce, of population, and of wants that require an active intercommunication, between city and country—a road that commands, by its connexions and intersections, a greater extent of country than any similar work in America?

In estimating the results of this road, it is not to be forgotten that if our delay in undertaking works of this kind has been unfortunate in its effect upon our progress, there are some counterbalancing advantages which will form a source of profit. We can build roads now of greater efficiency, and at half the cost of roads built twenty years ago. Science has advanced, experience has imparted her lessons, materials have diminished in price, labor is cheaper, more effective and more accessible, and the heavy item of iron is less than half its former price. These are some of the causes that make this investment one of certain heavy returns.

We assume that a great railroad from New Orleans to Nashville, with an adequate equipment for the necessities of its service, will yield returns for the transportation of passengers both ways, for freight or produce brought to New Orleans and supplies carried back, which at rates now current will amount to three millions of dollars. This amount is less than the present annual and rapidly increasing gross revenue of the New York and Erie railroad only 460 miles in length, and will be derived from the following sources:

300,000 through and way passengers, at an average of $5	$1,500,000
200,000 bales of cotton at $1.50	300,000
Agricultural and mineral productions of Tennesse, Virginia and Kentucky	500,000
Horses, mules, cattle, sheep, etc	100,000
Merchandise, groceries and supplies of all kinds from New Orleans to the interior	600,000
	$3,000,000
If 40 per cent of this amount be deducted for expenses, according to the experience of other southern roads	1,200,000
There would be left a net receipt of	$1,800,000

This amount being equivalent to an interest of 18 per cent on the investment.

We do not mean to say that so heavy a dividend would be declared or desirable, but we show, as we think, conclusively, that after allowing for any possible errors, or over-calculations, the receipts of the road would suffice to make the stock one paying a dividend of 8 or ten per cent, besides leaving an ample surplus for extending and improving the accommodation to the public in accordance with the increasing business of the company, and justifying a constant diminution in the rates of toll for passengers and merchandise, so as to accomplish the great purpose of the work, the growth and prosperity of our city.

It is the earnest conviction of these facts, fellow citizens, that has imposed on us the duty of laying this address before you. It is the intense desire we feel to see our city assume the proud rank which nature seems to have designed for it, which makes our duty a pleasant one, and our toil a "labor of love," for which we shall feel amply repaid by the satisfaction of seeing our efforts result in your increased happiness and prosperity.

June, 1852. JAMES ROBB, President.

Exhibit of the Newcastle and Richmond Railroad.

The New Castle and Richmond railroad company was organized for the purpose of constructing a railroad from Richmond, in Wayne county to Logansport in Cass county, Indiana, under a liberal charter granted by the legislature of that state. The road passes through the flourishing towns of Washington, Hagerstown, New-Castle, Middleton, Anderson and Kokomo.

At Richmond, this road will unite with the Richmond, Eaton, Hamilton and Cincinnati railroad; and at Logansport it will connect with the Logansport and lake Michigan railroad, which will be constructed from Logansport directly to Chicago.

The New-Castle and Richmond road will form a continuous line of railroad of the same guage from Cincinnati to Logansport, and thence to Chicago, by the most direct route. The distance from Cincinnati to Richmond is 69 miles; from Richmond to New-Castle is 28 miles; from New Castle to Logansport is 80 miles; and from Logansport to Chicago is 113 miles; making the distance from Cincinnati to Chicago only 290 miles. The whole road from Richmond to Logansport, being 108 miles is now under contract for the grading, masonry and bridging.

The work upon the first division of the road, extending from Richmond to New-Castle, 28 miles, is progressing rapidly. About four hundred hands with the necessary teams, carts and cars, are at work upon the line. Eight miles are graded and ready for laying down the track. Ten miles of the road extending from Richmond to Washington, will be completed in November next, and will be run by the locomotives and cars of the Cincinnati, Hamilton, Eaton and Richmond road. This will secure a large and profitable business on this part of the road during the winter, and will facilitate the early completion of the road to New-Castle in the spring of 1853.

The contractors on the line from New-Castle to Logansport are prosecuting the work vigorously. A large force is employed on this division at difficult sections. The stock subscribed for this part of the road amounts to two hundred and fifty-eight thousand five hundred dollars, and is fully sufficient to finish the road ready for the iron. This division of the road will be completed in September 1853, ready to connect with the division from Richmond to Newcastle, so that the whole road from Cincinnati to Logansport will be opened for business in September 1853.

The Logansport and Lake Michigan railroad company has been organized for the purpose of constructing the division of the road from Logansport to Chicago. By a junction with the New-Albany and Lake Michigan road at Monticello, in White county, Logansport can be connected with Chicago by constructing 30 miles of road. By taking the most direct line to Chicago, it will require the construction of about fifty miles of road to make the connextion, by which a continuous railroad from Cincinnati to Chicago will be secured upon the shortest and best practicable route. This road can be built for a sum not exceeding thirteen thousand dollars per mile, and it will be constructed as soon as the connecting link between Cincinati and Logansport is completed.

The local business upon the New-Castle and Richmond road will not be exceeded by any road in the west. This will be apparent to persons who are acquainted with the population, wealth, productions and resources of the counties through which the road passes, and the country which will be tributary to it.

The county of Wayne is the most populous and best improved county in Indiana. At Richmond, and in the vicinity, there is an extensive and valuable water power, only part of which is yet in use. The numerous large flouring mills and other manufacturing establishments at Richmond, render it an important point. The city is fast increasing in population and wealth, and the country rapidly improving.

Hagerstown and Anderson have each valuable water-power, which is used for manufacturing purposes. The manufactures can be greatly extended; and when the country is more improved, this power will be of great importance, and will add much to the business of these towns, and to the prosperity of the surrounding country.

New-Castle is the capital of Henry county, and is the centre of a rich and flourishing country. The products of Henry county, which will be brought to Newcastle for transportation upon the road, and the necessary supplies of merchandize required for the consumption of the surrounding country, will render this town a very important point on the road.

The enterprise of the citizens of New-Castle prompted them to entist efficiently in favor of this road. To them the public are indebted for projecting and carrying forward this important public work.

Logansport is the centre of the Upper Wabash valley, which has long been celebrated for its abundant crops of wheat and corn, and other agricultural products; and possesses the most valuable and abundant water power in the state. Extensive beds of excellent iron ore are found in the vicinity of the town, and several large furnaces are in operation, which produce iron of the very best quality. Large quantities of this iron have been taken to Pittsburg for the purpose of being manufactured into American steel. The iron of Logansport will be carried in large quantities over this road to Cincinnati, for such purposes as require the very best quality of iron.

The counties of Wayne, Henry, Madison, Howard and Cass, through which the New-Castle and Richmond railroad passes, cannot be excelled in quality of soil and timber, and capacity for raising stock and agricultural productions. These counties produce annually more than one hundred and fifty thousand hogs, fifteen thousand head of cattle, and two millions of bushels of wheat for market. The greater part of these products must pass over the New-Castle and Richmond railroad.

No section of the United States, of equal extent, exceeds in the value of its productions, the country through which this road passes; and no part of the west is increasing faster in wealth, and population and commerce. The freight and passengers are already upon the line of the road. The wheat and corn, cattle and pork, oats and flax-shed, and all the various productions of the farms of this rich portion of Indiana, are waiting the construction of the road.

In addition to the local freight and travel on the New-Castle and Richmond railroad, it will be the great connecting route between Cincinnati and Chicago. It can have no successful competitor or rival for the immense commerce and travel between those great western cities.

When it is considered that the road, for its whole length, runs through one of the richest regions of the west, which, without facilities for transportation, furnishes the largest portion of the agricultural products which have been sold in Cincinnati, and that it is the most direct road between the cities of Cincinnati and Chicago, it is evident that no road in the west presents a more safe basis or more certain and unquestionable security for the payment of large profits upon the money expended in the construction of the road.

COST OF ROAD FROM RICHMOND TO NEW CASTLE.

Grading, masonry and bridging for 34 miles, including a section of 6 miles northwest of New Castle, as per contracts	$185,420
Cross-ties for 29 miles, including side-track and ballasting, with gravel, and adjusting track	31,900
Locomotive and gravel cars for construction	17,500
Iron rails, chairs and spikes, and laying track	175,000
Right of way, water stations and depots	25,000
Engineering and contingent expenses	20,000
Proportion required to stock the road in connection with the Cincinnati, Hamilton, Eaton and Richmond roads	65,000
Total cost of road from Richmond to New Castle, 28 miles of main track and one mile side track, ready for running, with proportion of machinery for running the road, and of grading 6 miles northwest of New Castle	$519,820

RESOURCES FOR CONSTRUCTION OF ROAD.

Stock subscribed by individuals, applicable to construction of road from Richmond to New Castle, payable in cash	225,900
Stock taken by contractors	25,000
Amount of stock for construction of road from Richmond to New Castle	$250,900
The total amount of stock subscribed upon the whole road, from Richmond to to Logansport, is	$509,400
Balance required for construction of road from Richmond to New Castle, and to procure locomotives, cars, etc., to be raised by sale of bonds	$268,920

SECURITY FOR PAYMENT OF THE BONDS.

The company have issued three hundred seven per cent. convertible bonds, for $1,000 each, amounting to $300,000, payable in fifteen years, at the office of the Ohio Life Insurance and Trust company, in New York, with interest coupons, payable semi-annually at the same place. The bonds are convertible into stock of the company within five years, and are secured by a first and only mortgage, executed by the company to George Carlisle, of Cincinnati, and Joseph B. Varnum, of New York, trustees for the holders, upon their road from Richmond to New Castle, including the land occupied by the road and the right of way, with the superstructure, iron rails, and materials, and the tolls, income, rights, privileges and franchises of the company.

Bona fide subscriptions of stock, to the amount of $250,900, have been made, for the construction of the road from Richmond to New Castle. About $120,000 of this sum has been taken by the merchants and busines men of Cincinnati, which shows their appreciation of the road. The residue has been subscribed in small sums by the farmers and citizens of Wayne and Henry counties. The stock will be punctually paid up as the instalments become due.

Contracts have been made for the best quality of T rails for the whole road, from Richmond to New Castle, to be delivered in time to be got upon the line of the road before winter. A contract has also been made for the delivery of 2,500 tons of T rails in March next, which are intended for the division north of New Castle.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage, covering the road from Richmond to New Castle, with the iron rails and superstructure, tolls, income, rights, privileges and franchises of the company.

The facts which have been stated show that this road will be among the most productive roads in the United States. It will, in connection with the road from Cincinnati to Richmond, be the great thoroughfare for the commerce and business between Cincinnati and Chicago,—the greatest ma-

nufacturing and commercial emporiums of the West.

One hundred of the bonds issued have been absolutely sold; the remaining two hundred are now offered for sale. Capitalists, and others wishing to make investments, are requested to ascertain the facts in regard to this road. It is believed that no better securities than the bonds now offered can be found.

J. T. Elliott, *President.*
Miles Murphy, } *Agents.*
John Woods, }

New York, June, 24, 1852.

Canada.

Report of the Great Western Railroad.—The directors whose term of office has now expired beg to submit the following report of their proceedings during the past year, including a statement of the present position and prospects of your company:—

The contemplated arrangements mentioned in the report of 1851, regarding the subscription for stock in the company by railroad corporations and capitalists belonging to the United States, were after sundry, apparently, unavoidable delays, terminated by said companies and individuals taking up eight thousand shares, on which several instalments have been paid, as shown by the financial statement of the accountant. The agents of the company in England were authorized to offer for sale at such period as they might deem advisable, ten thousand shares of the capital stock, but after due consideration and consultation with those best able to advise in so important a matter, they decided (under the then state of the money market) upon issuing the bonds of the company for two hundred and ten thousand pounds sterling, convertible into stock within a period of four years; in this operation they were eminently successful, as shown by the result, said bonds being disposed of and the whole amount received by the company.—Previous to the final close of this transaction in London most particular inquiries were of course, to be instituted by capitalists and intending purchasers as to the position of the company, the dividend paying prospects of the work, management, etc. etc., and the result of which, proving entirely satisfactory, the agent and friends of the line felt it their duty to recommend to the board to avail of so favorable an opportunity to issue eight thousand additional shares of the stock, accompanied by bonds convertible into stock, or payable in ten years, to the extent of one hundred thousand pounds sterling. This recommendation was carried out by your directors and they have reason to believe that both bonds and shares are now taken upon the same favorable terms as the previous issue. In pursuance of this arrangement the directors have authorised the issue of fifty thousand shares, being an advance of ten thousand shares over the number they formerly intended to dispose of.

The funds to be obtained from the transaction alluded to, with a part of the advance, which the company is entitled to receive from the government, secures ample means to complete the whole line, with the necessary Station buildings, running stock, and plant of every kind.

As intimated in the directors' report of last year, the expenditure for construction was prudently confined to the central division, between the city of Hamilton and the town of London, until the American subscription and first issue of bonds, in England, were secured; but, after these important arrangements had been completed, the board directed the commencement of work, without delay, on the entire line, which is now being energetically carried out on every section, as is shown by the very full and satisfactory report of the Chief Engineer, to be submitted to this meeting.

During the past winter a very favorable contract was entered into, by the agents of the company, in London, with the Ebby Vale company, of South Wales, for the necessary iron rails for the line, say about 28,000 tons; 15 to 20,000 tons of which are to be despatched during the present season, if sufficient shipping can be obtained at moderate rates of freight; up to this time some 8,000 tons have been received at Quebec, which is being delivered at Windsor, Chatham, Hamilton, Dundas, etc. etc. These rails are considered to be of the most suitable make, and of sufficient weight and strength to bear a heavy and quick traffic with perfect safety.

In order to facilitate the operations of the company in the disposal of shares, negotiation of bonds, etc., etc., in London, it was found necessary to open an office in that city, and to appoint a Secretary to superintend the necessary transactions occasioned by the issue of so large an amount of the shares and bonds of the company; this step has been attended with the best results, and in addition to the transaction of the current business of the company, it is found to be a convenient medium through which to convey all necessary information, from the head office to the stockholders and bondholders in England.

With some trifling exceptions, the right of way and station grounds for the whole line have been secured, and, although, in a few instances, somewhat higher prices than were previously anticipated required to be paid; the entire cost is small when compared with the amounts expended for lands by other companies—either on this Continent or in Europe, and the extent and convenience of the depot grounds are, perhaps, unequalled by those on any other similar work.

In view of the very large freight and passenger traffic which must pass over your road, when completed, and which will, in a very short time, necessitate the laying down of a second line of rails, the board decided, in April last, that all unfinished bridges, culverts, &c., between Niagara Falls and Woodhull's creek, eight miles west of London, should be constructed of sufficient width for a double track, which is now being carried out by the chief engineer. The scarcity of stone from Woodhull's creek to Windsor, prevents simillar structures being desirable on that part of the road until stone can be taken along the line, from the company's quarries near Dunds.

The appointment of the late chief engineer to an important office under the government of the United States, which required him to reside at Washington, made it necessary to supply his place in this company. On the 10th September last, his associate Mr. Benedict, was therefore selected as Mr. Stuarts successor; and the members of the board feel it their duty to express their unqualified approbation of the very efficient manner in which Mr. Benedict, has discharged the complicated and important duties pertaining to his office, during the progress of the work, both as a resident and chief engineer, and their high sense of his untiring energy and zeal for the interests of the company.

They have also to acknowledge the able and efficient manner in which the several officers and their assistants, in the service of the company have performed the duties assigned to their respective situations.

Shortly after your meeting, in 1851, the By-law authorising the subscription for stock by the county of Middlesex, became law, and was completed in due form, by the Warden of the county, who, thereupon became *ex officio*, a member of the board of directors.

Negotiations have been commenced, and arrangements are in progress, between your company and the International suspension bridge company, for the erection of a sufficient bridge across the Niagara river, near the Falls, and at the eastern terminus of your road; which bridge is likely to be completed by the time the Great Western is opened for traffic throughout, viz., by August 1853.

The directors think it right to advert to the increased importance which your line continues to assume, as regards the business to be derived from its eastern and western connexion, and to the many new channels of travel which are daily opening on both ends of the line, all of which must act as feeders to it. During the past year two important lines of railway in the state of New York terminating on Lake Ontario, have been completed, viz.: the road from Ogdensburg to Rouse's Point forming a direct line to Boston, etc,, and the road from cape Vincent to Rome, forming a direct line to New York, &c., and the Rochester, Lockport and Niagara Falls railroad terminating on the Niagara river opposite the eastern terminus of your road, will be opened throughout during the next month.

On the western frontier there will be several important lines of railway to give traffic to your road in addition to former anticipations.

The directors avail themselves of this opportunity of publicly expressing their sense of the great ability and persevering energy evinced for the interests of your undertaking by Messrs. Peter Buchanan and Robert S. Atcheson, who by their excellent financial arrangements in England, as your agents, are, in the opinion of your board, entitled to the gratitude of the stockholders and the thanks of the people of this province, it being most obvious that the information necessary to the favorable introduction of such securities to the public of Great Britain, will have extended a knowledge of the vast resources of this colony, and thus have the effect of inspiring confidence in other undoubted provincial stocks.

The directors also feel it due to the Honorable Francis Hincks, the Inspector General of this province, to acknowledge thankfully the important assistance derived through his friendly co-operation.

And in conclusion, the directors have much pleasure in being able to congratulate not only the shareholders of your company, but the country at large, on the fact that the position and prospects of this most important Canadian enterprise are now as favorable as the best friends of the province could desire.

All of which is respectfully submitted.

Robert W. Harris,
President.

Great Western Railroad Co's Office, }
Hamilton, 21st June, 1852. }

Exhibit of the Milwaukee and Mississippi Railroad Company.

This company is organized and acting under a charter granted by the territory of Wisconsin, liberal in its provisions, unlimited as to tolls for freight and passengers, and as to dividends which may be made.

Its road extends from Milwaukee on lake Michigan to the Mississippi river, a distance of about two hundred miles, passing through the villages of Waukesha, Palmyra, Whitewater, Milton, Fulton, and Madison, the capital of the state; and from thence striking steamboat navigation at or near Arena, on the Wisconsin river, and from thence following the banks of said river to its confluence with the Mississippi, or turning off to the south through the lead mines, as may hereafter be determined by the board of directors.

The company was duly organized by the election of its first board of directors, on the 10th day of May, 1849, under their act of incorporation, passed February 11, 1847. The authorized capital of the company is three millions of dollars; of which there has been subscribed by citizens of Wisconsin and the city of Milwaukee one million nine thousand and eight hundred dollars, and of which seven hundred and five thousand dollars have been paid in; and the ballance is payable in instalments and will all become due in 1853.

Miles of road in operation, and earnings.

The company have in operation thirty-six and one-half miles of road, fourteen miles more graded and ready for the iron, and the iron purchased sufficient to extend to Rock river, distant from Milwaukee seventy miles. Twenty and a half miles of road from Milwaukee to Waukesha were opened on the 25th day of February, 1851. The net earnings of this short distance, with a plank road running parallel and near it, to Dec. 31, 1851 were $14,514 57. The road was partially opened to Eagle Center, distant from Milwaukee thirty-six and one-half miles, in February last; but, for want of accommodations and facilities for doing business at Eagle, the earnings have been light. Practically, the road has only been opened to Waukesha until May, when the road was gravelled up, depot and turn-table erected at Eagle, and the company commenced running two regular trains a day. The earnings for the winter season, from December to May, were light, and the expenses heavy, for causes not likely again to occur. The gross earnings for the month of May last were $3,789 57, showing an increase over the month of May of last year of $2,072 83. The expenses of running for this month have not been reported. The road is now earning about two hundred dollars per day, which will give for the month of June

five thousand dollars and upwards. The road has not yet extended far enough into the country to command the business, and the season has been unfavorable. It was never expected by the board of directors that the earnings of the road would be sufficient to pay the interest upon its cost until it should be opened to Whitewater, thirteen and one-half miles distant from Eagle. At this point there are facilities for doing business, stages will connect with the interior towns, and the road will then command a portion of the business from the rich valley of Rock river, The business of the winter season will always be light in comparison with the spring, summer, and fall. It is so on the Michigan Central, on the Chicago Union railroad, and so we may reasonably expect it will be on this.

COST OF THE ROAD.

The company had expended for all purposes, including machine shops, rolling stock, tools and stock on hand, on the 31st of December last, $675,753 58. Since that time the further sum of about $100,000 had been expended, chiefly in the further construction of the road, and for equipments.

The cost of the road when completed to Rock river, 70 miles, including all fixtures and equipments, will be about $18.000 per mile, which includes much the heaviest portion of the line. We are assured that from the Rock river to Wisconsin a distance of about 60 miles, the road can be built and equipped for about $13,000 per mile, which would make the average cost of the road for the 130 miles about $15,500 per mile. Following down the Wisconsin river to the Mississippi, the route is remarkably favorable; and the cost of construction, including all necessary stock and fixtures, has been estimated at $10,000 per mile. The distance is about 70 miles. on a level and straight valley and a sandy soil. The average cost of the road then, for the whole 200 miles, will not exceed $15,000, per mile.

ROAD BED AND SUPERSTRUCTURE.

The company have determined to construct a first class road in all its details. The iron used is the T pattern, of best quality, and weighs 58 to 60 lb. per yard. It is laid upon white oak sleepers, eight and ten feet long, six inches thick, and not less than ten inches wide, and placed so as not to exceed 28 inches apart from the centers. No better road bed was ever constructed. Gravel of the best quality is found in great abundance, and distributed upon almost every section of the road, so that generally the road is fully ballasted before the track is laid; and, hence, but little expense will be required after the road is put in operation to keep it in most perfect repair. There is but one bridge of any extent upon the whole line.

GRADES.

The road in respect to this important element in the cost of transportation will compare favorably with any road of equal length. The maximum grade is 34 feet in a mile, and ascending towards lake Michigan it is but 15 feet in a mile, except in one instance on the first division, where a grade of 30 feet has been temporarily adopted.

It is anticipated that the tonnage from the country towards the lake, consisting of mineral and agricultural productions, will be far greater than that going into the country from the lake, and that this difference will be nearly in the ratio of the difference in grades.

It is said "that the cost of draught on a railroad is nearly as the power employed;" and comparing our grades with those on the Western railroad, it will be seen that where we should be required to pay one dollar for motive power, over three dollars would have to be laid on that road; or comparing with the New York ond Erie road, with 60 feet grades, the cost to us would be one dollar where it would be two dollars and thirty-five cents on that.

PROGRESS OF THE WORK.

There are thirty six and one-half miles completed and in operation from Milwaukee to Eagle Center; fourteen miles more graded and ready for the iron, the ties purchased and distributed along the line, the iron purchased sufficient to extend to Rock river, and the contract let from Eagle to Rock river to Messrs. J. & S Chamberlain, well known and responsible contractors, at $12,000 per mile, the company furnishing right of way, motive power, and gravel banks. The contract requires the road to be completed to Rock river by the first day of November next. It is already in so great a state of forwardness as to insure its completion before that time.

SECURITY FOR THE LOAN.

Thirty-six and one-half miles of road completed and now in operation, fourteen miles more graded and ready for the iron, and the iron, spikes, and chairs purchased sufficient to reach to Rock river; seventy thousand dollars of rolling stock and stock in machine shop on hand, depot grounds at Milwaukee, on the navigable waters of the Milwaukee river, in the heart of the city, valued at seventy thousand dollars; depot grounds, depot, car and machine shop, at Waukesha, costing over thirty thousand dollars; depot and grounds at Eagle, Palmyra, and Whitewater, valued at twenty thousand dollars, the right of way secured and mostly paid for; ties for the whole road to Rock river purchased and distributed along the line; a most liberal charter, perpetual and unlimited as to tolls and dividends, and the only charter in the State that is not subject to repeal by the Legislature; three hundred and four thousand dollars due and to become due in 1853 from stockholders, being the balance of unpaid stock subscriptions that will be made as the road proceeds west,—and the security and means of the company will be ample for the payment of the sum now required. There are also bills before Congress, one for the right of way through the public lands, and the other for a grant of lands to aid the construction of this road, which are not counted upon, but which are as likely to become laws as any of the railroad bills now pending. The cost of the road to Rock river, covered by the mortgage as reported by the chief engineer, will be $1,250,000, and the amount of bonds issued on the same is $600,000. The security for the loan, the deed of trust, is beyond question. The whole stock subscription must first be lost and exhausted, and the road not earn sufficient to pay the interest on the amount borrowed, before there can be a loss to the bondholder.

BOARD OF DIRECTORS.

The directors of the company are men of substance, character, and standing, having the entire confidence of the stockholders, and some of them known abroad. They have the utmost confidence in the enterprise, and their character is a guaranty for the faithful management of the trust committed to them. They are among the largest stockholders of the company; are old residents of the State, and well acquainted with the business and resources of the country. The credit of the company is now established upon a firm basis, both at home and abroad, and the success of the enterprize undoubted.

CONVERTIBILITY OF THE BONDS.

The bonds are convertible into the stock of the company, at the will of the holder, any time within five years from their date. This provision offers great inducements to purchasers and capitalists, beyond the rate of interest which they bear, without taking the hazard which the original subscribers always take in such enterprises.

PROFITS AS AN INVESTMENT.

To those acquainted with the country, and its resources through which the road runs, nothing need be said to satisfy them on this head. The earnings of the road thus far give little or no indication of its future profits. Taking all things into the account, the length of road and the want of facilities for doing business, and they are highly flattering. B. H. Edgerton, Esq., constructing engineer, estimates the earnings to Whitewater at ten, and to Rock river fourteen per cent. on its cost. The reports and exhibits of Byron Kilbourn, Esq., late President and Chief Engineer of the company, giving in detail and at large the statistics, population, business, and trade of the country, are referred to, but are too voluminous for this exhibit. Subjoined are the reports of Edward H. Brodhead, Esq., Chief Engineer of the company, and of B. H. Edgerton, Esq., Constructing Engineer, which must satisfy all acquainted with them on this branch of the subject. The report of Mr. Edgerton is confined to an examination of the route west of Madison.

BANKING LAW OF THE STATE.

A general banking law was passed at the late session of the Legislature, liberal in its provisions, and offering great inducements for the establishment of banks. The bill allows ten per cent. interest until 1860, and thereafter seven per cent.; taxes the capital one and one-half per cent.; and allows one dollar of paper to be issued for every dollar of United States or State stocks and railroad mortgage bonds issued by any company, under certain restrictions, chartered by the State. The provision in the law admitting railway bonds is, in substance, as follows:

That in lieu of the public stocks spoken of in the bill, any such person or association, might at his or their option, assign to the State Treasurer bonds issued by any railroad company in this State, bearing not less than seven per cent. interest, secured by the first mortgage on such railroad for half the amount of bills or notes issued to him or them, the road to be not less than forty miles (if a portion of a continuous road of greater length,) nor less than twenty miles, should the whole road be less than forty; such mortgage to convey the railroad, together with its equipments, depots, fixtures, machinery, and the name and functions appertaining thereto. The certificate of the Governor, Comptroller, and Attorney General, or some two of them, first to be filed, that the requisite portion of road has been constructed in a substantial manner, with a solid road bed, and with a T or H rail, of not less than fifty pounds to the yard (lineal,) similar to other roads of the first class. That it has been fully equipped and in operation, and has earned a net revenue greater than the interest on the bonds; that the bonds should not be received at a rate higher than eighty cents on the dollar, nor at a rate exceeding one-half of the average cost and value of the road, nor exceeding eight thousand dollars per mile. If the bonds depreciate in value, the Comptroller shall require other bonds or stocks to make good the deficit.

This law is to be submitted to the people for their approval, in November next. The law is highly satisfactory to all parties, and it will be adopted by a large majority. The newspapers of the State, both whig and democratic, advocate its adoption, and no party organization can be got up against it. The State contains a population of about four hundred thousand, and, as yet, has no chartered banks. The establishment of banks in Wisconsin will create quite a home demand for railway bonds, and the Milwaukee and Mississippi R. R. Co. is the only one in the State that has as yet any portion of road in operation. Seventy miles will be completed and in operation by the first of November next, before the banking law can go into operation, and the bonds of this company will be the first that can be used for this purpose. The company will be able to show earnings by June next, for the year preceding, more than sufficient to comply with the requirements of the banking law. The value of these bonds for banking purposes in Wisconsin, bearing, as they do, eight per cent. semi annual interest, is much greater than any State stocks that can now be purchased in the market, and they will inevitably, in a short time, command a high premium.

RESOURCES, ETC.

For the purpose of meeting the payments that will fall due to the Messrs. J. and S. Chamberlain, contractors, and the purchase of the necessary rolling stock and materials, and of meeting the liabilities of the company incurred, and likely to be incurred, in the extension of their road to Rock river, etc., the company have ordered to be prepared six hundred thousand dollars of bonds, to be sold, bearing eight per cent. interest, payable semi-annually, in the city of New York, at the Banking House of Messrs. Duncan, Sherman & Co., on the first days of January and July each respectively, and the principal in 1862. The punctual payment of both principal and interest to be secured by a deed of trust, with the usual provisions, of the road, depot grounds, franchises, rolling stock, and personal property of the company. These bonds are convertible into the stock of the company at par. at the will of the holder, any time within five years from their date. The trustee, George S. Coe, Esq., Secretary of the Ohio Life and Trust company, is le-

gally authorized, in case of failure, to pay either principal or interest, to take possession of the road, depot grounds and fixtures, etc., and receive the earnings of the road, or proceed to sell the same, or any part thereof, without the aid of the courts or any legal process, and apply the same in payment of the bonds.

There is a previous mortgage on the east twenty and a half miles of the road for one hundred and fifty thousand dollars; but all the bonds of this issue have been canceled by Mr. Coe, except seventy-four thousand dollars, and for the redemption of which or exchange of bonds, an equal amount out of this issue, as certified by Mr. Coe on each bond, has been specially reserved.

A copy of the bonds, the deed of trust, the authority for the same, and the certificate of counsel as to their validity and compliance with the provisions of the banking law of Wisconsin, are published with this exhibit.

JOHN CATLIN,
Pres't. Milwaukee and Mississippi R.R. Co,
New York, June 15, 1852.

From the Cincinnati Gazette.

United States Steam Marine.

REPORT TO THE SENATE.

In all that concerns the use of steam in locomotion, the United States are now far in advance of any other nation. The subject has become, therefore, one of immense magnitude, and of corresponding importance to the nation. To have all the material facts for proper legislation before them, the Senate, in May, 1850, passed a resolution requesting Mr. Corwin, Secretary of the Treasury, to report the number, tonnage, crews, kind of steam and number of passengers, of steam vessels, for the United States, for the year ending July 1, 1851. The Secretary appointed intelligent agents to procure this information, and has transmitted to the Senate (in the report now before us), a complete statement, in all essential or interesting particulars, of the entire steam marine of the United States. This report is of great interest to all commercial men, as it contains a great body of information on the subject of insurance, losses, hazards, human movements, etc. We regret to say that the Senate, inadvertently, we presume, made no order for extra copies, so that those who desire to see it, must make interest with some Member of Congress. We can here only extract some general facts, which may be of general interest. We shall present these facts in the order the Senate called for them. To make these facts more clearly understood, and especially in reference to the trade and commerce of different sections of the Union, the coast was separated from the interior, and then again subdivided, as will be seen below:

1. NUMBER AND TONNAGE.

	No.	Tonn.
Atlantic coast, east of Florida Cape	465	154,270
Gulf of Mexico, from Cape Florida to Rio Grande	109	23,244
Pacific coast	51	34,936
Mississippi river, exclusive of the Ohio Basin	253	67,957
Ohio river and Basin	348	67,601
Basin of the northern lakes	164	69,168
Total	1,390	416,226

This was the aggregate steam marine of the United States on the 1st of July, 1851, subdivided into the following classes:

	No.	Tonn.
Ocean steamers	96	91,475
Ordinary steamers	1,045	275,000
Propellers	119	27,974
Ferry boats	130	22,744

The *average* tonnage of steamers of different classes are as follows:

Ocean steamers	953	tons average
Ordinary steamers on the coast	235	do do
Ordinary steamers on the lakes	503	do do
Ordinary steamers on the rivers	235	do do
Propellers on the coast	180	do do
Propellers on the lakes	302	do do

It must be observed however, that the *average tonnage* of ocean steamers has been increasing very rapidly the last two years; so that the average of all our ocean steamers now built, is under 1,500 tons. Between the 1st of July 1851, when the report terminated, and the present time, more than thirty ocean steamers (not included in the report,) have been built or finished. Of these we may mention, the Pioneer, the City of Pittsburgh, the Golden Cate, the James Adger, and numerous others.

The steam tonnage of the United States is now more than *double* that of Great Britain; a great many of the British steam vessels being very small used only for towing. In 1834, Great Britain had less than 500 steam vessels.—In 1851, she had 1,184, of about 180,000 tons.—The steam tonnage of the United States as stated above, is over *four hundred thousand tons.*

The distribution of steamers in the valley of the Ohio was as follows:

In the district of Pittsburgh, 112; of Wheeling, 46: of Cincinnati 111; of Louisville, 61; of Nashville, 18.

The distribution in the valley of the Mississippi was as follows, viz:

District of St Louis, 131; of Memphis, 3; Vicksburgh, 6; New Orleans, 113.

The distribution in the basin of the lakes, was as follows viz:

District of Burlington, 111; Plattsburg, 6; Ogdensburgh, 4; Sacketts Harbor, 1; Oswego, 9; Rochester. 2; Niagara, 1; Buffalo, 42; Presque Isle, 7; Cleveland, 13; Sandusky, 1; Toledo, 4; Detroit, 47; Michilimacioack, 12; Chicago, 4.

The number on each lake was:

On Champlain, 17; Ontario, 17 Erie, 114; Straits 12; Michigan, 14.

The distribution of steamers in the principal states of the Union was as follows:

New York, 196; Pennsylvania 172; Ohio, 129; Missouri, 131; Louisiana, 113; Alabama, 80; Virginia, 74; Kentucky, 61; New Jersey, 56; California, 51; Massachusetts, Connecticut, and Maine 83.

More than half the steam marine belongs to five states,—New York, Pennsylvania, Ohio, Missouri, and Louisiana.

2. *Crews.*—The officers and crews of Steamers on the coast, were distributed as follows, vis:

Ocean steamers, 4,548; ordinary steamers, 6,311; propellers, 542; ferry boats, 369.

Average crews of Ocean steamers, 47; of ordinary steamers, 16; of propellers, 8; of ferry boats,

3. The crews of each of the "Collins' line" of steamers number 135; of the Havre line, 92, and of the Chagres line, from 50 to 100—the "Georgia" having 112.

The officers and crews of the interior steam marine were thus:

Mississippi Valley, 6,114: Ohio Basin, 8,338; Lake Basin, 2,855.

Adding these to those given above, and we have twenty-nine thousand and fifty-seven, as the total number of officers and crews employed in Steam Navigation.

3. *Losses of Boats and Lives.*—The report shows that of the steamers of the interior, on the lakes and rivers, there were lost in the single year 1851, one hundred and eighteen steamers and six hundred and ninety-five lives! We cannot here analyze the causes of these disasters—one of the most interesting things connected with this inquiry—but we may note that one-tenth part of the whole number of steamers in the interior were destroyed in a single year, and that this is altogether outside the ordinary wear and tear.

Of all the steamers in the United States, one-tenth part are annually destroyed by fatal accidents, and if this go on for ten years, there will be in that time fourteen hundred steamers and seven thousand lives destroyed by steamboat accidents! This is a contemplation of future evil which may well attract the attention of government and philanthropists. Surely, it is not necessary that thousands of lives should be destroyed by accidental burnings and explosions, caused by carelessness or ignorance, in steamers. It is not steam that causes the evil, for look at our railways, where the steam locomotive traverses thirty miles an hour with comparatively few accidents. It is the lamentable disregard paid by the owners and captains of the second rate boats to the safety of life or property.

We intend, in a future article, to glance at the causes of loss—the amount of property destroyed—the insurance risks—and that most interesting subject the human movement of the United States, one of the most important topics of inquiry to all railway companies and steamboat owners. The report not being directly on that subject, is, of course, not complete as to that branch of the inquiry. But it embraces a much larger body of facts than can be found in any other document on that subject.

In conclusion, we add that the present Secretary of the Treasury, (Mr. Corwin,) has the honor of giving to the public more valuable reports and statistics than has been done, by any one, since the days of Hamilton.

Ship Navigation to Albany.

A project is on foot to secure a sufficient depth of water between this city and Hudson to enable the largest class ships and steamers to reach our docks. This may be effected by building a ship canal to New Baltimore (on either side of the Hudson) or by deepening the channel of the river. Either plan is feasible. The latter would probably be the most generally acceptable, although a canal would be of equal practical utility.

Measures are being taken to secure early surveys. A subscription book to procure the necessary funds is now in circulation, and more than half the amount required is already subscribed.—There should be no delay in filling up the amount.

No enterprise more important to the city than this has ever been projected. Albany is the great outlet between the illimitable West and the Atlantic border. The products of all the most prolific States in the Union, concentrate at this point.—But, with trifling exceptions, they move forward to New York for trans-shipment to foreign and coastwise markets, doing but little toward promoting the interests or augmenting the population of Albany.

If, however, ocean vessels could reach our docks, Albany would become the point of transhipment, because now nearly as much is lost in cartage, storage and commissions in New York, as would cover the freight to Liverpool direct from this city. The same is true of importations. Millions every year could be saved to both producer and consumer, and Albany be made a great mart of foreign as well as home commerce.

It is unnecessary to point out the advantages which would accrue to the city from such a revolution. They must be self-evident to every intelligent mind; and our only surprise is that a project so entirely feasible, involving such magnificent results, should not sooner have attracted the attention and enlisted the energies of our people. But "better late than never." We cannot recall the past, but we can improve the present; and we trust that our business men may promptly fill up the subscription for the contemplated surveys, and push forward the project so that Albany may become what nature has ordained—the meeting point of the products of the old world and new, and the place of transhipment for both.—*Albany Evening Journal.*

Brunswick and Florida Railroad.

A meeting of stockholders of the Brunswick and Florida railroad was held at Brunswick on the 17th inst,, when the following gentlemen were elected directors: Solomon Foote, of Vermont; Thomas A. Dexter, of Boston; S. R. Brooks, Wm. Chauncey. Amos Davis, and John Payne, of New York; L. J. Knight, of Lowndes county Ga.

It is expected that Gov. Foote will be elected president of the company.

Delegates were in attendance from most of the southern counties of Georgia, and these gentlemen pledged themselves to furnish five hundred thousand dollars towards the completion of the road to Thomasville, with a branch to Albany. This sum with the amount already subscribed at the north, was considered by the meeting sufficient to carry the road to these two points.

Propositions were received for the construction of the work, and recommended by the stockholders, to be accepted by the board of directors.

Great enthusiasm prevails ie all this section of the state, and it is confidently believed that the road will be speedily built to Thomas and Baker counties.

The canal from Brunswick to Altamaha, 12 miles long, is about half done. There is now a large force upon it, and they expect to complete it during the coming fall or winter. It is so constructed that it can be filled with tide water seven feet deep, to the point where it meets the water of the Altamaha. It is intended principally for the carrying of lumber. The canal company is no way connected with the railroad company, being entirely different charters; but some individuals are interested in both works.—*Correspondence Savannah Republican.*

American Railroad Journal.

Saturday, July 3, 1852.

New York as a Railroad Terminus.

Few minds among us are able to take in at a glance the extraordinary system of railroads which within the last three or four years has made New York the great commercial and monetary centre of the continent. Without going into minute details, we may safely assert that the railway horizon, of which New York is the centre, has been doubled in extent, by the completion of connecting lines, within the last three or four years.

The opening of the New York and New Haven road in the fall of 1848, brought all New England into easy communication with the great metropolis, and the city of Boston has felt a steady and increasing draft upon its business since, notwithstanding the vast extension of her own lines, north and east, meanwhile. Instead of securing to herself the principal trade of New England, the attractions of New York are daily and hourly drawing both population and business from Boston to New York.

The same thing is true, to a greater or less extent, of Montreal, of the valley of the Hudson river, the cities of the lakes, and of the west, and of the south. The region of country which is now brought within one day's ride of New York, includes an area of 175,000 square miles, embracing the most populous portions of the continent.

Any one who will glance his eye over a map, and study the railway system of the country, will see that passengers arrive here daily from various points formerly distant from us in time by a whole week.

From Waterville, Maine	430 miles.
White Mountains, N. H	440
St. Johnsbury, Vt	325
Montreal, Canada	400
Buffalo	470
Dunkirk	469

There are numerous other points within the sweep of this great circle north, which might be appropriately noted. We give the above as more extreme points in different directions.

Strike a line from New York *due* west, and almost the entire region of the continent lying to the north and east, within four hundred miles of it, is now brought into such easy communication with us, that New York is able to offer to it all needful facilities for wholesale trade, greater probably than any one or all of the other points put together.

Looking directly west, we find a very large portion of its business coming to New York. Philadelphia divides with us the trade of the west, and with Baltimore as a rival to both of the great cities north of her, seems destined to share no inconsiderable portion of the trade of the Ohio valley.

When continuous lines of railway shall connect Cincinnati with Baltimore, Philadelphia and New York, we can hardly venture to predict the influence of this state of things upon the business relations of the country. That New York will be able to maintain her share of the western trade, we cannot for a moment doubt.

Our lines of ocean steamers seem to keep pace with the expansion of our railway system, and the growth of New York cannot be calculated or measured by any known rule of calculation heretofore resorted to.

The area of all the British Isles is 116,700 square miles, with a population of 27,452,262 in 1851, and her great metropolis has a population of 2¼ millions of people.

Within the next five years, a region of country of twice the extent of the United Kingdom of Great Britain and Ireland, will be within a single day of New York, embracing a population of ten millions of people, possessing in greater abundance than any portion of the earth, all the elements of wealth and commercial greatness.

The tendencies of the time contribute to the growth of the cities over that of the country, and we should hardly be charged with extravagance if we were to predict for New York, within the next ten years, a material growth such as the most sanguine of our business men now regard with cautious distrust. Give us peace, and continuance of our present policy, and this country has in store a measure of commercial success which no other nation or people has ever been able to reach.

Cincinnati and Chicago Railroad.

The people of Cincinnati, and those upon the route, are fully aroused to the importance of a direct line of railroad from Cincinnati to Chicago. These two are the great cities of the northwestern States, and are rapidly leaving all their rivals behind, in their race for numerical and commercial superiority. They must always remain the two *great* cities of the west, however large other cities may become.

The business relations that already exist between these cities, as well as the conviction of what they must eventually become from their future growth, is forcing the rapid construction of a railroad to connect the two. The distance is about 290 miles. The route is remarkably favorable, allowing the construction of a first class road for $15,000 per mile. The country traversed is of vast fertility, and is already one of the most productive portions of the United States. The local business of such a road must be ample, while its prospective thro' business cannot be surpassed by any route in the country. We know of no more attractive enterprize for capitalists, among all our roads, whether in the east or west. We consider the stock of such a road fully equal in value to its convertible bonds.

The line that proposes to form this connection by the shortest route, is that of which the New Castle and Richmond forms an important link; the exhibit of which, as well as an advertisement of its bonds, will be found in another column. The affairs of this company are in the hands of gentlemen favorably known in this community, as possessing a high reputation for integrity and capacity. We commend this project to the careful attention of all who wish to make a safe and profitable investment of their money.

ERRATTA.—Our readers will please make the following corrections in the article in to-day's paper, headed "European and North American Railroad." In the fourth paragraph, for "natural" read *national;* for "phrase" read *phase.* In the eighth paragraph, for "severe" read *serene.* In the fourteenth paragraph, for "maket" read *matter.*

Milwaukee and Mississippi Railroad.

We invite attention to the exhibit of this company which will be found in another column. It presents its affairs, as well as the prospective business of the road, in a very favorable light. We feel assured that the stock, as well as the securities of the company, offer a very lucrative investment for capital. Under its present able management, this enterprise has secured to itself a high degree of confidence on the part of our capitalists, and occupies a prominent place among our best class western roads. The favor with which it is now regarded, will secure to it ample means for its completion to the Mississippi river, with all reasonable despatch.

For the work now in progress, contracts were somewhat recently made with J. & S. Chamberlain, for the entire construction of the road, embracing the rails etc., etc. From this arrangement the company derive important advantages, securing efficient and responsible contractors, who, exercising a supervision over the whole line, at once secure the energetic and uniform progress of the work. The amount saved to the company in this manner, will be much greater than all the profits to be made by the contractors. The Messrs. Chamberlain, are well known as responsible and successful contractors, who have constructed some of the most successful western roads, among which may be named the Cleveland and Pittsburgh railroad, and their connection with the above road is well calculated to strengthen the confidence felt in, and to secure the success of the enterprise.

There is no subject more interesting in railroad construction, than the progress of these works in our new States. In 1840 Wisconsin had a population of only 30,000. It must now have a population of 400,000, most of which is confined to an area of 10,000 square miles. The rapidity of this increase is without parallel in the history of any of our new States. This fact alone is sufficient proof of the extraordinary resources and attractions of this great State. For a majority of its population, the above road will be their convenient and appropriate outlet to market.

Ohio.

Little Miami Railroad.—The following table shows the yearly receipts of this road since 1847, viz:

In 1847 the gross receipts were			$221,139 52
In 1848	"	"	280,085 78
In 1849	"	"	321,398 92
In 1850	"	"	405,697 24
In 1851	"	"	487,815 89

On the first of December last, a dividend of five per cent was declared for the net earnings of the six months preceding with a surplus of past earnings of $134,121 15. On the first of July next, a cash dividend of 5 per cent will be declared, with an addition to the surplus of about $35,000, making the rotal of surplus $169,121 15.

This road is 84 miles long, under most excellent management; is now in fine order with heavy T rail.

Indiana.

New Albany and Salem Railroad.—Mr. Brooks, president of this railroad, recently addressed the citizens of Lafayette upon the prospects of that work. He gave a history of the road and the terms upon which it would pass through Lafayette, which were—a subscription of $50,000 and a right of way. The right of way had been granted and $30,000 subscribed; $10,000 more had been subscribed at last accounts, whence it is probable that the requisite amount will be subscribed.

Virginia.

Winchester and Potomac Railroad.—The Charlestown, Va., Spirit of Jefferson, in announcing the fact that the extensive damages done to the Winchester and Potomac railroad by the flood of April last have been so far repaired as to permit the cars to again make their regular connection with the Baltimore and Ohio railroad, highly commends as worthy of general admiration the energy, perseverance, and judicious method with which the authorities of the company have conducted their operations under the very adverse circumstances in which they were placed. By the flood the company had the whole of its bridges, except one, six in number, swept away with a thousand feet of tressel work and track. The arrangements at once made were such as to secure the uninterrupted travel over the road—not a single mail having been lost, and every possible facility given for the transportation of freight. Since that time four of the bridges have been rebuilt, the other two, which are to be of iron, tressled, and the whole of the one thousand feet of tressel work re-constructed on solid stone piers—the entire task having been accomplished in six weeks' time. To the active superintendence and energy and influence of the President of the company is due the credit of these results.

Georgia.

Central Railroad.—The following named gentlemen compose the board of directors for the current year.

John P. King, President.

Hays Bowdre, B. H. Warren, Joseph C. Fargo, Wm. D. Conyers, John Cunningham, James W. Davies, Wm. M. D'Antignac, John Bones, Thos. N. Hamilton, Elijah E. Jones, Antoine Poullain, A. J. Miller, Pleasant Stovall, Paul F. Eve, Chas. Dougherty, Asbury Hull.

Tennessee.

County Subscription.—We learn with pleasure that the County Court of Blount county, at its last sitting voted a subscription of $200,000 towards the construction of the Knoxville and Charleston railroad.

This is a very liberal subscription, and speaks in high terms of the wisdom, sound practical sense, and praiseworthy efforts of the citizens of Blount.

Twenty-five miles of this road runs through Blount county, which by this appropriation will have $8,000 per mile for its equipment.

In conformity with the law it will have to be submitted to the county, and from every appearance, we ardently hope it will be ratified by the people.—*Knoxville Plebian.*

Stock and Money Market.

The money market continues easy with large operations in all kinds of railroad securities. The fancies have touched a high figure for mid-summer, indicating a great abundance of money. There have been large *reported* sales of bonds of new works, but we do not think that the demand for investment is very active at the present time. We think there will be a pause until the fall season commences. A very large proportion of our capitalists are out of town, and we learn that foreign orders are light for a similar reason. A large portion of the bonds sold at auction or by tenders, are either taken on speculation, or are bid off on account of the seller. There are of course exceptions to this rule.

The sales of the Chester Valley bonds, sold by J. A. Underwood, are reported at 89. The demand for first class securities continues good, and there is every appearance that it will remain so.

The principal sales in the market since our last have been those of the Milwaukee and Mississippi railroad. These bear 8 per cent and sold as follows:

A. S. Beckwith	20	97·50
R. Miller	20	97·39
Hught & McLean	3	97·
Hught & McLean	3	97·
G. White	2	97·
D. A. Boker	1	97·
R. Miller	20	96·87
Wadsworth & Shelden	5	96·55
Hught & McLean	2	96·25
De Launey, Iselin & Clark	5	96·25
Wadsworth & Shelden	5	96·10
Rufus King; Corcoran & Riggs, and Cammann, Whitehouse & Co	10	96·02
George Smith	25	96·
Cammann, Whitehouse & Co	5	96·
Hught & McLean	2	96·
A. S. Beckwith	25	96·
G. H. Nash	10	95·87
G. H. Nash	10	95·57
Strahan & Scott	17	95·50
Hught & McLean	10	95·50
Total	200	

The whole amount of bids were for $662.000.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JULY 3, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101
U. S. 6's, 1856	106¼
U. S. 6's, 1862	113½
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	118
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	119
Indiana 5's	97½
Indiana 2½	55
" Canal loan 6's	95
" Canal preferred 5's	49
Alabama 5's	—
Illinois 6's, 1847	81½
Illinois 6's—interest	49½
Kentucky 6's, 1871	110½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	100½
Maine 6's, 1855	—
Maryland 6's	106½
New York 6's, 1854-5	—
New York 6's, 1860-'61-'62	112
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	117
New York 5½'s, 1860-'61	107
New York 5½'s, 1865	—
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	106
New York 4½'s, 1858-'59-'64	—
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	104
Ohio 6's, 1860	107
Ohio 6's, 1870	113
Ohio 6's, 1875	115½
Ohio 5's, 1865	103
Ohio 7's, 1851	—
Pennsylvania 5's	99
Pennsylvania 6's, 1847-'53	96
Pennsylvania 6's, 1879	108
Tennessee 5's	91½
Tennessee 6's, 1880	109½
Virginia 6's, 1886	112½

CITY SECURITIES—BONDS.

Brooklyn 6's	109
Albany 6's, 1871-1881	108
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	102
New York 7's, 1857	110
New York 5's, 1858-'60	101
New York 5's, 1870-'75	103½
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	103½
Baltimore 1870-'90	106
Boston 5's	102½

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	116
Erie 2d mortgage, 7's, 1859	107
Erie income 7's, 1855	100
Erie convertible bonds, 7's, 1871	99½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	94½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	88½
Reading mortgage, 6's, 1860	95
Michigan Central, convertible, 8's, 1860	109
Michigan Southern, 7's, 1860	98½
Cleveland, Col. and Cin. 7's, 1859	109
Cleveland and Pittsburg 7's, 1860	101½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	June 24.	July 1.
Albany and Schenectady	109	109½
Boston and Maine	104½	104½
Boston and Lowell	108½	108
Boston and Worcester	103½	103½
Boston and Providence	89½	93½
Baltimore and Ohio	75	82½
Baltimore and Susquehanna	32	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	127	27
Eastern	103½	103½
Erie	88½	91
Fall River	99½	99½
Fitchburgh	105	105½
Georgia	—	—
Georgia Central	103	—
Harlem	73½	73½
" preferred	114½	112
Hartford and New Haven	118	125
Housatonic (preferred)	35	35
Hudson River	67	70
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	103	110
Michigan Central	106	111½
Michigan Southern	123	115
New York and New Haven	111½	112½
New Jersey	136	130
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	54½	57½
Ogdensburgh	30½	27½
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	22	32
Petersburg	—	—
Richmond and Fredericksburg	93	100
Richmond and Petersburg	35	35
Reading	84½	89½
Rochester and Syracuse	122½	124
Stonington	54	57½
South Carolina	—	—
Syracuse and Utica	132	133
Taunton Branch	115	115
Utica and Schenectady	135	137½
Vermont Central	17½	17
Vermont and Massachusetts	22½	22½
Virginia Central	—	—
Western	107½	109½
Wilmington and Raleigh	57½	57½

Connecticut.

Canal Railroad.—We stated the other day that the friends of the two routes for the Canal railroad extension had agreed among themselves, and we now have the gratification of announcing that a charter had been granted to a corporation called the Farmington Valley railroad company, with the privilege of building a road on either or both routes, and so guarded as to secure a connection with the road to Westfield and Northampton, as soon as it shall be constructed. Thus all the difficulties of obtaining charters have been overcome, and it only remains with the friends of the road to raise the money and commence the work of construction.—*New Haven Journal.*

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

European and North American Railroad in Connection with the Future Destiny of the British North American Colonies.

(The following was handed us, some weeks since, with a request to publish, which we then declined to do, having a full conviction that Mr. Hincks would succeed in his mission. As we were mistaken, we comply with the original request. Without expressing any opinion upon the subject matter of the article, we would state that it was written by a highly respectable Provincial, and one thoroughly acquainted with the wants and feelings of the Colonies.)

It is more than half the battle of life when the mind has settled down into a determined mode of attack to the opposition it must encounter in the attainment of such object or objects as it has proposed to itself to possess.

The true objects of life are more easily acknowleaged and ascertained, than is the method by which they are to be accomplished. Left to instinctive nature the individual heart always beats most in unison with the mention of that name, which embodies most of its own ideal. The peace and happiness of mankind is beneficially promoted by the variety, with which such tastes are bestowed upon different individuals.

The natural heart, which is only a more varied and extended phrase of the individual, is subject to like rules, and can be stimulated by similar motives.

The great object of man's creation is that he should love and obey his Creator.

But such love and obedience must in many cases, governed by circumstances, manifest itself in different, often in opposite ways.

Some nature, duty, calls in one way, to others a different pathway invites.

The primary secret of success, and there can be no real success, unless our motives, or at least our actions are founded upon motives of duty—is to get upon the right track. To see the end from the beginning. There can be no happiness without a sense of progression. The motionless joy, however, for the moment, severe and calm, soon becomes putrid from its very stagnation.

"Count that day lost whose low descending sun views from thy hand no worthy action done."—These ideas in connection with our present caption may be said to be philosophically general, if not generally philosophical. Consideration however may torture them into a relationship to our subject.

If half the battle of life is overcome when we have settled into a course of decisive action, how much are its terrors doubled, when, without a course to steer by, each succeeding wave dashes us about, without energy, without determination, to resist?

Now how are our remarks to be made at all applicable to British North America, and that too, in connection with the proposed line of railway?

Perhaps the sole reason why by this date the European and North American railway does not 'loom up' among the enterprises of the world as '*au fait accompli*,' is because of the two objects or two interests which at the one time or other have each preponderated successively in their influences over it, but now seem fairly united, and as a consequence, fairly in the way to bring it to a successful termination.

These two objects are, one, the object of a large generally an imperial interest to build only the road from Halifax to Quebec, the other, that mutual and daily strengthening influence, which wishes to grasp hands, and join the interests of British North America with the United States.

Hitherto these influences have been counteracting, and the maker of the railroad has been placed on the horns of a dilemma. Now let us hope they have become reconciled and will strengthen each other; that is in accomplishing the feat of a railway somewhere through these regions.

The true friends of both these interests which have now been so successfully reconciled, must wish to forget and to forgive all causes of reproach on either side, and must—as I am happy in the belief that they do—ardently unite in carrying the work forward. Now the delay of months, of weeks, even of days, may prove disastrous to the scheme. The battle is half over, the course has been 'chaulked out,' the watchword must be onward! and may no unfounded alarm delay or disconcert the enterprise.

Notwithstanding our desire that all causes of reproach may be buried, there is one which we cannot help adverting to, though not by the way as a cause of reproach, so much as a cause for warning, viz, the too great dependence placed upon Imperial assistance, on the part of the British Provinces, and particularly of the party there, most in the Imperial interest. "Man can do whatever he *wills!*"

This is a great truth, gloriously true! Mr. Hincks, Mr. Chandler, Mr. Howe have gone, one of them, for the second time, to where we Colonists are accustomed, *falsely* accustomed, to call our *Home*, for the purpose of *again* inducing the Imperial Government to lend their aid to this railway project. And should they return unsuccessful, the souls of many loyal hearted British American subjects will either sink with a despondency no hopes can ever again revive, or be galled into hatred and rebellion to British supremacy. And such fact may be more than possible, it may be probable! And should it happen, fellow subjects of British North America, *what do you intend to do?* And here let us observe, better that such refusal should be boldly, promptly and manfully given, disastrous as the consequences would be, than that the syren charm of unmeaning, heartless and hollow promises, should *again* lull us on to the shipwreck of our hopes, and the disgrace of our common country.

Well in case of refusal, *what do you intend to do?* Do you intend to give the matter up? Our object in the question is not so much to obtain an answer, as to moot it, to provoke thought, discussion, and *determination* upon it.

What a glorious opportunity have the British Government of now retrieving their lost fame and honor upon the American Continent, and, that too more gloriously than by the sword! The inhabitants of Her remaining Colonies are still as loyal and as loath to change as were those of this country prior to the final act which abandoned them to their fate, and a glorious one it has proved. It needs no prophetic foresight to foretell that a perfect alienation of heart must grow up between them, if Great Britain refuses this last final and united appeal from her British Colonial possessions. They are now fully ripe.

The British North American Provinces are in a most interesting, perhaps precarious state of development. The two influences which attract them and which have taken visible outlines, in the different railway tracks, are, *Union to themselves, Annexation to the United States.*

So far to my view, as I believe to that of the majority of their inhabitants, the more desirable, natural, and easily accomplished of the two influences, is their *Union into one sovereign and Independent State*, with the full assent of the Mother Country, or at least instant preparation on her part for such concession. The union of the Provinces, backed by a friendly, and heart felt alliance with Great Britain, would place them in a proud and independent position; and enable them to treat with surrounding countries, successfully.

The national course of events must hasten friendly alliance, perfect commercial intercourse, and reciprocal trade with the United States, and next to their own *union* this ought to be the dearest concern to the Provinces of British America. But this bright vision may be dispelled, by the breath of a single statesman, can he be a true statesman who can dispel it?

Then what course lies open? Till the catastrophy has happened, the answer need not be given, there is then only one course open for the Colonies to pursue, think upon it, ponder on it, *prepare for it?*

J. W.

New York, May 3d, 1852.

Memphis and Charleston Railroad.

The practical inception of this enterprise was November 1849. The greater portion of time since has been employed in preliminary surveys, final location, and raising the sinews of war.

Up to this point, $2,600,000 have been subscribed to the capital stock of the company, $500,000 of this in 6 per cent. 20 year bonds of the city of Memphis, interest payable semi-annually in Philadelphia; $50,000 of similar bonds of the town of Huntsville, $100,000 of the bonds of the county of Madison, in Alabama, to bear an interest not exceeding 8 per cent.; $250,000 by city of Charleston, in Nashville and Chattanooga railroad stock, guaranteed at par, and the balance, $1,700,000 by individual stockholders on the line of the road, in which is included about $97,000, by citizens of New Orleans, and $27,000 by citizens of Philadelphia.

Calls upon the individual stockholders in Ala., amounting to 34 per cent., and upon the stockholders in Tennessee, of 42 per cent., have been made, and are being promptly responded to.

The road, as located, commences at the city of Memphis on the Mississippi river, runs east to Lagrange, on the old grade of the Lagrange and Memphis road, thence to Tuscumbia, Alabama, thence upon the old Tuscumbia, Courtland and Decatur railroad to Decatur, on the Tenn. river,—crossing the river at Decatur—passes through the county of Limestone, to Huntsville, thence to the east corner of Jackson city, Alabama, to its junction with the Nashville and Chattanooga road, which terminates at Chattanooga.

The entire line of road is 281 miles, estimated cost of construction $2,900,000, inclusive of depots, locomotives, and everything necessary to equip the road fully. No grade exceeding 42 24-100 feet per mile need be used, excepting a short distance between Big Bear creek and the Tuscumbia fork of Hatchee, where 52 8-10 per mile must be resorted to.

The country traversed—*the western district, north Mississippi*, and the *Tennessee valley in north Ala.*, is well known to be productive, populous and wealthy. As Col. C. F. M. Garnett, the late Chief Engineer, said, "there are not 50 miles of poor land on the whole road; even the poorest land on this road will compare favorably with any land on some of the most flourishing roads in the country."

It is believed that this Road will be the first to form an unbroken line of railway between the Mississippi river, at or near any point below St.

Louis and the South Atlantic, and its destination is from the common point Chattanooga to Knoxville, Abingdon, Lynchburg, Va., thence by choice of lines to Washington, and the extreme east.

To this line from Virginia to Memphis—the topography of the country forbids a parallel.

The company is now engaged in the construction of parts of the trunk, which have been heretofore graded by other companies, viz: from Memphis to Lagrange, 50 miles, and from Tuscumbia a point below, to Decatur a point above the Muscle shoals on the Tennessee river. Forty-two miles T iron, about 60 lbs to the yard, cross ties, chairs spikes, locomotives, burden cars, have been procured, and these 92 miles are to be finished for the fall business, at a cost of $700,000 including four locomotives, two passenger and eighty burden cars.

These parts being completed, will bring a revenue, and with the stock subscribed ensure the completion of the trunk.

The grading, &c., of the road from Decatur to the intersection of the Nashville and Chattanooga railroad—a distance of 82 miles, has been let to responsible contractors, and operations have been commenced upon the heaviest sections.

The state of Tennessee, by Internal improvement act of last Assembly, granted to this company the loan of her 6 per ct. bonds at the rate of $8,000 per mile, for the distance traversed in that state.

Two hundred thousand dollars of these are expected to be obtained by 15th July. It is understood that the company will endorse the Memphis bonds.

It seems from these data, that this road has progressed with greater rapidity than we had anticipated, and without attracting much of public attention beyond the locality.

Amid the multiplicity of securities offered in this market, it seems to us that our capitalists would not be able to do better than to turn their attention in that direction.

We have said thus much in justice to an enterprise deemed national in its character, and *which will eventually unite the banks of the Mississippi with the Southern and Eastern Atlantic.*

For the American Railroad Journal.

The Erie Railroad.

The financial condition of the Erie railroad, was examined to some extent in the Railroad Journal of the 26th of June. The floating debt of the company was considered as being large, and by common report as increasing. That article has turned the attention of the public to this matter. The receipts of the company are very large. Its floating debt to be upon the market, must be in the shape of notes or acceptances. Notes given for articles purchased on time, are quite proper. If thrown upon the market by the makers, or acceptors, to raise money, the enquiry, for what end, becomes pertinent. It has been said that the bonds of the company for a large sum, have been used to enable some person to build the new steamboats Northern Indiana, and Southern Michigan, upon Lake Erie. The authority for doing this may be questionable. The right to build or charter steamboats if not expressly given by law, can scarcely be an incidental power of a railroad corporation.

There are several new railroads being constructed from the Erie railroad to Buffalo, Niagara Falls etc.

How is the money raised for these roads? Is the floating debt of the Erie railroad any larger on this account?

A contractor for one of these roads, when cautioned, that he must be sure that he was working for a responsible company, remarked, that he knew who stood behind him. Of course this could have but one meaning. It referred to the main trunk from which these branches proceed. It is difficult to see what other means could be adopted to aid these branches, than by an increase of floating debt, which may be used quite like bank circulation. This may account for the increase of the floating debt, when the income of the company is so large.

These branches may possibly be successful, and bring a compensating increase of business. It will be strange however if they do. For in all other instances, in our country, the extending of branches, has been unfavorable. The authority to afford this aid must be very questionable. A railroad company unless specially authorized by law, has no right to make or aid branches, any more than it has to build steamboats, or stores, or hotels.

Q.

Ogdensburgh Railroad.

The Editor of the Cleveland Herald has been making a tour over some of our northern roads, and has furnished his paper with graphic descriptions of them. We copy the following from his notice of the Northern (Ogdensburgh) railroad.

This road has cost about $5,200,000, with all its equipments, and is in all respects one of the best constructed and completely finished railways in the Union. It is intended mainly, for a great, cheap and expeditious freight way between Boston, New York, and the Lakes and Canada, and bids fair to fully realize the expectations of the most sanguine of its enterprising originators. The equipments of the Northern railroad are: 28 locomotives, 500 eight wheeled freight cars; 10 first class passenger, and 6 second class passenger cars, and 6 baggage and post office cars. The passenger cars are unusually high, roomy and pleasant, and each is supplied with a water-cooler, glasses and ice water, free to all thirsty travellers. Such attention to the wants of passengers costs but little, and is gratefully remembered. Another convenience to travellers on the Northern railroad is worthy of imitation along all the land steam thoroughfares. On each end of all the substantial and spacious depot stations along the line, in characters that he who "runs may read," is the name of the station and the distance to Ogdensburgh or Rouse's Point, as the case may be. This is a satisfaction to all strangers who desire to know how rapidly they are flying and the points reached, and saves the asking and answering of questions.

The depot grounds of the Northern railroad at Ogdensburgh are very convenient and extensive.—They contain 63 acres, lying upon a bog in the river St. Lawrence, three miles wide. The docks of the company, permanently built, extend one mile and an eighth, with sufficient depth of water for vessels of the largest class. The depot accommodations are the most ample. The passenger depot is large and convenient. There are two immense freight depots capable of storing 30,000 barrels of flour, besides flour sheds of sufficient capacity for storing a like quantity. Also a grain elevator warehouse holding 180,000 bushels of grain, and will elevate 1,500 bushels per hour. The warehouse is 110 by 82 feet, and is neatly finished outside and in. There is a merchandize store house 400 feet by 82, exclusively for the Upper Lake and Canada goods; and a flour warehouse 350 feet by 100, rented to the flour dealers and commission merchants. This is a point where large quantities of flour are sold and distributed throughout Northern New York, Vermont, New Hampshire and part of Massachusetts. Some of the dealers sell as high as 100,000 barrels the season.

The country from Ogdensburgh to Rouse's Point is quite level, and the line of the railroad very straight. The depot at Rouse's Point is 550 feet by 104, and the dock 800 by 164 feet. Here the Northern railroad connects with the Vermont Central railway by a permanent bridge across Lake Champlain 5,000 feet long, and a draw bridge on pontoons 300 feet by 30, which is swung round when not in use, so as to give free navigation. The improvements are all of the most perfect, enduring character. By this route the Ogdensburgh cars go through to Boston with produce and return with merchandize.

Two trains per day between Ogdensburgh and Boston and 6,000 to 10,000 barrels can be transported per day. Goods are brought to Ogdensburgh from Boston in from three to five days, and from New York by Whitehall canal, Lake Champlain and Northern railroad, in from five to seven days. Nearly the same quantity is received and shipped to Kingston, Toronto, Hamilton, and other Canadian ports. The Lake Ontario steamboat company run two splendid boats daily from the Ogdensburgh depot to Lewiston on the Niagara river.—The boats are well managed, burn wood exclusively, are very neat and clean, and furnish capital fare. The daily line of Canada steamers between Montreal and Toronto touch up and down at the depot. There is also a daily line connecting with the Lake Ontario steamboat company's line from Ogdensburgh to Montreal.

The Northern railroad is a pattern railway in its construction and management. The track is so solid and even that the cars run smoothly at great speed, making prompt time and seldom varying one minute at the station. Not a life has been lost upon the road since it has been in use. The daily trains are 4 passenger, 8 regular freight trains of from 20 to 25 loaded eight wheel cars per train, and 3 lumber trains. The lumber business of the road is large. The first week in May the shipments eastward from the Champlain landing were 2 098,-111 feet of lumber, 1,252,000 shingles, 7,500 000 hoops, and 9,100,000 staves. The same week 66 tons of potatoes were shipped East.

Col. Charles L. Schlatter, an engineer of 26 years' experience, was the Chief Engineer of the Northern railroad, and is now the efficient and able Superintendent. Every part of the management and business of the road is thoroughly systematized, and the company are greatly indebted to his superior skill and energy for the construction and success of the important work.

Distances on the Baltimore and Ohio Railroad.

The following is a table of distances on the Baltimore and Ohio railroad, as far as Fairmont:—

	Miles.		Miles.
Relay House	8	Paw Paw tunnel	153
Ellicott's Mills	14	Green Spring Run	164
Woodstock	24	Cumberland	178
Marriotsville	28	New Creek	201
Sykesville	31	Piedmont	206
Woodbine	37	Bloomington	208
Mount Airy	43	Everett's Tunnel	210
Monrovia	49	Oaklands	231
Ijamsville	53	Cranberry Summit	213
Monocacy	58	McGuires Tunnel	244
Point of Rocks	69	Rodimer's Tunnel	216
Berlin	75	Cheat River	254
Knoxville	78	Kingwood Tunnel	261
Weverton	79	Murray's Tunnel	263
Harper's Ferry	84	Independence	267
Martinsburgh	100	Parkersburgh Junc.	280
Hancock	123	Fetterman	282
Sir John's Run	128	Valley River Falls	288
Doe Gulley Tunnel	141	Fairmont	302

From Fairmont to Wheeling, the distance by the railroad, when completed, will be 77 miles, making the total distance from Baltimore to Wheeling 379 miles.

South Carolina Railroad.

Railroad Connection at Augusta.—We notice an advertisement in the Augusta papers, of the Engineer of the South Carolina railroad, inviting proposals, until the 10th of July next, "for building five stone piers and two abutments for a bridge across the Savannah river, at or near the city of Augusta." From this it appears that the bridge difficulty is settled, and that there is to be an uninterrupted connection at Augusta.

Opening of the Baltimore and Ohio Railroad to Fairmont, 123 Miles from Cumberland.

The division of the Baltimore and Ohio railroad, extending from Cumberland to Fairmont, was formerly opened to the public on the 21st inst. This opening was celebrated with great spirit by the people of Baltimore. A very large number of the leading men of the city, with the President and directors of the company, went over the road on a tour of pleasure, and for the purpose of inspecting the work. We are indebted to the Baltimore American for the following sketch of the route and of the leading works on the line of the road.

Leaving the town of Cumberland, the train first passed over the magnificent viaduct of fourteen arches, which crosses Wills' Creek in the town, and up the valley of that Creek, which makes its way through the gorge in the mountain and falls into the Potomac at the foot of the Alleganies. The travellers enjoyed the view of the mountain scenery, seen by many of them for the first time. Lofty mountains rise on every side, and new and striking objects meet the eye at every turn of the road, and soon Fort Hill, a solitary mountain about five miles long at its base, breaks upon the view. After traversing the side of this lofty elevation, the road is carried over a rugged piece of rocky country, and passes a splendid farm called "Black Oak Bottom." Still further on the road, which has hitherto kept on the Maryland side of the Potomac, now passes to an island in the river, and again traverses the Maryland side until it reaches a point about twenty-one miles from Cumberland, where it crosses into the Old Dominion by a wooden suspension bridge, ingeniously designed by the chief engineer of the road, Mr. B. H. Latrobe. A few miles further on lies Paddy Town, a village destined to be of some importance, as it is from this point that it is designed to construct the Manasses Gap railroad to the city of Alexandria. Beyond Paddy Town, the road encounters a tributary of the Potomac called New Creek, over which it passes by an iron bridge. A less difficult but still beautiful country is now traversed along the Potomac, passing the base of Dan's Mountain, until the town of Piedmont comes in view. On the Maryland side lies the town of Westernport, at the junction of George's Creek with the Potomac.

As soon as the Potomac is passed by a splendid stone viaduct, the heavy or steep grades commence, beginning with a rise of thirty-five feet to the mile, and increasing to eighty, when the road passes through the first of the five tunnels excavated for its passage. Everett's Tunnel, the first and smallest on the line, is 300 feet through, and the grade of it corresponds with the line of the road, which has here a rise of one hundred and sixteen feet to the mile. But neither the steepness of the ascent, nor the various curves of the road, offered any obstruction to the steady, onward course of the train. The tunnel is thirty-five feet high, and is cased with a solid brick arch.

Following the ravine of Savage river to its junction with Crabtree Creek, the course of the railroad is towards the South West along the Crabtree, the grade being still 116 feet to the mile. Before reaching the little village of Frankville, we see the Great Back Bone Mountain, which rears its stupendous top on the South, and along the base of which the road is constructed.

About three miles up the Crabtree is an excavation through a rocky spur of the mountain, 108 feet deep. A little further up the road crosses the creek on an embankment 67 feet high.

At Swanton, 41 miles from Cumberland, is a short level, where the company design to establish a "station." The heavy grade continues until the road reaches Wilson's Summit, 44 miles from Cumberland. The whole length of this steep ascent is about 15 miles, along which distance the road rises about 1625 feet, that being the difference between the elevation at the crossing of the Potomac, and the top of Wilson,s Summit, called Altamont, the dividing ridge between the rivers which flow into the Chesapeake, and those which run into the Ohio.

Abont the sixtyeth mile from Cumberland, the road crosses the State Line, and passes into Virginia.

Crossing the Summit, the road is located on the north bank of the Little Youghiogheny river, the valley of which it pursues by a very easy descent until it strikes the great Youghiogheny river, which it crosses on a splendid viaduct of wood and iron, but soon leaves, ascending by easy grades to the Valley of Snowy Creek. Reaching Cranbery Summit, a steep downward grade commences about equal to that on the banks of the Savage river, and Crabtree Creek. Less than two miles from Wilson's is McGuire's Tunnel, a perforation through the mountain about 500 feet in length, and about three miles further is Rodemer's Tunnel, 400 feet through, both of which are secured by heavy timbers, preparatory to being arched with brick.

The descent here continues at the rate of about 113 feet to the mile, the road taking the ravine of Spruce Run, which empties into Salt Lick creek, along the banks of which the road is carried until it reaches Cheat river. It is taken over Salt Lick by a stone and iron viaduct of 50 feet span and 50 feet high. It then crosses Cheat river, a large and rapid stream, over which it passes by a viaduct of two arches, 180 and 130 feet span, composed of wood and stone, with a stone pier and abutments. —The masonry is good looking and very strong. The road is then carried along the southern bank of the Cheat, ascending at about the grade of 105 feet to the mile for a distance of four miles, until it passes Cassidy's Summit, a thorough cut being made for the route of the road a quarter of a mile long. The line is now of the most imposing character.—The road winds along the steep sides of Laurel Hill, until it reaches three deep gorges over which it is carried by a series of tressel work built on a stone foundation. The first of these gorges or ravines is 76 feet deep; the second is 108 feet high and 400 feet across; and the third is 600 feet long with a depth of over 150 feet. Within six months the wooden tressels will be replaced with cast iron ones. No part of the road appeared more singular than the passage over these lofty structures. It is said, however, the work is built so strongly that the passage of the cars causes no movement in the frame work.

Passing over a level at the summit, the road enters the largest and most magnificedt tunnel on the route—called from its proximity to the town of Kingwood, in Preston county, "Kingwood Tunnel." This excavation through Conn's Summit is 4100 feet, or 1366 yards in length. It was at this point that the company experienced the most mortifying and at the same the most gratifying portion of their journey. A slight fall of earth in the interior of the tunnel on the morning of our arrival prevented the cars from passing through it. The company accordingly left the cars and ascending the hill, passed over to the other end of the tunnel. While in the act of ascending, they had the gratifition of seeing the locomotive at a rapid rate, draw one of the passenger cars up the temporary railroad leading over the mountain, on a grade of no less than five hundred and twenty feet. This extraordinary achievement was accomplished without apparent difficulty. Seven cars were taken over in succession. The surmounting of this extremely steep grade is said to be the greatest steam locomotive achievement ever accomplished. We have just said the detention at Kingwood was the most mortifying part of the journey, because the delay caused by it prevented the arrival of the cars at Fairmount until the very unseasonable hour of 9 o'clock P. M., greatly to the disappointment of the visiters and the inhabitants of the town of Fairmont, who had turned out in full force to welcome the arrival of the stranger visiters.

Descending from Kingwood tunnel by a grade of about 100 feet to the mile for a distance of five miles, passing in its descent Murray's tunnel, 252 feet in length, the road is almost level but still slightly descending. It then takes the banks of Raccoon creek, until it joins Three Fork creek following the ravine of the latter creek, passing the village of Thornton, in Taylor county, about 95 miles from Cumberland. The road crosses the north bank of the Three Fork creek about 4 miles from Thornton, and then pursues its way to its junction with Tygart's Valley river. Pursuing the north bank of the latter stream the new and thriving village of Fetterman is passed. Fetterman is a promising town, 103 miles from Cumberland. At this place the northwestern turnpike crosses the Monongahela, and it is from this point a line of stages will convey the mails to Parkersburg after the first of July next.

Following the windings of Tygart's valley river, on its north bank, and crossing the numerous creeks and rivulets which flow into it, it strikes the Monongahela and crosses it about a mile below its junction with Tygart's, at the mouth of a stream called Pumpkin river. The Monongahela is crossed upon a viaduct 650 feet long, and 39 feet above low water. The track crosses upon a tressel work, which is to be replaced by an iron superstructure of three arches, each of over 200 feet span.

Fairmount is 123 miles from Cumberland and 77 from Wheeling. All the great obstacles to the rapid progress of the work, are now overcome, and all doubt as to the completion of the road to Wheeling, by the first of January next, at an end.

In this connection we give the following extract from some remarks made by the president of the company, Mr Swann, in reference to the financial condition of the company, made at the recent opening of the bid for $700,000 of the mortgage bonds of the company.

The total liabilities of the company, with their road complete at the Ohio river, will be as follows:

Sterling 5's	$3,200,000
Bonds of 1867	1,000,000
Iron bonds	566,666
Coupon bonds of 1875	1,128,500
" " 1880	700,000
	$6,595,166
Add for contingencies, say	500,000
	$7,095,166
Allowance for increase of cars and machinery to accommodate a trade of $4,000,000 of revenue, as per report of general superintendent, over and above former estimates, say	1,000,000
	$8,095,166
Capital stock, including $500,000 subscription of Wheeling, and probable increase to first January, say	9,800,000
	$17,893,166

Interest on this amount at six per cent, would be $1,073,709 96.

In this exhibit is not included the $1,000,000 of the Washington Branch, which is more than secured by $1,032,600 of stock in that road, besides a sinking fund of $244,633 30, which reduces the outstanding indebtedness on this head to $755,366 70. This stock has yielded a dividend of eight per cent for the past year.

The gross revenue of the road between Baltimore and Cumberland for the fiscal year, ending 30th September, was	$1,349,222 75
The probable result at the Ohio river, it is presumed, cannot be less than *double* the amount here indicated, which would give	2,698,445 50
Off one half for expenses would leave net	1,349,222 75

And a surplus of $275,512 79 after paying interest at six per cent upon the entire capital represented in this increased basis. During the first two years after the opening of the road, the expense of maintenance may exceed 50 per cent; but this item should be diminished rather than increased after that period.

If the revenue should be $3,000,000, the annual surplus, after paying six per cent on total capital, would be $426,290 04.

But if the revenue should reach $4,000,000, which the general superintendent, backed by a number of the merchants and business men of the city of Baltimore, has provided for in his recommendation to the board, by so large an increase in machinery and cars, the surplus over and above interest on capital would be $926,290 04, equiva-

lent to more than nine per cent additional on the amount of stock represented.

These results have been stated on an assumed amount of revenue at the Ohio river. Provision has been made for the largest amount indicated. What the result will be is a fair subject for speculation.

The entire equipment of the company, upon the increased basis estimated for, will be—

1st class burthen engines	86
2d " "	5
3d class passenger and freight engines	17
4th class freight engines	19
1st class stock engines	9
1st class passenger engines	3
	139
Passenger train cars, including baggage, express and mail cars, in all	96
Burthen cars of all kinds	2,567
Total	2,802

The cost of this equipment will represent more than two millions of capital.

In reference to the interest of the Main Stem in the Washington Branch, it may be proper to state that it may be estimated at a much higher valuation than the amount of the sinking fund applicable to the one million loan would seem to indicate. The stock of this road is entirely independent of the obligations of the Main Stem, and of course not subject to the same fluctuations. The charter of the Wasington Branch makes it, to a certain extent, a distinct and independent road—and protects its stockholders in the enjoyment of their dividends. This stock would now command a handsome premium in the market, and there is every reason to anticipate that it will continue to improve in value. Whatever excess it would realise then, beyond its par value, from the fact of it being an eight per cent stock, would be so much added to the aggregate capital of the company.

It is also worthy of note, that although the result of aggregate capital stated by me, has been charged with the whole equipment of the road, that equipment has not been represented by stock, nor does it appear in the estimated value of the road, having to a great extent been supplied out of the earnings of the road from time to time. When the present requisition of the General Superintendent shall have been met, the market value of the equipment of the company, will be larger by upwards of $2,000,000, as heretofore stated; and as soon as the debt, which may now be incurred for the increase, shall have been paid off, the stockholders will have the value of this equipment *added to their substantial capital.*

It will be seen then, that if the gross revenue of the company, *is only doubled* at the Ohio river and the expenses of the road should not exceed 50 per cent, the surplus to meet the floating obligations which may be incurred for the increased equipment recommended by the general superintendent, over and above interest at six per cent on debt and stock, supposing them to be limited to one two and three years would be $275,512 79.

If the gross revenue is $3,000,000 the surplus applicable to this purpose would be $426,290 04.

And if it should reach the amount estimated for, say $4,000,000, then this surplus would be $926,290 04, or nearly equal to the whole cost of the additional equipment.

This exhibit then, apart from other considerations, would incline me to a temporary use of the company's credit if it be practicable, rather than incur any farther permanent debt beyond what may be necessary on the completion of the road, should the chief engineer exceed his estimates, or other contingencies arise, which may have been found incident to all works of similar magnitude.

I am frank to say however, that I am not wedded to any settled line of policy upon this subject; and will most cheerfully yield to any more desirable plan which would better accomplish the object we have in view. If I did not acquiesce in the judgement of our business men as to the necessity of this large increase of power. I would certainly not give my sanction to so heavy an expenditure; and the probable contingency of a revenue of $4,000,000, or even $3,000,000, would justify the recommendation which I now make of a temporary use of the company's credit until the more matured results of the future shall have been fully developed.

Estimating the total amount of capital invested in the road west of Cumberland as before stated, the cost of that road from Cumberland to Wheeling now under construction, would be, including its proportion of the large equipment estimated for, and graded for a double track—about $40,000 per mile.

Unprecedented Speed.

The telegraph express train from New York to Buffalo on Tuesday, has made the run in 14 hours and 25 minutes—within five minutes of the time table mark. The actual running time, exclusive of all stops, was 11 hours and 29 minutes!—distance 472 miles—an average of one minute and twenty seconds to a mile on the whole distance!

The distance was "done" as follows:

	Miles.	Hours.	Min.
From Chambers st. N. Y. to Albany	144	2	52
Albany ts Schenectady	17		32
Schenectady to Utica	78	2	
Utica to Syracuse	53	1	10
Syracuse to Rochester	104	2	59
Rochester to Buffalo	76	1	56
	472	11	29

The Buffalo Republic says:

The train stopped half an hour for dinner at Utica—half an hour in crossing the Hudson river and from five to seven minutes at Syracuse, Rochester and Batavia. Passengers by this train left last evening by the southern Michigan line of steamboats for Chicago, and by other boats for Cleveland, Cincinnati and Detroit. The passengers for Chicago will be set down in that city this evening. By this arrangement passengers can take breakfast in Buffalo, dinner in Syracuse and tea in New York, and vice versa going through by daylight. We venture to say a greater feat has never been accomplished in this or any other country. When the straight line shall be finished a saving of some two hours at least will be made in the card table.

A correspondent inquires of us the names, and builders of the engines by which the above time was made. Will some of our friends on the line inform us?

Ohio and Mississippi Railroad.

We are gratified to learn that the contracts for the grading and masonry of about 86 miles of the road extending from Cincinnati to the intersection with the Jeffersonville railway, have been given out as follows:—Sections No. 1 to 9, except Miami bridge, to Philips, Brintnall & Co; 10, 11 and 12, to A. & J. Dawson; 13 to 17, to Moore Lee & Co.; 18, to M. G. Norton & Co.; 19 to 22, to Buel & McGrady; 23 to 27, to Harris, Black & Co.; 28 to the intersection with the Jeffersonville railway, to Peter C. Ward; Miami bridge masonry to Moore, Lee, & Co.

The above are well known contractors of energy, experience and ample means; and we have full assurances that large forces will in a short time be placed along the line with a view to a vigorous prosecution of the work.

The propositions for the western end of the road, exrending from St Louis to Salem are now under consideration and the work will be allotted in a short time.—*Cincinnati Gazette.*

Population of the United States at Various Periods.

	White.	Black.	Total.
1714	375,750	58,850	434,600
1727	502,000	73,000	580,000
1750	1,040,000	220,000	1,260,000
1760	1,385,000	310,000	1,695,000
1770	1,850,000	462,000	2,312,000
1780	2,383,000	562,000	2,945,000
1790	3,172,464	757,363	3,929,827
1800	4,804,489	501,436	5,305,925
1810	5,862,004	1,377,810	7,239,814
1820	7,866,569	1,771,622	9,638,191
1830	10,537,378	2,328,642	12,866,020
1840	14,195,995	2,873,458	17,069,453
1850	19,619,366	3,626,935	23,246,301

British Provinces.

The New Brunswick Times states that the Government of that Province have accepted the proposition of Messrs. Jackson, Peto, Betts, Brassey, Locke, etc., the terms and manner being the same as stated a few days since, with one exception—the company are to get 5 miles of ungranted land on each side of the railway. If the company should determine on a line from the Bend, or from Shediac, to Miramichi, the contractors will build it on similar terms to those of the E. and N. A. line.

The constructors are to send out Engineers with as little delay as possible, and when their plans have been completed, they are to be submitted to two Engineers,—one on behalf of the government, and the other on behalf of the company—when if the estimates shall be considered too high, the plans are to become the property of the company, and the company are to pay the expenses of the engineers, the Executive government pledging themselves to guarantee the payment of such expenses.

If the company have seven directors the Government shall have three, or if the former nine, the latter four.

New-York.

Canandaigua and Niagara Railroad.—A correspondent of the Advertiser gives some particulars concerning the progress of this road that may be of general interest. It seems to be the purpose of the company to carry it on to its destination energetically and without much noise. Two-thirds of the distance from Honeoye Falls to the Genessee river is already graded,—the ground having been broken six weeks since,—and about two hundred men are engaged upon the work. The piles for a bridge over the river, 400 feet in length have been driven, and the foundations and abutments are going forward. This bridge is to have a span of 180 feet. The abutment pits are sunk 25 feet beneath the level of the flats. Below this about 100 piles, under each abutment, are driven to a depth of 20 feet further. The piles are then capped with heavy timbers, the interstices filled up with broken stone, and covered with a platform of three inch plank. On this plattorm the abutments, composed of heavy blocks of stone, are to be raised about thirty feet in height. The other pile bridges, each 120 feet in length, and a truss bridge of 240 feet are to be constructed between the river and the canal, making a total water way of 1060 feet.

Genesee Valley Railroad.—A meeting of the directors of this road was held at the Eagle hotel yesterday afternoon and evening. The facts presented were highly encouraging to the friends of the enterprise.—Subscriptions, bona fide and conditional to the amount of $594,500, were reported—within $5 500 of the sum necessary to ensure the building of the road. Of this amount Genessee subscribes $105,000, Mt. Morris, some $50,000, and other towns in the valley less sums. In the city, about $100,000 in private subscriptions were reported. It requires about $30,000 additional bona fide subscriptions to make the thing sure.

There would seem to be no difficulty in raising that amount. Mr. Wadsworth, president of the company and others, advised that work should not be commenced until the full amount of money was raised, and the company should proceed surely, and let the contracts in small sections for cash. He had seen so much money wasted by beginning too soon, that he felt desirous not to have matters precipitated. The Conhocton road was an example of how cheap a road may be built for cash, and he desired to have the same course pursued here.

Delegates were present from Angelica, Cuba and Smithport, Pa., who gave the best assurances in behalf of the people in those places. We shall recur to this subject again.—*Rochester Democrat May 25th.*

Iron Mountain and Lake Superior Railroad.

The *Lake Superior Journal* says: "H. B. Ely, Esq., of Cleveland, Ohio, with half a dozen engineers, passed through this place (Sault Ste. Marie,) a few days ago on his way to Marquette and the iron mountains. The contemplated railroad between these two localities is to be surveyed and the work commenced as soon as possible. The length of the road from Lake Superior at Marquette, to the iron mountains will be from twelve to fifteen miles on a very regular ascent of about 50 feet to the mile. The road will prove of immense advantage to all engaged in the iron business at this point, and a profitable investment for the enterprising stockholders of the road. We have long considered such a road as absolutely necessary to the success of the iron manufacture on this lake, and all connected with this business will rejoice at the prospect of its speedy construction. With this road and a canal at this place, the iron business will immediately grow into an importance that will be felt by all the lake country, and we confidently believe that within three years after the completion of these works, the iron trade alone will require more shipping than is now employed on Lake Superior."

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS of the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES. { Late Davenport, Bridges & Co., Fitchburg, Mass.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR—I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintenden
Motive Power for N. J. R.R. and Trans.

Notice to Contractors.

PROPOSALS will be received until 10th July next, for the filling and masonry of "Whetstone," "Arms" and "Vinings" Bridges. Bids for each bridge, earth work and masonry will be considered separately; but should a bid for the whole work (and from responsible parties) be more favorable than separate bids, it will be considered. The work to be commenced immediately, and to be prosecuted under direction of the General Superintendent, so as to insure its completion within one year from the date of letting. The bridges are in a high and healthy section of the country between Atlanta and Marietta, and will contain about 400,000 yards of earth, and 3300 perches of masonry.

Any information relative to the work can be had by applying to the undersigned, or to G. G. Hull, Resident Engineer.

WM. M. WADLEY,
General Superintendent.

Western and Atlantic Railroad,
Atlanta, Ga., June 9, 1852.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE, Chief Engineer.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

To Contractors.

ENGINEER'S OFFICE, S. C. R. R. COMPANY,
June 16, 1852.

SEALED PROPOSALS will be received by the South Carolina Railroad Company at their Office, in Charleston, until the 10th of July next, for building Five Stone Piers and Two Abutments for a Bridge across the Savannah River, at or near the City of Augusta, the Contractor furnishing all materials, and of the best quality.

The plans and specifications may be seen at the Railroad Office in Charleston, or with W. J. Magrath, Esq., the Agent at Hamburg.

Any further information will be obtained on application to the President in Charleston, or to the undersigned at Aiken.

GEO. W. LYTHGOE,
Chief Engineer and General Sup't.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH.
Sup't Trans. & Motive Power So. Ca. R. R. Co.

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction

F. C. ARMS,
General Superintendent.

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.
June 2, 1852.

Notice to Contractors.

LEXINGTON AND DANVILLE RAILROAD.

SEALED proposals for the construction of this road will be received as follows:

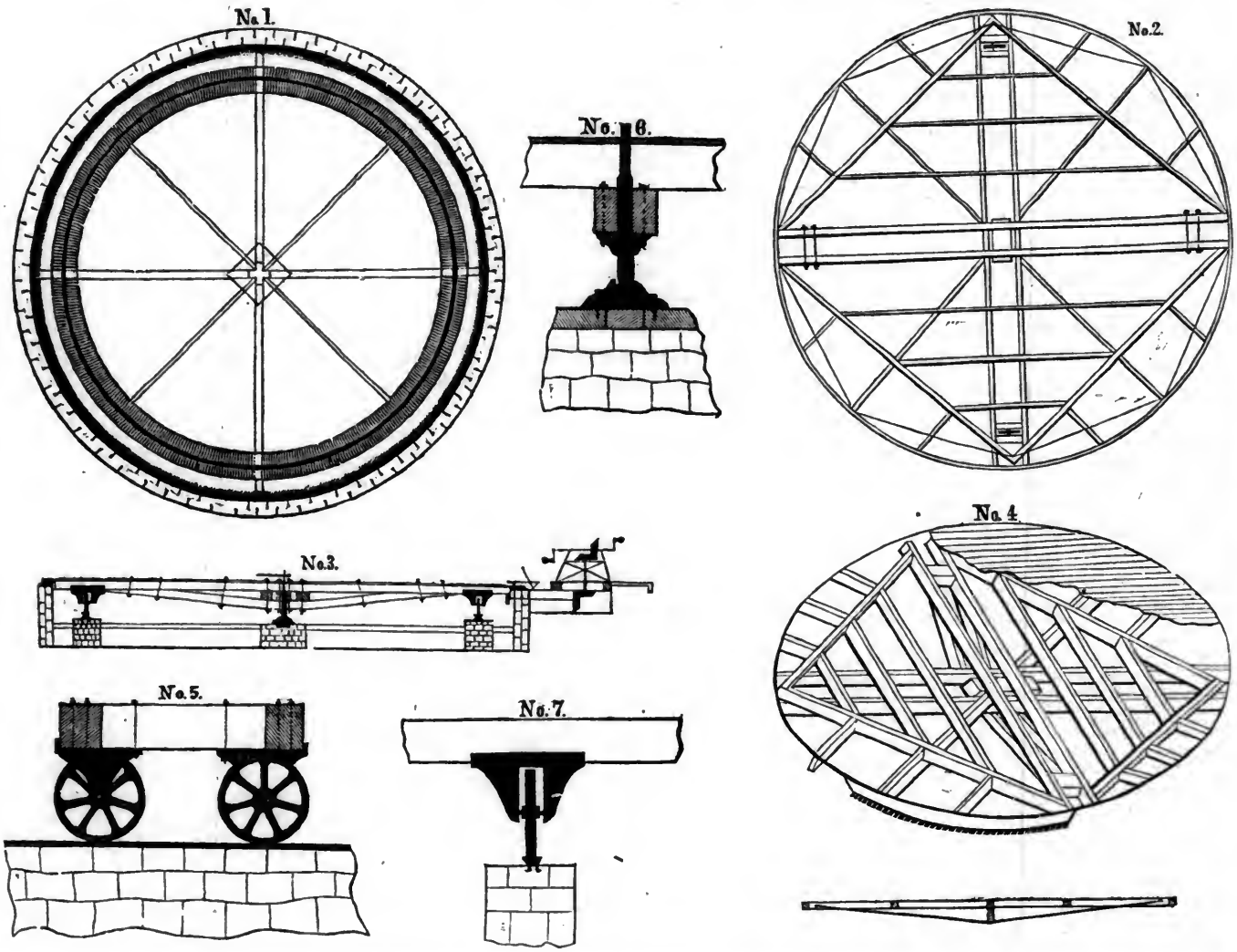
At the Office in Lexington, from 1st to 15th of July, for the grading and masonry of 12 miles of the road between Lexington and Nicholasville.

At the Office in Lexington and at the office in Danville, from the 1st to the 15th August, for the grading, masonry, and bridges of the remainder of the road (22 miles) from Nicholasville to Danville.

Plans, profiles, specifications, &c., may be seen at either of the offices within the times specified.

GEORGE C. SCHAEFFER,
CH. ENG. LEX. & DAN. R. R.
Danville, Ky., May 28, 1852

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies, Contractors etc. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are its *cheapness durability* and *capacity*. It is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of $5 a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the band and track walls; centre pier, cross-timber for bolting the step of pivot to the track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J., or at Wooster, Ohio.

June 19th. D. H. CARHART.

New York and Canada.

 The attention of Merchants, Tra 

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 28] SATURDAY, JULY 10, 1852 [WHOLE No. 847, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

English View of American Securities.....433
Exhibit of the Springfield and Mansfield Road.437
Michigan Southern Railroad.....438
Atlanta and Lagrange Railroad.....439
Steamboat Line between N. Y. and Quebec...439
Railroads in the Provinces.....440
Cincinnati and Charleston Railroad.....440
East Tennessee and Georgia Railroad.....440
Rome and Watertown Railroad.....440
Rutland and Washington Railroad.....441
Wilmington and Manchester Railroad.....441
Stock and Money Market.....441
Terre Haute and St. Louis Railroad.....441
Marietta and Cincinnati Railroad.....442
Peru and Indianapolis Railroad.....442
Boston and Providence Railroad.....443
Indianapolis and Bellefontaine Railroad.....443
Great Western Railroad.....443
Rochester and Niagara Falls Railroad.....444
Brunswick and Florida Railroad.....444
Wabash Valley Railroad.....445
Muscogee Railroad.....445

American Railroad Journal.

Saturday, July 10, 1852.

English View of American Securities.

An amount equal to £1,000 000 sterling of the bonds of an American company; called the Illinois Central Railroad, has just been introduced upon the stock exchange, and the greater part of it is understood to have been already subscribed. The railway has been commenced, and its length is to be 700 hundred miles, extending through the entire state of Illinois, and connecting all the great branches of travel from Canada to the Gulf of Mexico. Its cost is estimated at $17,000,000, or about £4,500 per mile, and this is to be raised by an issue of six per cent bonds, of which $12,000,000 are to be taken in the United States, and $5,000,000 here, such bonds being secured by the line itself, and by 2,500,000 acres of land granted by congress to the state, and by the state to the company. They are to be paid off at par in 1875, but may be redeemed at an earlier period at 20 per cent premium. Concurrently with the issue of the bonds a nominal share capital also of $17,000,000 will be created by the company, and, as the promoters rely that before 1875 the sales of the lands and the profits of the line will have discharged the whole of the bond debt, the road would then become their property without its having cost them anything.

As an inducement, however to the takers of the bonds, the option is given them of participating in this prospective reversion. They may accordingly if they choose, become shareholders to the extent of one-half the amount of their bonds. in which case supposing the outlay for the line should not exceed the contemplated $17,000,000, every holder of a £100 bond, after he has been paid off in 1785 will still possess £50 stock in the line for which no payment will ever have been required. Of course the entire value of the scheme thus submitted must depend upon the correctness of the estimates regarding the ultimate value of the lands granted by congress, the cost of the road and its prospects of traffic, and lastly the constitutional validity of the arrangements under which the whole plan has been formed, and in which the Federal government, the State government, and the company have all been parties.—With regard to the first two points enough is known of the general results of similar works to enable persons conversant with what has taken place during the last fifteen years in America to arrive at a distinct though not a positive opinion; but the chief reliance must still be placed upon the standing of those by whom the proposals are introduced. In this respect both as regards the directors in the United States and the trustees and agents in England, there is enough in the commercial position of the parties to excite full confidence that the undertaking is believed to be intrinsically sound; as respects any questions of constitutionality, it is to be mentioned that the company is a New York one, and that, owing to its lands having been granted by congres, the tribunal to whose jurisdiction it would be amenable is the Supreme court of the United States, and not the Legislative Assembly of Illinois. If the reverse were the fact, it would be necessary to protest aaginst the introduction of any of the securities of the company on this side. Although Illinois has never repudiated her public obligations, she is still a defaulter to a heavy extent, and at one time she passed an arbitrary law imposing confiscation in case her creditors should fail to register their bonds within a certain defined period. Happily since that date a different tone has been manifested, and a full discharge of every liability is ultimately to be looked for; but although the construction of the present railway, by the immense impulse it will give to the prosperity of the state, will accelerate that conclusion, it will take many years of punctuality to warrant, as far as her government is concerned, any revival of former confidence.

In touching upon American railroad bonds of any description, it is essential to add a general caution. Like those now referred to, there are many descriptions which are perfectly legitimate objects of investment, the extent of any speculation that may be involved in them being fairly stated at the outset. At the same time it is unquestionable that active attempts have been carried on for months to introduce upon the London and Provincial markets a large mass of these securities, which are likely o prove in a great degree worthless. and which would find no countenance in New York, except among the most notorious speculators. By these parties they are taken at rates of discount which show that, like doubtful bills, they are calculated at an average—some may be paid and some dishonored, some may be got rid of in England, some may be sold at home during a temporary rise, and others may be advantageously compromised in the ultimate litigation that awaits them. It is, therefore, easy to understand that for the habitual gamblers that abound in every commercial city they have powerful attractions. That they should find purchasers, however, among foreigners seeking a quiet investment is almost incredible. The only explanation lies in the influences that are employed to effect the object. Iron-masters, for instance, are tempted to receive them in payment for orders, on which they realize enormous profits, and once introduced, it follows that every plan is put in motion, by means of larger per centage to brokers and others, to insure their diffusion among the public, who at last by the force of recommendations, which increase in confidence in proportion as the nature of the original negotiation is lost sight of, become the purchasers at par of things which probably fetched at starting not more than 50 or 60 per cent. of the amount they purport to represent.

The system of towns and counties pledging their credit for the payment of these bonds is merely a revival of the method which, in 1837, was pursued by the various States, and it will inevitably have a similar termination. Those who may suffer, however, must blame themselves alone. If they would consult any leading American houses, they would hear the opinion entertained of these documents among the respectable portion of the commercial community in the United States; and if they have neither opportunity nor inclination to make such inquiry, they are not to charge the result upon the merchants of that country, any more than the people of New York could reproach us if they were to accept consignments of gold mining shares in payment for cotton from the least reputable of our London adventurers. If capitalists wish to participate in American enterprise, the only national method is to become joint shareholders in undertakings that have a definite value in the American markets. If any loss arise, they can then at all events feel satisfied that it has not been all on one side. But to take bonds of which they practically know nothing, from companies of which the shareholders, instead of being in the same boat, may deem it profitable at any time to treat them as adversaries, is a proceeding so calculated to invite disaster, and to injure instead of promoting a healthy co-operation between the two nations, that it will be impossible when the time shall arrive to feel regret in witnessing its penalty.

The following is from a recent number of the London Globe:

Prudent men, who know the dangers of commercial prosperity, are beginning to look for the first signs of a coming crash in the United States. Its

invariable forerunner—a general extension of credit beyond what a due regard to the casualties affecting the fulfillment of all commercial engagements would seem to warrant—has been broadly apparent for some time. The occurrence of some such casualty of sufficient magnitude to produce a movement of distrust in any one of the great centres of credit, is alone wanting to bring about a close comparison of pending engagements with the means of meeting them. The result of such a comparison made, as it would be, in a spirit much less sanguine than that in which many such engagements have been, and are being entered into, would probably end in marking, pretty accurately, the present elevation, if any, from the line of legitimate and prudent speculation.

It is not our purpose to excite alarm, but to forestall it. It is to the want of such a comparison as we allude to, made in time, that pecuniary difficulties, individual and national, are notoriously and almost invariably due. Whence—more especially as nothing is yet in view indicative of imminent danger, or of difficulty in withdrawing gradually and without loss from ventures not soundly based—such present discussion of the subject as may prompt timely attention, and so avert any occasion for alarm, is now, more than at any other time, likely to prove profitable. And our interest in the commercial condition of the United States is more than sufficient to justify its careful examination here.

In some respects the monetary speculations of the United States resemble those of the same country prior to the disastrous panic of 1837; but they have a character of their own, distinctive enough to deprive the particular precedent of any special value as a warning. The native produce of the country has lately been both abundant and in good demand. The consequent rapid accumulation of capital in the hands of an enterprising people, in a country affording extraordinary facilities for enterprise, and especially prompting to forms of investment in which capital becomes fixed, and not susceptible of ready conversion, must always be a source of danger. The reason is apparent not only in the uncertainty attending all attempts to bring the future within the range of present calculation, but more striking in the aptitude of individual speculators, when looking beyond the means within their own command, to count upon funds already reckoned upon by others.

As soon as a promise to pay is made, the fulfilment of which is not probable there is danger.—But speculation does not proceed far before promises are made which are not eventually intended to be fulfilled. The speculator in shares in a new company, for instance, often takes more than he hopes to pay up, hoping, instead, to sell at a premium to somebody with more capital. But larger capitalists do not wait to take up the ventures of the smaller in numbers great enough to render such hopes reasonable; and not being found when looked for, or pressed by numerous competitors for their aid, the too sanguine originators of the speculation, or those who, with means similarly defective, have been induced to take their places, are compelled to stay expenditure which on the faith of its consistence with the resources of the country had come to be regarded, as *pro tanto*, a proof of prosperity.

At the end of the last year the railways in use in the United States—at the end of twenty years from the time when their construction there was begun—had a total length of 10,814 miles, and we are told that those now in course of construction extend to 10,900 miles. Railways in America are made quickly as well as cheaply. Being made quickly, the capital required for the construction is rapidly called up; and it is, therefore, anything but unreasonable to assume, from these figures alone, that the capital required to be sunk in railway works and plant within the next three years—and the sinking of which cannot be interrupted except at a loss, the mere contemplation of which would produce a panic in the share market—is equal to the amount so spent during the preceding twenty years. And this, assuming that the lines already in progress of construction are alone proceeded with, and no others begun till they are completed; an assumption not consistent with the circumstances which have led to this enormous extension of works yielding nothing, though promising much.

We copy the above from two leading English journals, for the purpose of giving our readers the English view of our public works, and of the safety and value of the securities issued for their construction; and for the additional purpose of enabling us better to correct the great errors into which these journals have fallen.

In writing for the foreign reader, we have in the outset a great difficulty to contend with: and this is, to make him understand and appreciate the condition of this country, as far as its productions, markets, its topographical and geographical features are concerned. He applies his modes of thinking, drawn from his own experience and the circumstances by which he is surrounded, to this country; and in this manner makes up his opinion of a given case, upon data which have not the remotest connection with the subject matter under consideration.—Thus, an Englishman is told that we have already 12,000 miles of railroad in operation in this country and as many more in progress, and he at once sees bankruptcy and repudiation staring us in the face. And why? Because one-quarter of the same number of miles of railroad that we have and are building, half-ruined England, from the losses suffered by them, and the same must be the result here. Again, 24,000 miles of railroad implies a vast number of speculative schemes, got up, to use the language of the Times, by *gamblers*, without merit, or pecuniary foundation, merely for the purpose of speculating in their stocks and securities. In Great Britain, 7,000 miles of railroad are sufficient to meet the wants of their people; the same number, therefore, are equal to *our* wants. All beyond this extent are schemes that never should have been started, and which must end in bankruptcy.

There are speculators, gamblers, in every legitimate branch of business in the community. This is always so. In the vast number of railroads in progress in this country, we must expect, therefore, to find some speculative projects. Such, no doubt, *do* exist; but from a pretty extensive acquaintance with the railroad projects in the United States, we can say, that where such projects do exist, they are got up by speculators residing in our cities, for the sole purpose of making money in their shares and bonds, and *not* by persons residing in the country, and who are more interested in the *results* that railroads accomplish, in diminishing the cost of transportation, and in increasing the value of their property, than in any income they may produce. The schemes that come into market for money, those from Ohio and Indiana for example, and we take these States as representatives of the whole country, are *not* speculations. Some of them may be premature, or may not come up to the expectations of their projectors, but such mistakes are those arising from a lack of good judgment, and are not attributable to any design to deceive. Such are the facts; facts which can be readily sustained by the best evidence in the world, that of experience, as we will proceed to show.

We have, we will estimate, 24,000 miles of road in operation and progress. If it can be show that we need a larger extent of line to meet the wants of our people, the presumption is, that the 24,000 miles which are soon to be in operation, are the proper works to meet these wants. If so many miles of railroad are needed, then it is just as improper to charge the roads which make up this aggregate with being speculations, as it would be to make a similar charge against ship building, when the demand for vessels exceeded the supply. Until this state of things is reversed, the business is legitimate. Let us illustrate this point. The State of Georgia has 1,000 miles of railroad in operation, every mile of which is doing a very flourishing business, which yield a net income of at least 8 per cent upon their entire cost. So marked have been the favorable influences of railroads in that State, in promoting the welfare of their people, and in advancing the value of every kind of property, and at the same time in securing the stockholders a good income, that this State is generally referred to by way of illustrating the value of these works. All admit that the Georgia railroads are good projects, and should have been built. Now, what is good for Georgia, certainly must be so for North Carolina, Kentucky, Tennessee, Alabama, Mississippi, Louisiana and Missouri, which on an average have an equally dense and wealthy population, greater natural resources, and are further removed from markets; all of which have not so many miles of railroad as the single State of Georgia. Here, then, is an admitted field for 6,000 miles of new road. But Georgia has not half so many miles as she really needs, because not one-half of her population nor territory are within convenient distance of them. She needs at least 2,000 miles, to secure to all her inhabitants the advantages now enjoyed only by a portion. This enlarges the number of miles required by the above States to some 12,000; equal to the whole extent in progress in the whole country.

So in the north. There are 1,250 miles of railroads in Massachusetts, costing $50,000 to the mile. In the aggregate, this immense sum has proved a good investment, yielding 6 per cent net, and is steadily improving. At the same ratio per square mile, New York should have 7,200 miles of railroad, or nearly three times the amount we have in operation and progress; Pennsylvania should have an equal number, or four times her present extent; Ohio three times; and that portion of the United States, in which railroads are in progress, and embracing an area of over 1,000,000 square miles, 167,000 miles of railroad against the 24,000 as above stated. It is true that Massachusetts is more densely populated than any State in the Union, but at the same time she is probably inferior to all in natural resources, and vastly below the general average; and there can be no doubt that the States named will need an equal number of miles of railroad, compared with their areas, long before they can be constructed.

We therefore need a much greater extent of railroad than we have. Such being the fact, those in progress cannot, in the aggregate, be charged as *speculations*. They are LEGITIMATE enterprises, so long as they are needed.

A few words in reference to the necessity that exists for these works. We are a country of vast productiveness, without markets in the great producing regions. All surplus, therefore, must be forwarded, frequently a great distance, to find a market. By means of railroads, produce can be profitably forwarded a thousand miles to market, that would not bear transportation a hundred miles over an ordinary western road. Railroads and markets, therefore, mean the same thing. A very large amount of the beef cattle consumed in New York comes from the western part of Illinois, by railroad, a distance of over a thousand miles. It would not begin to pay to drive cattle on the hoof this distance. Without railroads, the great mass of our people are without markets. With them, every man has a market at his door all the

year round, for all he can sell. It must be borne in mind that over a greater portion of the country, railroads can be built at a cost not exceeding $20,000 per mile, which places them within the means of every well settled section. We trust the above remarks are sufficient to convince the most skeptical, that our roads are not speculations; that they are legitimate projects, being needed to meet the commercial wants of our people, and are sure to pay a fair income upon their cost.

So long as our roads pay, there can be no danger from over-construction. But the direct revenue to be derived from them is, in a *national* point of view, the least of their advantages. It is safe to say, that our railroads have added more than 500 per cent of their entire cost, to the aggregate property of the country. A farmer living in the interior of Kentucky, for instance, and owning 500 acres of land, may be worth $5,000. Run a railroad through his farm, and he will by this operation be made worth $25,000. In one case, his surplus, beyond his immediate wants, was nearly worthless. It had no *commercial* nor marketable value. With a railroad, everything he can raise has a ready sale, and the new demand quadruples the amount of his surplus. The railroad has created his wealth. What it has done in the case supposed, it does for the whole community. Every railroad we build absolutely increases our available or *cash* means. These works render our resources available; so that, instead of having a tendency to cause a scarcity of money, or to bring on a financial crisis, they constitute our greatest safeguards against such evils. As well might a farmer be impoverished by opening a road from his barn to his wheat field, or to any other part of his farm.

That we are building 12,000 miles of railroad is no ground for alarm, if it can be shown that so much is needed, and that the projects in progress are legitimate. Such we contend, and we believe, we have conclusively shown to be the fact. It is certainly very singular, that the very article that brings these indiscriminate charges against our roads, should be an elaborate puff of the greatest railway *speculation* ever started in this, or any other country. The sweeping charges against all other projects in progress, were introduced as a sort of *back ground* to bring the Illinois Central more conspicuously forward. Now we do not deny that this project may prove a very profitable speculation. Success in every speculation is always assumed. We waive this point altogether. But that it is purely a speculation, and has all the hazards of one, there cannot be a doubt. What are the facts in this case. This company have a grant of from Congress to the amount of 2,500,000 acres, worth at government prices $3,333,333, At these prices, there is an abundance of equally valuable land to be had. The company estimate the cost of the road at say, $17,000,000. They estimate the value of the lands at $26,000,000! some $9,000,000 more than the cost of the road. Such a prize as this was not allowed to come before the public for stock subscriptions in the ordinary manner, but the few persons holding the charter and grant decided that they would create only $1,000,000, stock, and raise the $17,000,000, the cost of the road, by an equal amount of bonds. Allowing their estimates to be correct, and that they paid in the $1,000,000, they would make a bonus of $25,000,000! It will be borne in mind that the estimated value of the lands might with equal propriety have been fixed at $50,000,000, as at $26,000,000. The value placed upon them was such as suited the objects of the corporatiors.

These facts, we think, show the speculative character of the project. But there is a still better test. The company adopted the route that would give them the greatest quantity of land. Now we have no hesitation in saying that the routes selected do not coincide with the great routes of travel and commerce of the country, neither do they hold out such inducements to local traffic, as would justify their construction in view of such business. A road never could have been built upon the route adopted, upon their merits alone; and no sensible business man would have put his money into this road without some other inducement than the income to be derived from its business. This we hold to be the true test between a sound and speculative project. The former is built upon its own merits; the latter from incidental advantages *anticipated*. In this latter category is to be placed the Illinois Central. The road may develop a business, and may pay, but all this is yet in supposition. The business necessary to sustain the road does not now exist That it can never become a great through route for the trade of the country, is to our minds clear. The great through route traversing the State north and south, must be the line between Chicago and St. Louis, of which the Central forms no part. This must always be a great line of travel. The great routes of travel in Illinois must be from east to west. Travel going south, to Mobile and New Orleans for instance, will fall into the Wabash valley taking Nashville, Tennessee, on its way.

We have been thus explicit in presenting the true character of the Illinois Central project, because it has been taken up by the London Times and heralded to the world as the great legitimate railroad, in the securities of which any person may luxuriate with entire safety, and is made the occasion of a general assault upon all our other securities, and upon our railroad system. The *exception* here is made the rule. The person who furnished the data for the article, must have known this fact. He is *particeps criminis* in the transaction. Now we do not feel at all disposed to stand by in silence, and see a fierce attack made upon what we believe perfect and legitimate securities, under cover of a mammoth speculation. The tendency of the article must be injurious in every way. It will be read by every capitalist in Europe, and, very likely, be believed by a great number of them. We say nothing against the project, but we protest against this mode of going in for popular favor, by depreciating its kindred and more legitimate projects.

With regard to city and county subscriptions to railroads. We are opposed to such subscriptions, when railroads can be constructed without such aid. The objection is a very obvious one. Railroads are commercial enterprises, and should always be treated and managed as such. Commerce is not, and should never be made one of the objects of municipal organization. Still there are very strong reasons in the justice of the thing, why the *aggregate* community should assist in these works, as well as on the score of economy. In the first place, every person in such community living near a railroad, is benefitted nearly in proportion to the amount of property he possesses. It is just, therefore, that the benefit and burden should correspond to each other. When a railroad is built by individual contributions, a few make all the sacrifices, while the great mass reap the benefit. Now it often happens, that these who are the best able to contribute toward a railroad, do the least. They have an abundance already, and the road might not add to their means of comfort or pleasure; but as a general thing, a still stronger motive holds them back. They believe the road will, and must be built, whether they take hold or not, and that they can receive all the advantages to be derived from it, without being compelled to make any sacrifice, or incur any risk. The only way to make such men contribute to an enterprise, is to tax their property by the general voice of the community. When, therefore, an entire community are equally benefited by a railroad, the most equitable mode of raising the necessary means is, to make every person to contribute according to the extent to which he is benefitted.

Another reason why this *community*, as a body, should take stock in, or loan its credit to, a railroad company, is the fact, that money can be borrowed upon much better terms, upon such credit, than upon that of a company, composed of private individuals. In this country at least, the condition of the aggregate body of our people, such as a city or county, is certain to be worth more next year than this, and so on indefinitely. Not so with individuals. Any number of individuals connected with a road may have ample means this year, and become bankrupt next. The same amount of property may be in the community, but it constantly changes hands. Now a security, which is a lien upon the whole of such property, however held, is much more desirable, than one that rests upon the contingency of one or more persons remaining solvent for a series of years. Experience fully confirms this general statement. Take the city of Albany for example. She subscribed $1,000,000 to the Western railroad. This loan sells from 10 to 20 per cent. higher than would the bonds of what is considered a perfectly safe company, bearing an equal interest. The difference in the market value of these securities is so much saved to our enterprize. As a general rule, it may be stated that from 10 to 20 per cent. can be saved by use of the bonds of a municipal corporation, over those of an individual, or company of individuals; and were there no objections to such a mode of providing means for railroads, it would certainly be the best, as well as the most equitable. These objections we propose to examine, as well as to show under what conditions such credits may be used with entire propriety and safety.

As already stated, railroads should always be treated, as they really are, *commercial* enterprises. Although there may be instances where their construction is justified in anticipation of a prospective business, which *they* are to *develop*, the safe rule, and one by which our people should be governed, is not to construct them upon routes where an existing traffic and population do not warrant the belief of a profitable business. This is our only safe guide, and what is more, a careful adherence to it will leave us a plenty of projects for all the money we can raise. The moment we depart from it we are without guide or compass. The best test of the ability of a community to sustain a road, is their capacity to furnish a portion of the means for its construction. Where they cannot do this, the project is premature; and where they will not, possessing sufficient means, is good evidence that they are not up to the proper management of such work, and that it would prove a failure if accomplished. We regard projects generally as speculations, and unsound, where one-half or nearly that amount, of their cost, is not furnished by parties immediately interested. Such an amount demonstrates the

strength of the route. It may be regarded as the opinion of persons possessing the best means of knowing, whether the scheme will be profitable or not. It is also a guarantee to the lender, that when a company have so much at stake, they will take good care of their property. We believe, therefore, that no better security can be made than that created by a mortgage of a road for $10,000 per mile, the cost of which is $20,000 per mile. In whatever light viewed, here are all the conditions and guarantees of safety.

Now it may happen that individuals, composing a *community*, may be willing to pledge the faith of this community to a project, the success of which they would not guarantee by a private subscription. The mode of reasoning is this. The individual says, I think this project may turn out well, but I am not so confident of this, as to be willing to hazard my private property. I am willing to encourage it as a member of the *community*, and bear my proportion of the loss, in case of "failure." In this manner there is some danger that an unwise and unprofitable project may be started and pushed forward even to completion, through the support given to it by a municipal corporation, that never should, and never would, have had an existence, if left entirely to private enterprise. There may be such instances with us, though there are none such now in our recollection.

But another and still stronger reason why corporate bodies, including our state governments, should not become parties to our roads, is the danger of bad management when entrusted to such organizations. Neither States, cities, nor towns, were constituted for *commercial* purposes. It often happens that neither commercial nor business men are placed at the head of these affairs. These often fall into incompetent hands; but this is not all. No person at the head of a city or State, can be expected to feel the same interest in its prosperity, as he does in what more immediately concerns him. He will not exercise the same supervision and vigilance in the one case as the other. If a loss should be sustained, he feels that what he suffers in consequence must be very slight indeed. His time can be more profitably employed in his own business, than in looking after those of the company with which he may be thus indirectly connected.—Hence he is liable to sacrifice the public, to his private interest.

A still more potent reason for the failure of enterprizes undertaken by the aggregate community, is the temptation that is held out to unfaithful service, and to speculations. Every person employed upon a public work may have a real or fancied interest, which is opposed to its real welfare. The amount of his own contributions involved in the faithful discharge of his duty, may be very small, compared with what his position enables him to make, and justly perhaps in his own eyes, out of the public. The result usually is, that works directly undertaken by a municipal corporation, and superintended by its officers, chosen perhaps with entirely different objects, prove often disastrous failures.

In confirmation of these remarks it may be stated as a matter of common notoriety, that a given sum of money expended by the general government, will not accomplish one half so much work as the same amount in the hands of individuals, owing to that want of personal interest and incompetent management to which we have alluded. For a community to undertake a work implies a loss. So universal is such a result, that it is beginning to be felt in this country, at least, that all our enterprizes, such as railroads, should be under the exclusive management of individuals who have a large personal interest in the work of which they have charge.

While all this is very true, the credit of municipal corporations, and of States, can be very safely and properly used in the construction of railroads, under certain limitations, the most important of which is, that in all enterprises, private means should first furnish a sufficient basis for such credit, in an amount of stock capital actually paid up, to render such basis perfect security for loans. This course throws the burden in the outset, where it belongs, upon individual enterprize. It prevents speculative schemes from starting up. It retains the management of the roads in private and competent hands, and uses the credit of a city or State in the best and most efficient manner, without involving any of the evils which we have pointed out. Such credits should be placed in the light of a mortgage upon the road, and then there should be such an amount of previous capital, as to preclude any necessity of an interposition on the part of such city or State in the work.

Such should be, and such is, as a general rule, the character of our corporate subscriptions to railroads; and as such, they are properly issued, and are in fact, the very best securities offering in this market. As they are a credit for the benefit of the road, the company to whom they are issued, almost without exception, guarantees the payment of principal and interest of such loans. They have therefore, not only the security of the property of those composing the community voting them, but of the railroad. The foreigner who thoroughly examines into this matter, can come to no other conclusion, than that they are the safest security offering.—Such would be the report of any respectable house in this city to whom this matter should be referred, notwithstanding our English contemporaries to the contrary. No evil, but a vast good can be effected, by the proper use of a State or city credit, as the history of many of our most successful works fully prove; works that never could have had an existence but for such aid.

Let us now see how far our railroads are calculated to produce the threatened commercial revulsion feared by the Globe. We showed, in a recent number of our paper, that the amount of stock subscribed towards a new work might be partially, in fact totally lost, and the country be vastly better off, provided the construction of the railroads be secured. The farmer contributes a portion of his means, which are more than returned to him, in the increased value of his property, so soon as the road is opened. The loans which are effected for our railroads, and which are generally equal to one half their cost, say $10,000 per mile, have from ten to thirty years to run. The stock of a road is generally paid up as the work progresses. The permanent loans represent the debts of the companies. These, therefore, will be unaffected by any commercial revulsion, provided interest in the loans, which amount to say $700 per year, can be promptly met. Now, the net average earnings of our new roads equal, at least, three times this amount. A commercial revulsion can only affect those roads which have not yet secured the necessary means for their construction, which are only a very few compared with the whole number. In looking at this subject, people seem to think that, should a stringency in the money market occur, all our railroads would be at once called upon to pay up their whole loans. Instead of this being true, none of the liabilities of our roads accrue under ten years from the present time. Any immediate or temporary emergency cannot affect them. Their liabilities are not falling due, neither will the holders of their bonds throw them upon the market, for the very good reason, they are entirely safe, as every day's experience demonstrates. So long, therefore, as we can borrow money for our roads in Europe, as we are doing, and leave our own means in their regular business channels, the progress of our works, instead of making money scarce, have a direct tendency to render it more abundant.

There is no parallelism whatever between the state of things in this country at the present time, and in 1837. Nine tenths of our speculations then were illegitimate. We were then building cities on *paper*, projecting and attempting to execute stupendous lines of canals, instead of railroad. Our new states were then comparatively a wilderness, without people, without means, or skill to construct, or superintend the management of extensive lines of public work. We were then lacking in all the conditions of success. Failure was inevitable. Since that time fifteen years have elapsed, during which the population of the new states have more than doubled, and their means more than quintupled. In 1836 & 7, a vast number of banks were created, and as every person could get plenty of *paper* money, for a day every body thought himself rich, and acted upon this idea, by abandoning all useful labor. The whole community gave themselves up to the most insane speculations, or to pleasure. The amount of paper money in circulation at that time was much greater than it has been at any subsequent period, notwithstanding the vast increase of the business of the country. The paper money, as the result proved, had no substantial basis. Our importations were in enormous disproportion to our exports. So great was the diversion of labor from all its useful channels, that we soon found ourselves in danger of actual want. All kinds of provisions went up to an extravagant price, and we found ourselves compelled to supply our necessities by importations of large quantities of grain, and potatoes even from Europe. How is it now? There is a plethora of every kind of production, we have now nearly two years supplies of the great grain staples of the country on hand. Our manufacturing establishments are turning out vast quantities of goods which they find difficult to sell at remunerating prices. Our currency is based upon an abundant supply of the precious metals, which are daily increasing. Were we to judge by the amount of productions, we should pronounce every branch of industry to be remarkably prosperous, as in fact they are. How does this state of things compare with 1837? Not at all. It is a striking *contrast* to it, without the slightest likeness between the two. In 1837, our activity was an unnatural one; an indication of weakness, and of an unsound condition. It is now the result of pressing and profitable employment, the proceeds of which are seen in overflowing graneries, in vast accumulations of every kind of manufactured fabrics, and in the general prosperity which we witness in every portion of the country. In place of importing our food from abroad, we have a surplus that would feed the civilized world, if they would only receive it from us. If therefore the conditions of the two periods are entirely different, there is certainly no philosophy nor good sense in predicting similar results from very dissimilar causes.

The great matter we have to complain of in the English papers is, that they express opinions and state things as facts in reference to us, in the plainest and apparently most sincere manner, without knowing anything about our real condition. The style in which they write, and the conclusions to which they come, are given with an emphasis which is extravagant, just in proportion to their ignorance. The easiest way in the world to write, and to write flippantly too, is to know nothing of the subject about which one writes. Such a person merely gives utterance to his own whims and prejudices, which he states as truths, because they are so to him. He don't trouble himself about the *facts* of the case. He does not stop to balance conflicting testimony, or examine and clear up a doubtful point. Such dull, disagreeable business would quite cut off the thread of his eloquent extravagant assertion, as investigation might leave his mind completely balanced between conflicting testimony. This point is well illustrated in the advice of the Times not to invest in *bonds* of our roads, but in *stock*. Now, the fact is well known, that bonds *always* take precedence of stock, and that their principal and interest must be paid whether the stock gets anything or not. These bonds are secured, almost without exception, upon all the property and franchises of the company, which can be seized and sold in case of default. Almost the only exceptions to this rule, are the recent issues of the Erie, which are without any such security, and towards which John Bull has recently taken such a fancy. *Our* capitalists will not touch the stock of new roads till they see the result of their operations. Again, bonds are generally convertible into stock, so that the holder may continue his lien upon the property of the company, or convert it into stock, as he shall deem most for his interest. If he is satisfied with his rate of interest, and the management of the road, he holds on to his bond. If not, he converts it into stock, and in this manner takes the risk, and assumes his relative share in the management of the company. No respectable house in this city would for an instant recommend to their customers to invest in stock of new works, for by doing this, the stockholder at once assumes all the risk of the enterprise. So much for the advice of the Times on this point.

Exhibit of the Springfield and Mansfield Railroad Company.

The Springfield and Mansfield railroad company was chartered by the Ohio Legislature by a special law, passed March 21st, 1850, which was amended February. 20th, 1851. By this charter, and the general law of the state, entitled "an act regulating railroad companies," the company is invested with all the powers usually conferred upon railroad companies in Ohio.

The first organization of the company took place on the 12th day of February, 1851, by the election of officers under the charter.

The route adopted by the board of directors, is from Springfield to Marysville, Union county, by way of Mt. Hor and Milford, from thence to Delaware, thence to Mt. Vernon in Knox county, and thence to the Ohio and Pennsylvania railroad, near Loudonville, a distance of about 115 miles. By this location the name given to this company, at its inception is rendered inappropriate, and the company will avail itself of a provision in a statute lately passed by the Legislature to change its name.

The route is in the best part of Central Ohio, affording at once a most favorable line for cheapness of construction and the certainty of a great amount of local business for the road when made. The large amount required for railroad making is alarming to farmers, and this road passes through an agricultural district without any large city upon its line to furnish means or credit. But the public confidence in this road, in view of its superior advantages, has enabled the company to proceed faster than was anticipated.

They have already secured

In subscriptions by counties	$205,000
In subscriptions by the city of Springfield	20 000
In subscriptions by townships	65.000
In subscriptions by individuals	405.000
Ohio and Pennsylvania railroad	100.000
Total,	$795.000

The average cost of the road per mile is estimated at $16,000, and the construction of that part of it lying between Springfield and Delaware has been let and the work is in rapid progress of construction, and will be in use about the first of June, 1853; and it is proposed to let the residue in a short time. To complete the 48 miles of road, furnish it, and bring it into use, the company propose to negotiate a limited amount of their bonds.

THE COUNTRY—ITS POPULATION—BUSINESS PROSPECTS—REVENUE OF THE ROAD, AND VALUE OF THE STOCK.

A full statement of the resources, wealth, and beauty of the country through which the Springfield and Mansfield railroad is located, would swell the narrow limits prescribed for these brief statements. A few of its advantages may be stated.—The road when completed will extend from Springfield to the Ohio and Pennsylvania railroad, and will pass through the central part of Ohio, an agricultural district as already stated, and the wealthiest, most fertile, and productive portion of our growing state; affording an ample and even *large surplus* of water-power, and is inhabited by enterprising and thrifty farmers. These advantages and others combined constitute it a region unsurpassed for all the elements of business and wealth.

The road comprises two important divisions.—The first extends from Springfield to Delaware, where a connection will be made with the Cleveland and Columbus road. The second division extends from Delaware by way of Mt. Vernon, to the Ohio and Pennsylvania railroad. Either of these divisions of itself will constitute an important thoroughfare, and the completion of either will secure a sufficient amount of business to make it a good paying road.

The following statement will briefly exhibit the population and resources of the counties penetrated by this road.

Counties.	Population.	No. acres of land.	Valuation
Clark	22,174	250,000	$4,506 231
Champaign	21,257	268 798	3,424 496
Union	12 205	270,490	1 297,590
Delaware	21,870	283 354	2.816,504
Knox	28 567	327,691	4 052,492
Holmes	20 458	259 762	2,423,418
Ashland	23,825	264,937	3,570 151
Total	150.357	1,925,031	$22,090,882

	Valuation of town property.	Personal.	Aggregate value.
Clark	$804,115	$1,659 137	$6,969,483
Champaign	389,477	1,295.703	5.029 675
Union	92,940	404,716	1,795,241
Delaware	437,839	890,788	4.114,681
Knox	668,215	1,029.479	5.750.186
Holmes	127,207	667,949	3,219 644
Ashland	230,677	878,163	4 578,996
Total	2,750,120	6,745,938	31,586 914

The population is composed almost entirely of farmers, as before stated, who, although not very productive of railroad subscriptions produce a great amount of business for a railroad in the surplus produce of their lands such as live stock, grain, beef, pork, etc., etc. The country to be drained by this road, extends much beyond the limits of the counties above designated, and will comprise an area of several millions of acres teeming with the most valuable produce of the soil, and embracing a population of several hundred thousand.

The following statement of the exports and imports of the district coming immediately within the range of this line of road, is based in part upon returns made and partly upon estimates.

	Amount.	Amount consumed.	Amount exported.
Bushels wheat and other grains	15,000,000	9,000,000	6,000,090
No. of cattle, horses, mules, sheep, and hogs	500,000	400,000	100,000
Barrels pork, beef, whiskey, lard, oil, and butter	60.000	20,000	40,000
Pounds of wool	600,000	200,000	400,000

Bu. wheat and other grains	Tons.	52,000
Number of cattle, horses, mules, sheep, and hogs		10,000
Barrels pork, beef, whiskey, lard, oil, and butter		7,245
Pounds of wool		200
Timber, stone, lime, staves, and articles not enumerated		15,000
Imported articles, such as box and bale goods, Cotton, groceries, salt, coal, iron, nails, Stoves, castings, machinery, furniture, etc., etc.		25,000
Total amount of tons		109,445
The average cost of transportation at $3 per ton amounts to		$328,335
In the summer season about 101,732 passengers travel to and from the eastern states and cities; one half of these will take our route: making		50,866
In winter there is less travelling: say 78,700; of these two-thirds will take our route to save the extra distance of 120 miles		52,800
It is said that 75,000 persons annually travel by steamboats on the Ohio river to avoid the lake route, or are attracted by business to Pittsburgh; of these at least two thirds would take our route		50,000
Amounting in all to through passengers		153,666
These at $3 each would amount to		$460,998
The way travel may be safely estimated at 25,000, each at $1,50		37,500
Total amount of receipts as per above estimate		$826,833
The total expenses of keeping up and running the railroad is estimated at		426 833
Leaving an annual net proceed of		$400,000

It is confidently believed that these figures will fall below the truth, and that the company may safely guarantee the above estimate not to be too high. The estimate of the cost of running the road may be and is probably too high, for it traverses a region in which wood is exceedingly cheap, and the eastern portion of the road extends through a a country supplying abundance of coal; and it is well known that the cheapness of fuel enters largely into railroad economies. The facilities for transportation afforded by this road will greatly increase the production of wheat and other grains; add to this the yearly increase of these products which has hitherto amounted annually to from ten to 22 per cent, and the above estimate will be swelled to a much larger amount. The resources of the western country are now just beginning to be developed; the influence of railroads and other improvements upon its population, its property, its labor, and its business, is only beginning to be seen and felt. But enough is shown to afford proof more palpable and more convincing and more satisfactory than any argument we could offer. What we have lost in the past by delay, and the advantages derived in the present, we can perhaps appreciate. But we only faintly and imperfectly foresee the advantages to the east as well as to the west, to be produced by railroads in the future, when this whole wide-spread western country, so inviting in every respect for a dense population, shall be threaded together by railroads, forming as it were, a net-work between all important points, furnishing a speedy communication between distant places, subserving, in an eminent degree, the wants of society, and giving vigor, animation, and activity to business, and value to labor and property of every form. And in this view let it be re-

membered, that Ohio must, to a great extent, be the transit ground for the communication between the Atlantic country and the Mississippi valley.

The connection west from Springfield, by the most direct line across the states of Indiana and Illinois, is one of the most important advantages belonging to this line, and one which must bring to the road an immense amount of busines; flowing by the lake and New York route, and the Pittsburg route, as interest or convenience may direct it. The road from Terre Haute to Indianapolis is completed, and from Indianapolis to Dayton in progress of construction; so that there will, in a short time, be a continuous line of direct railroad from New York across the central parts of the states of Pennsylvania, Ohio, Indiana, and Illinois: our road forming an important link in the chain.

The commanding advantages and resources of New York, interest her as a city in every improvement tending to direct trade and travel to that city. Our line of road will at once shorten the line of travel between New York and Cincinnati by the Pittsburg and central Pennsylvania route, and the lake and New York routes, and in both ways facilitate the intercourse between New York and the western country.

The navigation of the Ohio river, at all times tedious, is interrupted in winter by ice, and in summer by low water; and whilst the travel to Philadelphia is cut off or impeded, Pittsburg is paralyzed in her trade and manufacturing interests. Give Pittsburg this direct line of railroad, connecting her at all seasons of the year with Cincinnati, and the whole west and south-west, and affording a constant outlet for her products; and her salt wells, furnaces, forges, hammers and spindles may go briskly all the year. And besides, the great steam travel will require a resting place, for which a large city only is suitable. Pittsburg would be a suitable half way house, and would derive incalculable benefit from her position, and besides the route lying further south will in winter be more pleasant and safe than the lake route.

Close upon the eastern terminus of the road the country abounds with coal. The whole country from near the eastern terminus of the road to Springfield, and even south and west of Springfield is destitute of that cheap and necessary article, and can be supplied by means of our road cheaper than by any other route. And it will be remembered that the importation of coal will take place at seasons of the year when there would not otherwise be a large amount of freight to transport. For it is well known that the fall and spring are the seasons at which the greatest amount of produce and merchandise are transported. Instead therefore of being compelled to house up a number of our cars in the summer and winter seasons, we will be enabled to employ them to advantage in transporting coal.

It is undoubtedly true that on the completion of this road a vast amount of trade and travel will be directed from its present course into this channel. This we are authorized to believe, as the distance by this route is so much shorter than that traversed by the roads which have hitherto been travelled (For instance the distance between Cincinnati and New York will be about 120 miles less than by the Dunkirk route.) And the facilities afforded by means of the valuable and important connexions with other great thoroughfares will contribute not a little to diverting trade and travel from its present channel.

The whole cost of the 115 miles when completed and *furnished* is estimated at two millions of dollars. The forty-eight miles which is now in the hands of the contractors, was let below the estimated cost; and it is supposed that the remainder will fall below the estimate. But suppose two millions of dollars to be the cost of constructing and furnishing the road, it is shown in the foregoing estimate that the company will have an annual income, over and above expenses, of four hundred thousand dollars, which will amount to a dividend to stockholders of twenty per cent per annum. There are, indeed, no facts existing that will authorize us to place the nett proceeds of the road as low as two hundred thousand dollars; yet even that estimate would give to the stockholders a dividend of ten per cent per annum. And when we remember that the cost of the road is only sixteen thousand dollars per mile, and that the cost of the roads east of the mountains is nearly three times as much, and that they are yielding annually good dividends, the above estimate of business and profit will not appear too large.

If we estimate the business to be transacted by this road upon another standard we will arrive at the same result. We quote from the first annual report of the Ohio and Indiana railroad company:

"A comparison with the population and taxable property of the region along other roads in the western country where a similarity exists, and where the earnings of such roads exist as known facts, is not only safe but conclusive evidence.

While every road now built in the western country is earning a fair dividend upon the real cost of the road and equipment, the Madison and Indianapolis and the Mad river and Lake Erie roads furnish the data for the most equitable comparison.

The former road, on the first year of its operations, having nothing but a local trade, passed through a population of 42 to the square mile, and having a taxable list of $134 to each inhabitant. Along your road the population is 40 to the square mile, with $160 taxable to the inhabitant. The business of *that* road netted fifteen per cent. The Mad river road has a population of 43 to the square mile, and earns from ten to fourteen per cent on its stock.

Now assuming this to be reliable, let us see how our line of road will compare with those named in the preceding paragraph. Our road has a population of 48 to the square mile, having a taxable list of $175 to the inhabitant; which produces according to the above computation a net proceed of twenty and a half per cent per annum.

And it will be observed that in this calculation the *local* trade and travel is all that is taken into consideration; omitting all that which may be expected from branches, connections, and *through* business; the latter in our case forming a very large and important business.

A careful examination of the foregoing facts thus briefly stated will be more convincing and satisfactory as showing the importance of this line of road, and the value of its stock, than any arguments which our space will allow us to add.

C. Anthony, President.

Michigan Southern Railroad.

The following is the substance of remarks of Mr. Bliss, president of the company, made to the stockholders of the above road, at their meeting at Chicago on the occasion of the recent celebration of the opening of the road:

Gentlemen:—Upon the successful completion of the work committed to their hands, it seemed, to the directors of the Michigan Southern and Northern Indiana companies, peculiarly proper that they should invite those from whose means it has been accomplished, to visit and pass over the line—satisfy themselves of the propriety of their investment—and examine the mode in which the trust confided to their agents had been executed; and they have with great pleasure improved the opportunity to invite a number of ladies and gentlemen largely engaged in similar works, with a few others in official stations, to accompany them.

We are thankful to our friends for responding so freely to this call, and are specially grateful to such of them as have added, to grace the occasion, the presence of those who regulate the enjoyments and give zest to the pleasures of our social parties.

Having thus passed over and examined this work, and the beautiful and productive country which it traverses, our stockholders will naturally expect that the directors should avail themselves of the occasion, to give them some history of the origin and progress of the enterprise, and some few statistics of its construction.

About 70 miles of the eastern end of the Michigan southern road were constructed by the state of Michigan with a flat bar rail. In 1846 it was much neglected and in a dilapidated condition, and was then sold to a company of local gentlemen, who were incorporated, with authority to extend it westward. The road remained under their management until the spring of 1849, when finding themselves unable to make the extension, a majority of the stock was offered and sold to a few eastern gentlemen. The purchase of the stock of the Michigan Southern having been thus perfected, a lease of the Erie and Kalamazoo road, between Adrian and Toledo, was procured; thus securing during the existence of the charter of that company, a railroad connexion with the harbor of Toledo, one of the best upon lake Erie, and at which was already concentrated a large and increasing commerce.

The new parties in interest then resolved to resuscitate the road and extend it westward.—They were a small but determined band, confined principally to a part of the present directors, with an unlimited confidence that this line of railway, when constructed would be productive of great results.

Our first object was to draw to this work a larger number of stockholders, and a greater concentration of capital, from eastern cities.—For this a vigorous effort was made near the close of 1849, by soliciting subscriptions in the city of New York and elsewhere; but, owing principally to the state of the money markets, this effort failed. Nothing daunted by this first failure, we pledged ourselves from our own means and by our individual credit to construct the first 22 miles of the extension. That pledge was redeemed by opening that division of the road within the time required by law,—about nine months. In the same manner and by the same parties, the next division of 40 miles, to the state line of Indiana, was commenced about August 1st, 1850.

In the mean time, while this was in construction public attention was called to the importance of the route and the prospects of its productiveness, and during 1851, subscriptions were made to the charter in Indiana, embracing a long list of as reliable and respectable names as were ever procured for a similar object in the city of New York. This with the issue of mortgage bonds for one million of dollars by each company, enabled the directors to prosecute the work upon the whole line to Chicago, and the whole in the three states has been completed and opened for use.

Like all such roads, built in haste, you may have seen that this has not all the conveniences of a completed public work; and doubtless also remarked in passing over a part of it recently opened that the road bed and track require some labor before it can be presented as a finished road. The necessary buildings, workshops, and other accommodations are in progress, and the parts of the track alluded to will soon be properly adjusted.

But it may be asked by some why has not this been already accomplished?

The old part of the road, purchased of the state, was in some places inartificially located, and it was long a question whether important changes in its alligament should not be made.—As it would answer for present purposes, all our energies and means were devoted to carry forward the extension to its present terminus at Chicago.

But the relaying of the old track with a heavy rail has been perfected during the present week, and this will account for the absence of *ballasting* and ditching on a part of the road first passed over on this excursion.

As to the new road constructed by the companies there is no stronger reason for any incompleteness, in its appointments and conveniences, in the fact that there has not been time for them.

The whole line from Monroe Pier to Chicago, is 246¼ miles, and from Toledo to the same point 212¼ miles. The extension has required 176 miles of new road exclusive of branches, This was commenced March 4th 1850, a little more than two years before the whole was opened for use. During that period as you all know, we have passed through some severe presses upon the business of the country—and many of those who hear me, will bear witness that such periods are not favorable to carrying forward, by private enterprise, great works of public improvement.

In addition to this 176 miles of new road on the main line,—within the time I have mentioned, we have constructed and opened four miles of road between Constantine and Pigeon, and over fourteen miles upon another route between Michigan city and the main line, at Bailey Town; which latter is designed at some future time to be connected with the direct road, a little west of Laporte. And we have now relaid the 70 miles of old road, making 260 miles of road constructed or re created

since March 4th 1850. It may be added here, that a branch of ten miles between Elkhart and Goshen in Indiana, is ready for the rails, which are awaiting transportation at Monroe. And it is worthy of note, in this connection, that during the year 1851, there was laid 188 miles of track with the heavy rail—an extent of work of this character, which, I venture to assert, has never been accomplished by any other company, in this or any other country, in the short period of 12 months.

In Indiana, within 14 months after the first blow was struck, 79 miles of road, from the Michigan line westward, (and embracing the heaviest work between Lake Erie and Chicago,) were constructed and opened for use.

For weeks together the track laying parties averaged half a mile per day; and upon the 10 miles east of Laporte, the average was one mile per day. *in the dead of winter.* And the severity of the last winter has rarely been equalled in this latitude. Indeed, during the whole of that severe season, the work was not suspended, and the parties were kept in the field without intermission.

Too much praise cannot be bestowed upon the contractors and men, and those who supervised their labors, for braving the snows, and frosts and searching winds of the winter of 1851–2, to gratify the wishes and meet the expectations of those of you most deeply interested in their success.

The iron for relaying the Erie and Kalamazoo road, 33 miles between Adrian and Toledo, has been purchased with the bonds of that Company. A part of it is upon its passage from New York to the line of the road, and the work will be pressed on to early completion.

I should not omit to notice, that in the purchase from the State of Michigan, was included the Tecumseh Branch of 10 miles, extending over the main line east of Adrian to the village of Tecumsh. This has still a flat rail upon it, and has been in constant use as a freight road. This will make an aggregate of main line and branches of about 318 miles. Of the main line about 13 miles are in Illinois.

There are upon the road 10 locomotives, which were in use prior to 1850. There have since been added 24 new ones. Eleven now are in construction, to be delivered in a few weeks, and 6 others have just been ordered; making in all 51 locomotives.

We have 28 first-class passenger cars, with a corresponding supply of second-class, emigrant, baggage and post-office cars. Of freight, including cattle cars, there are on hand, or in process of delivery, about 450 eight wheeled cars.

The progress of the work has been so rapid, and the theatre of operations so far distant from our principal office, that the accounts of the later construction cannot be well stated with accuracy. I am assured, however, that the cost of the entire work, including buildings and equipment, will not vary much from 5 to 5¼ millions of dollars, including also the purchase from the State of Michigan.

The entire cost of the 62 miles of new road in Michigan, prepared for the cars, and including buildings adequate for present business, did not exceed $11,000 per mile.

The maximum grade of this part of the new line, going east, in which direction is the heavy traffic, is 25 feet per mile, and going west 30 feet. The *curvature* is light.

In Indiana, the main line is 102 22-000 miles.

The grading and bridging of the first 30 miles, ready for the superstructure, averaged $1,700 per mile. Some single miles were graded for $500.

The cost of grading and bridging 37 miles between Michigan city and the line of Illinois, was not over $1,200 per mile. The intermediate division was more expensive, but the results are not yet ascertained.

The grades of the whole line in Indiana are light, the maximum not exceeding those in Michigan. The first 30 mile are under 10 feet per mile. The maximum curvature is of 2665 feet radius.

Of the character of the country through which it passes, I leave to you to form your own opinions from actual observation. For 60 or 70 miles in Indiana, it is a succession of *Oak Openings and Prairies*, some of the richest of the West; the produce of which will afford an abundant and annually increasing business for the road. And on many other parts of the line, where the character of the country, in its immediate vicinity, is less favorable, there are similar large Prairie districts at easy distances and readily accessible, whose products must seek a market through this channel.

From these *data*, with a road of so small cost—so moderate a capital upon which to apportion the dividends of profits, our friends will not, I hope, think us chimerical, although some of us may be too sanguine, if we estimate highly the qualities and capacity of this favorite project of ours; but if we are in error, will ascribe our partialities to the care and anxiety with which we have nurtured its growth thus far, and will appreciate future efforts to bring it to a vigorous and useful maturity.

Per order.

GEO. BLISS, President.

Atlanta and Lagrange Railroad.

REPORT OF THE DIRECTORS TO THE STOCKHOLDERS.

Your last annual meeting having been postponed till October last, shortens the report of the directors to the present convention. Nothing has transpired calculated materially to change the views of the officers and directors as then expressed, and the progress of the work is very satisfactory. The road is now complete to Grantsville, twelve miles below Newnan, and the engineer is of opinion that it may be opened for business to LaGrange, about the end of the present year. It will be perceived by the report of the engineer, that from very clear indications on the finished part of the road, the income is likely to equal his first estimates made in 1850, This must be abundantly satisfactory to the stockholder and relieve them from all apprehensions on the score of future profits.

As the engineer still adheres to the estimates made in his report of October last, the directors will simply refer to them, and make some suggestions upon the mode of providing means to progress with the work. By the estimate then made the opinion was expressed that, with $35,000 the road could be completed to LaGrange, with a partial outfit of three locomotives and two passenger and two baggage cars, and leaving 625 tons surplus iron on hand. Without going into details, the Board venture the opinion that the small amount necessary to reach LaGrange and complete the outfit necessary to work the road to that point, can and will be raised without difficulty or sacrifice.

The directors will not dwell on the great importance of completing the road without delay to West Point. The importance of the measure to the best interests of the stockholders, is too obvious to require any demonstration. How shall the means be raised, is the only question worthy of consideration. At the commencement of our enterprise, the cash system was adopted, and it was made a fundamental principle in our organization, that no contracts should be made beyond the bona fide and solvent subscriptions to the stock of the company. This is doubtless, the true principle, and up to the present time has been strictly adhered to. Circumstances have, however, changed, and it may be a question with the stockholders whether the early completion of the work is not of more importance to their interests, than a rigid adherence to this principle. The sudden depreciation of the price of cotton, and the almost total failure of the provision crop the past year, have greatly reduced the monied means of western Georgia, and rendered increased subscriptions to our stock very difficult in that part of the state most interested in our enterprise. But the directors believe that the amount necessary may be easily raised by loan on favorable terms The real interests of the company cannot suffer, or its affairs be embarrassed by a small loan. The stockholders must now be fully satisfied that the stock will pay more than 7 per cent interest, and it is respectfully submitted to them whether the paramount object of an early completion, will not justify a loan—*if necessary*—to build the road from LaGrange to West Point The directors are inclined to this opinion, but respectfully submit the matter to the consideration of the stockholders.

It will be perceived that $30,770 50 has been charged to interest account. According to the original plan, interest has been promptly paid to the stockholders, half yearly, when demanded. Most of the stockholders, however, take stock for their interest, and leave a large portion of the earnings of the road to be appropriated to the completion of the work. The board has found great assistance from this resource and earnestly recommends to the stockholders (who can do so with convenience) a continuance of this course—at least to the end of the present year. It will be an easy way of contributing to the means of the company, whilst it will furnish a good investment to the stockholders. With the probable assistance which the company will derive from this source, the engineer is of opinion that a loan of $225,000 would be sufficient to finish the road to West Point, including a full outfit of engines and passenger and baggage cars, and a bridge and depot at West Point. The statement of the treasurer and the report of the engineer will give information on the subject of the wants and the means of the company, sufficiently accurate for all practical purposes. The account may be briefly stated thus:

Revised estimate of the expense to finish and stock the road to West Point with outfits, depots and bridge at West Point complete		$971,009
Subscriptions	648.000	
Freight on iron yet to be subscribed	15,000	
Income that has been and will be invested in stock	83,000	
Loan on bonds	225,000	971,000

The board have been happy to learn that the grading beyong LaGrange, in whole or in part, will most likely be taken by responsible contractors at cash prices for stock. If so, the wants of the company will be reduced to that extent. The directors would be glad to dispense with a loan at all, and only recommend it in preference to a delay of the work. In no event can the amount needed by loan be large, and the directors have strong hopes of reducing it below the amount above stated.

All of which is respectfully submitted in behalf of the directors, by

JOHN P. KING, *President.*

May 25, 1852.

New Steamboat Line Between New York and Quebec.

It will be seen by reference to our advertising columns that a new addition is shortly to be made to the steam marine of our city, and a new line of communication with the British provinces is to be opened. We refer to the new bi monthly line of steamships between New York and Quebec, touching at Halifax, Pictou, and various other important intermediate ports. The very great importance of this enterprise is evident at a glance; especially its importance to the provinces in bringing them into this regular connection with each other and the American commercial emporium. Few enterprises would seem to offer greater commercial advantages than this, and had the capitals, to be connected by the new line, been under the same government and laws in previous years, a gigantic trade must long ere this have grown up between them.

But there is another point worthy of notice. The magnificent scenery of the Nova Scotian coast, the channels among the St. Lawrence islands, and the shores of that great river, will, for the first time, be opened to those who travel for pleasure. Cities, towns, bays, harbors and islands, familiar as household words, yet in fact hardly so accessible as cities and places of interest beyond the Atlantic, will be brought within an easy and steamboat passage—in short, a magnificent route is opened to health and pleasure seekers. After touching at Halifax the boats will push on to Whitehaven and Canso, pass through the narrow passage, known as the Gut of Canso, which separates Cape Breton from Nova Scotia, stretch across to Northumberland Strait, and coast along the beautiful and fertile island of Prince Edward, thence touch at the ports of the District of Gaspe, and enter the noble stream of the St. Lawrence. Much of the finest scenery in America will thus be rendered accessible—scenery now scarcely known, but to the few who have taken pains to inform themselves of the physical geography of Lower Canada and the other eastern Provinces.

This route was first suggested, we understand, by the U. S. Consul at Pictou, or rather, perhaps, that portion of it from Pictou to Quebec; and the

favor which the project has met in the Provinces is shewn by the fact that the local Legislatures have not hesitated in subscribing for its support, for mail service, $30,000 per annum. The first boat placed upon the line is the steam propeller *Arbatross*, of 1,060 tons and 250 horse-power, a boat whose capacity for steaming and sailing has recently been favorably excited between Philadelphia and Charleston, S. C. She leads off, and will soon be followed by others, in an enterprise which we have no doubt will soon be found to be as profitable to both countries as it is noble in its plan, and will be in its execution.

American Railroad Journal.

Saturday, July 10, 1852.

The British Provinces

Seem to be waking up to a true sense of their importance, and to a determination of taking a high stand among the enterprises of the day.

Now that in the matter of the Quebec railway they have been shaken off with contumely from their dependence upon Imperial assistance, so far perhaps from proving a misfortune, it would seem to have already given a more decided and manly tone to their character and negotiations.

People may talk as they please about the impolicy of Mr. Hink's letter, to our minds it was apt, forcible, appropriate and necessary.

Let the feelings and passions of the colonist rather be stirred by noble principles than by mere names. which, however significant they may be in Great Britain, are daily losing their charm in America—at least as watchwords to loyal enthusiasm.

We beg our readers to notice the *Errata* in our last number, written to correct some errors in the article of that day's paper, on "The European and North American Railroad," without which some parts of the production would appear unmeaning. The article went to press before the proof was corrected, hence the errors.

We are glad, in relation to railways in the Province, to see the true spirit awaking, a determination upon self-reliance.

Canadian Provincial credit stands high enongh in London, to borrow all the money she may need for building the great trunk line from Quebec to Hamilton; and the spirit already displayed by New Brunswick must, as a matter ot necessity and self-preservation, be followed up by Nova Scotia, and insure the completion of the "European and North American Railroad."

In looking over files of Canadian papers, the "Toronto Globe," "Montreal Herald," "Quebec Chronicle," and others, we are glad to perceive considerable interest is being excited, as to the approaching Exhibition to be held in New York next year; and that the Provinces show a strong desire to participate in the movement, to strengthen and cement the already great commercial intercourse between themselves and the United States. This view of the matter needs no elucidation.

The matter of this Exhibition at New York will have also a great effect upon this city in connection with railways centering here. In our last number we spoke of New York as a railroad terminus, the event of the International Fair will present the strongest argument on that subject.

We have the pleasure of the acquaintance of Mr. James Whitman, late of Halifax, but for some time past residing in New York, the gentleman who has taken up the matter of the "British North American department" at the World's Fair in New York, and of whom the Canadian papers speak as having recently visited that Province in relation thereto. And we beg to commend both himself and his enterprise to the cordial support of all his fellow colonists.

Cincinnati and Charleston Railroad.

Of all enterprizes, says the Cincinnati Gazette, which should claim the attention of Kentucky and the business men of Cincinnati—of those most especially deserving Congressional aid in lands—we know of none which should demand it more than the railway looking hence *to* Knoxville and *at* Knoxville, connecting with all the chief roads leading into Carolina, Georgia, Tennessee and Alabama. Though on the *original* route East, the entire country for near two-thirds of a century has been almost exclusively cut off as a route of travel; has no outlet or facilities for travel, and but a spare population. The country is, however, rich in mineral—embraces a vast surface of country which should be cut through by some line of railway.—No such extent of country, lying in the South-Eastern section of the United States, should thus be left. The continuance for so many years, as it was, proves that no roads can be made by the *people*. The *States* and the *Union* are interested deeply in a route which would open a business intercourse between sections so widely and entirely severed, and to so large a section of country.

Car Factory for Sale.

The notice of Car Manufacturers is called to the advertised sale of an eligible site for the manufacture of railroad cars in Norwich, Connecticut.

Winslow's Compound Rail.

The Cincinnati and Marietta railroad have purchased a sufficient quantity of this rail to lay 75 miles of their road now in progress.

Tennessee.

East Tennessee and Georgia Railroad.—We learn that the cars are now running to within a mile of the river, and that the company are receiving and transporting freight from that point.

The iron will be laid down and the cars commence running to the river in the course of a few weeks.

Mobile and Ohio Railroad.

We are pleased to learn, says the Mobile *Advertiser*, that Pontotoc county, Mississippi, has recently voted a subscription of one hundred thousand dollars to the stock of the Mobile and Ohio railroad. Besides this, about $40,000 in private subscriptions have been secured, which will be increased, to $100,000, making a total subscription in the country of $200,000. Well done, Pontotoc!

Railroad from Tonawanda to Lockport.

Arrangements have been made to build a road from the Buffalo and Niagara Falls road at Tonawanda, 12 miles, to Lockport, where it will intersect the Rochester, Lockport, and Niagara Falls road, giving that road a connection with Buffalo. The new road is to be leased at 7 per cent on its cost.

Springfield and Mansfield Railroad.

We invite attention to this important project, the exhibit of which will be found in our paper of today. One great object of the road is to form a part of the shortest possible line between the two great cities of Ohio, Cleveland and Cincinnati. In addition to its strength as a through route, it traverses one of the best portions of Ohio, which cannot fail to furnish a large local traffic.

Indiana.

Indianapolis and Bellefontaine Railroad.—The following gentlemen have been chosen directors of this road for the current year, viz: Jeremiah Smith, David Heasten, and Peter S. Miller, of Randolph; James Truit, Samuel P. Autley, and David Kilgore, of Deleware; Allen Makepeace, William Sparks, and Madison G. Walker, of Madison; S. V. B. Noel, of Hancock; Daniel Yandes, Calvin Fletcher, Allred Harrison, and O. H. Smith, of Marion; and Richard H. Winslow, of New York.

Oliver H. Smith, was unanimously re-elelected prestdent; Douglass Maguire, secretary; James N. Yandes, treasurer; R. M. Patterson, engineer—Mr Morris not desiring a re-election.

Crawfordsville and Wabash Railroad.—The Crawfordsville and Wabash railroad, is now completed and in full operation between Crawfordsville and Lafayette, a distance of 26 miles. The daily receipts are about $150; it is expected the receipts will soon be doubled. A daily line of stages connect Crawfordsville with Greencastle on the Indianapolis and Terre Haute road.

Railroad Decision.

John Stratton, vs. New Haven Railroad Co.—The plaintiff in this case purchased a through ticket of the defendants, from New York city to Montreal. The plaintiff retained possession of his baggage (a carpet bag,) until he arrived at Northfield, Vt., where the trains were changed and the baggage given to the baggage-master, after which it was lost. The defence was, that the defendants had carried the baggage safely over their own line and were consequently not responsible for it further; but the court decided that the defendants, by the sale of a through ticket, had undertaken to convey the passenger and his baggage safely to Montreal and gave judgment for the plaintiff.

Milwaukee and Janesville Railroad.

We learn from the Milwaukee Wisconsin, that the arrangements are completed for the extension of the Milwaukee and Mississippi railroad to Janesville. The citizens of that town agree to raise $50,000, and the Milwaukee and Mississippi company have agreed to raise the balance required, probably $50,000 more.

New York.

Rome and Watertown Railroad.—The earnings of the Rome and Watertown Railroad for May were $23,000. This road is 96 miles in length, and the capital stock is $1,500,000. The following gentlemen have been elected directors: Wm. C. Pierrepont, N. M. Woodruff, Samuel Buckley, Smith Bartlett, Calvert Comstock, J. C. Cooper, O. V. Brainard, Robert B. Doxtater, William Lord, Clarke Rice, Horace Dunbar, Philip Dater, Willis Phelps.

Dust on Railroads.

An exchange suggests a plan to get rid of the dust on railroads, which will be effective in the preservation of the road, by saving in the washing away of the embankments:

Our railroads ought invariably to be sown with some low grass, like white clover, (being fertilized by a coating of lime, plaster or some phosphate, if need be,) and so preserved from wasting on the sides and dust-blowing any how. We believe $100 per mile, well expended in grassing road-beds, would save very much in the washing away of embankments and keep the track free from dust and dirt.

Rutland and Washington Railroad.

The formal opening of this important route of public travel took place on Monday and Tuesday of this week, although it has been in active operation since the 17th of May. This road intersects the Rutland and Burlington road at Rutland, and passes through the towns of Castleton, Poultney, in Vermont, Granville in New York, again enters this state, touching Pawlet and Rupert, from whence it goes through Salem, Shusham and Cambridge in Washington county, New York, intersecting with the Troy and Boston road at Eagle bridge, twenty three miles this side of Troy. The entire length of this road is 62 miles. It passes through one of the richest agricultural sections in that part of the country, and forms a connnecting link of the New York and Montreal route west of the mountains. The company dined at Troy; Gen. Wool presided, and made a humorous speech and was followed by Senator Phelps of Vermont, Mr. Seymour of Canada, Mr. Bradley, president of the Rutland and Burlington railroad and others.

Dayton and Western Railroad.

The iron for the Dayton and Western railway is arriving in large quantities, and a large force will be employed to put it down as speedily as possible. No time will be lost in finishing the road to the Indiana State line.

OFFICE OF THE ROCHESTER AND SYRACUSE RAILROAD COMPANY.
Rochester, July 5, 1852.

H. V. POOR, Esq.,

DEAR SIR: In your valuable paper of the 3d inst. you ask if some of your friends on the line of road will give you the names of the builders of the engines that made this time on Tuesday, noticed in your paper of the 3d.

We have engines from the following builders that make the time with ease on the fast train, viz: from Holmes Hinkley, Boston Locomotive Works, Messrs. Rogers, Ketchum and Grosvenor, New Jersey—and from the Amoskeag manufacturing company, at Manchester, New Hampshire.

We shall be able, next year, when our direct line is finished between Rochester and Syracuse, to cut off one hour and a quarter, and the Buffalo and Rochester road will save from one-half to three-qnarters of an hour.

Respectfully,
C. DUTTON,
Superintendent.

Stock and Money Market.

Money continues in great abundance, with active operation in all the fancies. The demand for investment in railroad securities cannot be called active, though it is good for first class bonds. It is the dull season of the year, and the present inactivity is due to this fact, rather than to any lack of money, or confidence in our new projects. We see no reason to doubt an active market to commence again in September. We look upon the introduction of new projects at the present time as inopportune.

Our railroads are now beginning to attract great attention wherever there is capital for investment. We shall soon have more miles of railroad than all the world besides. This immense extent of line cannot fail to excite the most careful inquiries into our whole system, which must result in securing to it all the money we need for our legitimate projects.

We have no recent sales of bonds to note. The iron market continues firm, and £6 is the lowest asking price free on board in Wales. We believe that the recent rapid advance in price must tend to check orders, and consequently cause a decline. At the asking prices, rails can be profitably manufactured in this country, and we hear of numerous orders being taken by our rolling mills, which for a long time have been lying idle.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, JULY 10, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101
U. S. 6's, 1856	106¾
U. S. 6's, 1862	113¾
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	118
U. S. 6's, 1868	118¾
U. S. 6's, 1868—coupon	119
Indiana 5's	97¼
Indiana 2½	55¼
" Canal loan 6's	97
" Canal preferred 5's	49
Alabama 5's	—
Illinois 6's, 1847	81¼
Illinois 6's—interest	49¼
Kentucky 6's, 1871	110¼
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	100¼
Maine 6's, 1855	—
Maryland 6's	106¼
New York 6's, 1854-5	—
New York 6's, 18 0-'61-'62	112
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	117
New York 5½'s, 1860-'61	107
New York 5½'s, 1865	—
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	102¼
New York 5's, 1866	106
New York 4½'s, 1858-'59 '64	—
Canal certificates, 6's, 1861	96
Ohio 6's, 1856	104
Ohio 6's, 1860	107
Ohio 6's, 1870	113
Ohio 6's, 1875	115¼
Ohio 5's, 1865	103
Ohio 7's, 1851	—
Pennsylvania 5's	99
Pennsylvania 6's, 1847-'53	96
Pennsylvania 6's, 1879	108
Tennessee 5's	91¼
Tennessee 6's, 1880	109¼
Virginia 6's, 1886	112¼

CITY SECURITIES—BONDS.

Brooklyn 6's	109
Albany 6's, 1871-1881	108
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	102
New York 7's, 1857	110
New York 5's, 1858-'60	101
New York 5's, 1870-'75	103¾
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	103½
Baltimore 1870-'90	106
Boston 5's	102¼

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115¼
Erie 2d mortgage, 7's, 1859	106¾
Erie income 7's, 1855	108¾
Erie convertible bonds, 7's, 1871	99½
Hudson River 1st mort., 7's, 1869	107¾
Hudson River 2d mort., 7's, 1860	94¼
New York and New Haven 7's, 1861	106¼
Reading 6's, 1870	88¾
Reading mortgage, 6's, 1860	95
Michigan Central, convertible, 8's, 1860	109
Michigan Southern, 7's, 1860	98¼
Cleveland, Col. and Cin. 7's, 1859	109
Cleveland and Pittsburg 7's, 1860	101¼
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	July 8.	July 1.
Albany and Schenectady	109	109¾
Boston and Maine	106	104¾
Boston and Lowell	108¼	108
Boston and Worcester	103¼	103¼
Boston and Providence	87	93¾
Baltimore and Ohio	75	82¼
Baltimore and Susquehanna	29¼	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	27
Eastern	98¼	103¼
Erie	88¼	91
Fall River	99¼	93¾
Fitchburgh	102¾	105¼
Georgia	—	—
Georgia Central	103	—
Harlem	73¼	73¼
" preferred	112	112
Hartford and New Haven	118	125
Housatonic (preferred)	35	35
Hudson River	67	70
Little Miami	—	—
Long Island	20¼	20¼
Mad River	—	—
Madison and Indianapolis	112	110
Michigan Central	114¼	111¼
Michigan Southern	119¾	115
New York and New Haven	113	112¼
New Jersey	136	130
Nashua and Lowell	106	104
New Bedford and Taunton	117	117
Norwich and Worcester	54¼	57¼
Ogdensburgh	27¼	27¼
Pennsylvania	44¾	—
Philadelphia, Wilm'gton & Balt.	22	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	88¼	89¼
Rochester and Syracuse	122½	124
Stonington	54	57¼
South Carolina	—	—
Syracuse and Utica	132	133
Taunton Branch	115	115
Utica and Schenectady	135	137½
Vermont Central	16¼	17
Vermont and Massachusetts	22¼	22¼
Virginia Central	—	—
Western	103¾	109¼
Wilmington and Raleigh	57¼	57¼

Railroad from St. Louis to Terre Haute.

It will be remembered that on the 19th, the bill before the legislature of Illinois, for the construction of a railroad from Illinoistown to Terre Haute *direct* was lost on its third reading by a vote of yeas 28, nays 37.

Subsequently a road was chartered from Springfield to Terre Haute, and then a charter was obtained for a road from Illinoistown to Belleville, with the provision as we learn, that this road may connect with any road constructed, or to be constructed to Terre Haute, from what point, not named.

The friends of this charter, contend that this is all they want, and under the charter of the Belleville road they can "connect" with the Springfield and Terre Haute road and thus obtain a road from Illinoistown to Terre Haute.—*St. Louis Intelligencer.*

North Carolina.

Wilmington and Manchester Railroad. — The Wilmington and Manchester Railroad is now completed and in operation from the Camden Junction to May's Station, 25 miles. About 100 miles from either end will be completed and in use early in the fall. The gap between will be occupied by mail stages, after which the great Southern mail to New Orleans will be taken over this route.

Great Sale of Coal and Mineral Lands.

We call attention to the advertisement, in another column, of the sale of the property of the Maryland Mining company.

The Marietta and Cincinnati Railroad.

We find the following as the leading editorial of the Philadelphia North American, of the 3rd inst., in relation to the above great project.

This is destined to be one of the most important railroads in the U. S. It might properly be called the "Ohio river valley road," as it will, when completed, to a great extent supersede the "beautiful river" (Ohio) as a means of travel.

We think the travel and business of this road can scarcely be over estimated in view of its Kentucky and Tennessee tributary and its western extension to St. Louis.

The Pennsylvania railroad company should not (if it has the power) hesitate a moment about subscribing a million of dollars, if necessary, to secure this great North-western line as a tributary.

We fully coincide in the intelligent, sensible and liberal views of the North American.

This company now has a capital stock of over two millions of dollars, and the work is rapidly progressing.—A subscription is sought from Philadelphia *only to aid in extending this road from Marietta to Wheeling*, (75 miles)—by which means the Pennsylvania railroad secures as feeders two lines of road costing over twenty millions of dollars, both of which are rapidly progressing.

The public is probably aware that the board of directors of the Pennsylvania railroad have lately had under consideration a proposition for a subscription of seven hundred and fifty thousand dollars, required for the Marietta and Cincinnati company, to extend their road to Wheeling, with a view to connect, from that point by some route hereafter to be determined upon, with the central road of this state. The result of the deliberations upon this question may be seen in the following extract from the minutes of the board, dated office of the Pennsylvania railroad company, Philadelphia, June 30, 1852.

Resolved, That it is the opinion of the board that the Marietta and Cincinnati railroad, and its eastern extensions, connecting it with the Pennsylvania railroad are very important links in the most direct and practicable chain of railways now in progress between this city, central Kentucky, Tennessee and the south west; and that the extension of this road up the Ohio river, from Marietta to Wheeling, or opposite thereto, with a view of connecting it by railroad with the Pennsylvania railroad at such point as may be determined upon by proper examination, surveys and estimates of cost, would bring a large trade and travel upon the Pennsylvania railroad that might pass over the North Western Virginia and Baltimore and Ohio railroads, to the city of Baltimore. The board would therefore recommend a subscription on the part of the citizens of Philadelphia, and especially those who are stockholders of this company, to aid in the early completion of such line of road.

It is gratifying to find, that the contemplated project has received from the directors of the Pennsylvania railroad so decided an expression of opinion, both as to its value to our local interests and the importance of such action on the part of our citizens, as is necessary for its accomplishment. It is, however, to be regretted, that it was not found judicious at this time, for the Pennsylvania railroad company to undertake and complete the work themselves; but since this has been deemed inexpedient, we shall urge the merits of the enterprise upon the individual citizens of Philadelphia, hoping that, should they determine (as they most probably will do, upon a full understanding of the matter) to make the requisite subscription of stock, they will be accorded a proportionate aid by a corporation having so direct and large an interest in the object to be attained.

The Marietta road is the only one now in progress of construction by means of which it is practicable for Philadelphia to obtain a continuous line of transit to Cincinnati, with a gauge of track uniform with that of the Pennsylvania central railway, and under a single corporate control. This fact, even had it no further extent than the securing to this metropolis an uninterrupted medium of communication with the "Queen City" of the west, ought to be sufficient promptly to determine public sentiment here in favor of the proposed connection with the Marietta road. But the value of the connection is immeasurably increased, and the obligation to make it is rendered imperative upon us, when it is considered that the gauge adopted on the railroads of Illinois, Indiana, Kentucky, and Tennessee is the same precisely, as that of our central work to Pittsburg, and that, in bringing the Marietta railway to Bridgeport, this city will gain an unbroken avenue of intercourse, free from the necessity of a single transhipment of freight or passengers, with six of the most flourishing and rapidly developing states west of the Alleghany mountains.

To secure this inestimable prize, Baltimore is ready to give almost any price, while, because of the superiority of Philadelphia, as a point of terminus for western trade and travel seeking the eastern seaboard, it is offered to us upon the cheapest possible terms. But notwithstanding the refusal of an object, passing in its certain future advantages all calculation, has been extended to us with generous patience, it cannot be much longer protracted. The work of the Ohio Company now in treaty with us, has progressed to a stage at which it is necessary to determine the width of their track from Cincinnati to Marietta, and, also, that of the extension of their road to any place of junction with a line of improvement reaching to the Atlantic coast.

If the subscription required for the purpose be made, and the Pennsylvania gauge be adopted from Cincinnati to Bridgeport, a uniform breadth of track will be secured on the Philadelphia route, as far west as St. Louis, and to Nashville, in the south-west. In other words—in order to state the matter more in detail—for the sum of seven hundred and fifty thousand dollars, needed to extend the Marietta and Cincinnati road to Bridgeport, the Pennsylvania gauge will be secured from Philadelphia to Wheeling, from Wheeling to Cincinnati, and from Cincinnati to St. Louis; and, also, upon all the tributaries of Indiana. But this is not all—the same gauge, for the same stock subscription, will be secured from Wheeling to Portsmouth, from Portsmouth to Lexington, and from this latter point to Louisville and Nashville, which last named city is to be the common centre of the great Southern system of railways from Savannah and Charleston upon the Atlantic; Mobile and New Orleans, on the Gulf of Mexico; and Memphis, on the Mississippi—a net-work of improvements which would afford to this city the shortest and most direct line of railway to Mobile and New Orleans—traversable in sixty hours from end to end—as well as to the interior of the States of Kentucky and Tennessee.

Let us now glance at the amount and value of the commerce which this contemplated union of roads would command. No one can fail to see, at once, the productive capabilities of a road traversing the rich mineral district of Ohio, between Cincinnati and Wheeling, intersecting, in that space, the prolific valleys of the Little Miami, the Scioto, the Hocking and Muskingum rivers, and receiving as tributaries, the Ohio Canal, the Hocking Canal, and the Muskingum Improvements. Besides this, view of its favorable course, the road will reduce the time of travel between Cincinnati and Wheeling from forty hours by steamboats, to less than ten hours by railway. Moreover, it will unite at Wheeling with the Cleveland and Wheeling line, leading to Lake Erie, and with the great Ohio Valley line, extending to Pittsburg, and thence up the valley of the Allegheny. Reserving for another article an estimate in figures of the worth of the trade and travel derivable to the Marietta and Cincinnati road from the territory embraced within its termini, and also that still larger sum that is to flow over it from the vast region of country drained by a thousand contributory thoroughfares, we will close these remarks with one important suggestion.

It has already been observed that the proposed measure secures to Philadelhia an unvarying gauge on a continuous line of road, running into six of the Western States. This is a privilege now denied to New York. Her line to the west, by the Lakes, is continuous, but it is subject to several transhipments, occasioned by the various widths of track that meet it along its western course. On the other hand, the Marietta road, extended to Wheeling, is the best channel through which this city can contend with Baltimore for the trade and travel of Southern Ohio, Kentucky and Tennessee. Without this practical projection of the Pennsylvania Central road to the point on the Ohio river near which the Southern arm of the Baltimore and Ohio railway will intersect the Marietta road, all the immense commerce ascending the Ohio, together with the entire eastern bound travel from the whole west and south-west, reaching Marietta, will avoid the Pennsylvania route and pass off by the way of Baltimore. This view of the question is taken and fully comprehended by our neighbors. We should not be blind or indifferent to it, considering the momentous issues depending on the action that must now speedily be taken by us on the proposition of the Marietta and Cincinnati Company.

Indiana.

Circular of the Peru and Indianapolis Railroad.—The counties immediately interested in the Peru and Indianapolis Railroad are Marion, Hamilton, Tipton, Howard and Miami. The statistics of these counties in 1850, according to the census returns of the U. S. Marshal, were as follows:

Counties.	Population.	Total Val. of Property.	Bu. wh't in 1850.	Bu. corn in 1850.
Marion, . . .	24,289	6,932,980	115,379	1,191,900
Hamilton,	12,686	2,374,150	66,478	680,948
Tipton, ...	3,534	547,216	85,092	156,956
Howard, . . .	6,667	1,008,767	25,290	177,121
Miami, ...	11,349	2,552,917	112,768	560,663
	58,585	13,416,030	405,295	2,767,618

This table shows a population of near 60,000, a valuation of real and personal property of more than thirteen millions, a production of 400,000 bushels of wheat, and two and three quarter millions of bushels of corn.

It is a safe estimate that the road when completed will do the business for a scope of country along its whole length, of not less than twenty-five miles in width. No portion of the State is improving more rapidly in population and wealth, nor can a better tract of land be found for farming purposes. The settlement of Tipton and Howard counties has been postponed in consequence of the Indian Title to the Miami Reserve, which covers these counties and a portion of Hamilton and Miami, having been so recently extinguished. Hamilton, Tipton, and Howard have no outlets either completed or contemplated.

The Peru and Indianapolis Railroad is the only direct thoroughfare between the Capitol and the northern portion of the State. Its line is almost equidistant from the eastern and the western boundaries of the State, and it can therefore have no competition on the northern and southern travel.

As an outlet for the products of Central Indiana, it may be stated, that it furnishes the shortest and most direct route to the Wabash and Erie Canal bearing east, that can possibly be constructed. The products of this portion of the State always seek an eastern market, and at this very moment thousands upon thousands of bushels of corn can be bought here, and a drug at that, while the price at Peru is thirty cents per bushel, an advance of two cents upon the Cincinnati market, and of five cents over the Madison market.

It also furnishes the cheapest and most direct route for the transportation of merchandize from New York to Indianapolis, and the region adjacent, and when completed, will add largely to the amount of business heretofore done with the east. At the present time, owing to the high rates of transportation, not more than one merchant in five in the capital purchases in New York; but the opening of this route, by which goods will be brought from New York for about one-third more than the rate of transportation from Cincinnati, will entirely reverse the present order of business. Goods can even be conveyed by this route to the city of Madison, as cheap as by way of Cleveland and Cincinnati Railroads. Add to these considerations the cheapness of construction of the Peru and Indiana-

polis Railroad, and it must be evident to all that it cannot be otherwise than a profitable investment.

E. W. H ELLIS, President.

Indianapolis, June 11th, 1852.

From the Boston Courier.

Massachusetts Railroad Statistics.

Boston and Providence Railroad, Incorporated in 1831. Opened throughout June, 1835. Length, (including branches) 53 miles. Length of double track, 16 miles. Cost Jan. 1, 1852, (including interest in Providence and Worcester railroad company's stock in B. and P. R. R. and Transportation Co. etc.) $3,469,600.

The following table exhibits the operations of the road, during the last ten years: its cost, and the market price of the stock, at the beginning of each year. The item of "interest" is deducted from the receipts and expenses:—

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842..	$1 872,500	$91 per share.	$236,468	$112,824	$123,644	6 per cent.
1843..	1 892 800	88	233,388	125.374	106,014	6 "
1844..	1,914,500	107 "	283,701	113,835	169,866	6 "
1845..	1,926,100	108 "	350,629	152,802	197,827	7 "
1846..	2,000,700	111 "	351,227	169,679	181,548	8 "
1847..	2,109,400	103 "	361,779	167 900	193,879	74 "
1848..	2 544,700	99 "	354,375	182,287	172,088	64 "
1849..	*3 031 100	91 "	354,332	163 682	190,650	6 "
1850..	*3,370,300	88 "	370,727	159,279	211,448	54 "
1851..	*3,416,200	85 "	†377,397	†177,715	†199,682	6 "
			$3,974 023	$1,525 377	$1,748,646	Av. 6 9-20

* Including interest in Providence and Worcester R.R. † For 11 months.

Indiana.

Indianapolis and Bellefontaine Railroad.—This is one of the most important roads to Cleveland now being constructed. It will open a direct and continuous railway route to the flourishing capital of Indiana, its western terminus, where connection is formed with the Madison, Terre Haute, Lafayette, Central, Lawrenceburg, Jeffersonville, New Albany, Evansville, and Peru railroads, radiating from Indianapolis to every part of the State, and, with their connections, to every part of the West and South.

Highly satisfactory and important arrangements have been made with the three great leading lines of Ohio, for direct through business connections, at Union, the eastern terminus of the road, giving eastern outlets, by continuous railways to the Lake at Sandusky and Cleveland, and to the Atlantic cities of Boston, New York, Philadelphia and Baltimore, as well as to Columbus and Cincinnati.

The completion of this important work, connecting Cleveland with the very heart of Indiana, and in a direct line to New York, cannot fail to add much to the business of the northern portion of the C. C. & C. Railroad and to the trade and prosperity of the Forest City. It will bring the rich Wabash valley almost to our doors, and a trade and intercourse will grow up between sections now distant and almost unknown to each other, alike profitable and agreeable to both. The Forest and the Railroad Cities will be united in indissoluble bonds.—*Cleveland Herald.*

Great Western Railroad of Canada.

Extracts from the Report of the Chief Engineer.

I have the honor to submit the following report of the state and progress of the work on the line of the Great Western railroad, as called for in the resolution of the board of directors, dated 13th ultimo:—

Since my report of May 30th, 1851, until February, 1852, the expenditure, for construction, upon the road, has been confined entirely to the Central division, between Hamilton and London, a distance of 75 miles, and the Galt branch, 12 miles; every effort being made to expedite the completion of the road, by confining the work to the heavy points, leaving the lighter and more easily graded sections, until the position of the company should warrant their commencement. The work, upon every section of these divisions, is now in a forward state, and the grading can be completed, if necessary, ready to commence laying the superstructure, before next December, with the exception of a few deep cuttings, between Hamilton and Copetown. A large amount of masonry and bridging has already been completed, consisting of culverts and bridge abutments, bridges for highways and farm-crossings. The principal structures remaining unfinished are, the bridge and abutments for the Desjardins canal, the culvert at Dundas creek, culvert at Beverly branch of Fairchild's creek, bridges at Dumfries branch of Fairchild's creek, Grand river, river Nith, Horner's creek, Cedar creek, river Thames, middle branch of Thames, Collier's and Doty's creek. A large force is now employed upon these structures, and the material for their construction is mostly on the ground, or in the course of delivery.

The grading, masonry, etc., for the Galt Branch line, was let, in July last, to Messrs. Farwell, Zimmerman & Co.: the work was commenced in December, and is progressing at a rate that will ensure its completion, for the superstructure, by the 1st of November next.

In February last, the contractors for the Eastern division, from the Niagara river to Hamilton, and for the Western division, from London to Detroit river, were notified to commence their work and carry it forward with energy. I have the pleasure of reporting, that operations have commenced, and that the work of construction is now being vigorously carried on, on every section of the line from the Niagara to the Detroit rivers, and the Galt branch, a distance of 240 miles.

The extreme and long continued high water in Lake St. Clair and its tributaries, the present season, has retarded our operations on the Western division materially, but I hope to be able to complete 100 miles of the road from the Detroit river east, by the 1st day of January, 1853. The work upon the remaining portion of this division is of a heavy character, and will require until the summer of 1853 to complete. The most formidable part of it is within eight miles of London, and consists of heavy excavations, two bridges over the river Thames, and a large culvert at Woodhull's creek.

Upon the Eastern division, the contractors are making every preparation to secure an early completion of their heavy work, and during the present month two Steam Excavators will be at work between St. Catherines and the Niagara river. The grading from Hamilton to the Twenty Mile creek —25 miles—will be ready for the superstructure by the 1st day of October next.

The remainder of this division, from the Twenty Mile creek to the Niagara river, will require as long time for its completion as any other part of the road, comprising as it does several heavy sections and important structures.

The bridge to be erected over the Twenty Mile creek will be 1,200 feet in length and 60 feet high, and the bridge over the Sixteen Mile creek 800 feet in length and of the same height. These two bridges are to be built with trusses of 100 feet span, and will contain upwards of one million feet of timber, which is now being prepared and delivered. The vallies of the Fifteen, Twelve and Ten Mile creeks are crossed by embankments of about the same height, with culverts of sufficient capacity to pass the water of the creeks at their greatest flow. The stone for these culverts, as likewise for the bridge over the Welland canal, the St. Davids road viaduct, and a great number of smaller culverts, are being placed upon the ground, and with three exceptions I hope to have the masonry on the entire line of road out of the way before next December, and to have the whole completed by June, 1853.

In the construction of the abutments for the Desjardins canal, much delay has occurred from various causes.

On the 6th of March last I recommended your board to declare the contract for section No. 1 forfeited, in consequence of non-fulfilment of agreement; the rate of progress not being such as to insure the completion of the work in proper time. This section was therefore advertised for re-letting from the 29th of March until the 7th of April, on which day it was awarded to contractors of experience, energy and capital.

In January, 1852, the Desjardins canal company opened a negotiation with the directors of the railroad company, for the purpose of endeavoring to secure a new and direct channel through the Burlington Heights for their canal, which would allow the railroad company to fill up the present channel and make a solid embankment for the track of their road from the heights to the opposite shore; this proposition was rejected, your board preferring the original plan, with the prospect of ultimately having a bridge without a draw, although at an increased cost. During the suspension of the work on said section No. 1, and before it was re-let, these negotiations were opened in different form, and the directors of the railroad, having satisfied themselves that they could not obtain the bridge as they wished, closed an arrangement with the canal company, whereby the site of the bridge is to be changed. This arrangement disposes of the only point on the line of the railroad where the highest rate of speed could not be maintained without liability to accident. By the alteration, the present bridge will be placed at a point where it can be seen by trains approaching from the east and west, and notwithstanding some £4,000 have been expended in the foundations and preparations for the old bridge, by this agreement with the canal company the new bridge will cost when completed less than to have proceeded with the work as originally intended, and the railroad company will effect a material saving, besides having a much safer bridge.

The grading done on the railroad up to June 1st, 1852, is as follows:

Total number of cubic yards moved.....	2,673,693
Rock and indurated earth of this amount.	360,416

The iron rails, weighing from 65 to 80 pounds to the yard, purchased by the company last winter are coming forward, and will be delivered at Hamilton, Dundas, Welland canal, Windsor and Chatham during the course of the summer.

From a knowledge of the character of the work, and taking into consideration the difficulties to be encountered in the prosecution of the same, I do not think it prudent to name a day for the opening of the whole line before August, 1853, during which month, unless difficulties now unforeseen and not anticipated, should arise, I do not doubt trains will make their regular trips between the Niagara and Detroit rivers.

Since the commencement of the work in 1850, I have had an opportunity of carefully overlooking the plans, estimates and calculations of my predecessor, Mr. Stuart, and I feel no hesitation in saying that I think his estimates were sufficient to complete the work upon the plan and in the manner specified by him. Some alterations have been made whereby the cost of the work will be increased, in other cases reductions have been made, but after making allowances for the increase of cost in consequence of building bridges and culverts for double track, for the substitution of culverts and embankments in many cases for temporary trestle work, for stone instead of brick work, etc., the cost of the road will not exceed the original estimate.

All of which is respectfully submitted.

ROSWELL G. BENEDICT,
Chief Engineer.

Engineer's Office, G. W. R. R.,
Hamilton, June 10th, 1852.

Opening of the Rochester and Niagara Falls Railway.

We learn from the Lockport Daily Courier, that this important work, which is to connect with the Great Western road at the Suspension bridge, and form the most speedy and direct route from the Atlantic to the West, is already finished, and will be in complete operation from this day forward.

The Courier makes the following remarks on the road, and the advantages which it will confer on the country through which it passes:

This road was formally opened on Saturday last, by the passage over the road of an engine and passenger car. It was merely an excursion of inspection on the part of the directors and others interested in the success of the road.

The noise of the whistle, ringing of the engine bell, and approach of the train from the east produced quite a *stampede* among our citizens. It was hailed as a harbinger of deliverance from our Van Dieman's Land confinement, and many were the hastily arranged trips to Rochester, Buffalo, the Falls, etc.

Several of Mr. Boody's acquaintances (the writer fortunately among the number) accepted a kind invitation to ride over to the Falls and return, and as far as we could learn, but one opinion was expressed of the excursion; and that of the highest delight. The road is of course incomplete as it requires time to settle and adjust the track; but it does not require a prophet to foresee the great advantages which it will possess over almost any other road in the country. There are no grades of sufficient importance to retard or hinder the attainment of the greatest possible speed, and in addition, curves are almost wholly avoided from the Falls to Rochester. From this village to the Suspension bridge, the road is constructed on an air line and it only requires first class engines to distance all competition in point of speed. We are assured by the officers that, taking into consideration the superior advantages of the track, when completed, and the most approved method on which the cars are constructed, it will rank as a specimen of American railroads.

The advantages which will accrue to our place from the construction of this road, cannot be easily estimated. No public work, save the Erie canal, can be compared to it, and the future will demonstrate the truthfulness of this assertion.

Too much praise cannot be bestowed upon Mr. Boody, for the prompt manner in which he has executed the contract in building this road, and placing it in running order. The quiet, though effectual manner with which he dispatches business, we have never seen equalled. His plans are so well digested before he takes hold of an enterprise, that "embarrassments" and "delays" find no place on his programme.

As we have before stated, passenger cars will commence running on Wednesday, the 30th inst., and we hope to see well loaded trains pass and repass daily through our thriving village.

North Carolina Railroads.

It is gratifying to witness the rapid progress which is being made on the Central road. We would not be surprised if the whole line were completed in two years from this time. This, we believe, is the determination of the managers. An enterprising gentleman, Mr. Shaver, from Salisbury, has already completed two contracts on the road, and is now actively engaged on his third, which lies contiguous to Charlotte. Mr. Shaver has a force of about eighty hands, and runs about thirty carts. But whilst the work on this road is being precipitated to a speedy completion by the energy, zeal and enterprise of the company, the Charlotte and South Carolina road is no less rapidly promising a completion. The grading from this place to the Catawba river—a distance of twenty miles—is nearly finished. The bridge across the river will be completed in less than a month, and when this is done the finishing of the road will advance at the rate of eight miles per month. Mr. John Caldwell, another enterprising gentleman, is, at this end of the road, at work with a large force, and will have ready at an early day the ground for the depot, the contractor for the building of which is making all necessary preparations to commence his work, and to finish it with magic speed when once commenced.—*N. C. Whig.*

Steamboat Losses on the Western Waters.

The losses of steamboats on the western waters make a frightful catalogue of calamities. At the first glance, it alarms the public mind, and almost deters the traveller from the pursuit of his journey. But a little attention to the class and character of the boats lost, soon discloses the fact, that very few boats that are well fitted, and well managed, meet with accidents. It is a palpable fact, that it is the inferior quality of the boat and the gross negligence of its conductors, which is the general cause of steamboat casualties. Two facts will render this very obvious. Take, for example, the great number of boats burnt. It is plain that fires, on board western boats so frequent, while in the Atlantic states they are so rare, must be the result of sheer carelessness. Again take the regular line of packets between Pittsburgh, Cincinnati and Louisville—there are scarcely any accidents whatever. These are well built and well managed boats, and in that consists their security. But we intend now only to present the aggregate of steamboat losses in the West, as presented in the *Report on the Steam Marine:*

Steamboat losses in the west prior to 1840	284
From 1840 to 1849 inclusive	364
In 1849	88
Total	736

Of the cause of disaster the following statement is given of the casualties:

By collision,	45
By fire	104
By explosion	82
By collapsing flues	67
Bursting pipes	19
Snagged	419
Total	736

The loss of property, deducting the depreciation of value, and the loss of lives, is thus estimated:

Loss of property	$5,643,791
Loss of lives (by explosion)	940

The loss of life from other causes is not known It is, however, vastly greater than that above stated.

The total amount of steamboat losses for the year ending July 1, 1851, were as follaws, viz:—

On the Ocean coast	29
On the lakes	8
On the western rivers	69
Loss of steam vessels in 1851	97

The year terminating in July, 1851, was one in which the fewest accidents occurred of any for a long while. Yet we see that at the same ratio we should lose *one thousand* steamboats in the short space of ten years, by fire, explosion, snagging etc. etc. The number of steamboats on the western rivers and lakes is but one sixth greater than that on the ocean coast; but the number of accidents is nearly four-fifths! There are undoubtedly a great many more real hazards; but the difference in the strength, cost and care of building boats, is one of the main causes of difference. We repeat what we said above, that in such lines as the Pittsburgh packets, where there is more to lose, and more responsibility on owners and managers, there are much fewer accidents.

The proportion of boats destroyed, by disaster, to those actually built, in the western waters, is prodigious. Thus—

Boats built prior to 1849	1,656
Losses by disaster (44½ per cent)	736

Again look at the value of property destroyed—

Losses on boats	$5,643,791
Losses on cargoes	12,698,529
Total	$18,342,320

We leave it to the underwriters on western boats and cargoes to say how their present prices of risks compare with this statement.

The Steam Marine Report contains a memorial of Alfred Guthrie of Chicago, on the causes of explosion in steam boilers. His investigations have been very extensive, and his memorial is one of great interest.

The Bridge across the Tennessee.

It is gratifying to us to be able to announce to the friends of the East Tennessee and Georgia railroad company that contract for building the railroad bridge across the Tennessee river at Loudon has this week been negotiated and completed upon terms mutually favorable to all the parties. This, we suppose will settle the question of the extension of the road beyond all cavil.—The company to whom the contract has been let is composed of Mr. James Gettys, of this place, Mr. J. B. Irvin of Pennsylvania, and Mr. T. T. Coffin of Ohio. The two latter gentlemen have been extensively engaged in bridge building in Ohio; understand the business thoroughly, and are highly recommended as responsible and enterprising men. Mr, Gettys is well known to the people of this section as a man of large means, safe, prudent, and enterprising—So that there is no mistake about the bridge contract. We understand the contractors will commence operations immediately.—*Athens Post.*

Assessment of Railroad Property.

The Legislature of last year enacted a law providing that the real estate belonging to railroad companies shall be assessed by town and city assessors, at its actual value, estimated as in any other cases, as the same would be appraised in the payment of a just debt due from a solvent debtor. It has recently been held by the Supreme Court, that railroad property is to be assessed in the same manner as the adjacent lands belonging to individuals, and without reference to the other parts of the railway; and that the duty of the Assessors is simply to ascertain the value of the land, and of the erection and fixtures thereon, irrespective of the cost thereof, and irrespective of the consideration whether the road is well or ill managed, or whether it is profitable to the stockholders or not.—*Buffalo Com. Advertiser.*

Tonnage of our Commercial States.

The following table, taken from the last Register's report, shows the amount of tonnage owned by the principal commercial states for the year ending June 30, 1851, omiting the fractions of 95ths.

New York, (city, 931, 193)	1,041,010
Massachusetts	694,397
Maine	536,308
Pennsylvania	284 372
Louisiana	253,284
Maryland	204 540
Connecticut	116,177

The total tonnage of the United States, June 30, 1851, was 3,772,439 tons. That of England, 1851, was 4,200,000—showing that we have but about 400,000 tons less of shipping than England, and as our annual increase is over 200,000 tons, we shall probably in the year 1854 stand at the head of the maratime nations of the world.

Brunswick and Florida Railroad.

A meeting of stockholders of the Brunswick and Florida railroad was held at Brunswick, Ga., on the 17th inst., when Solomon Foote, of Vermont, Thos. A. Dexter, of Boston, L. R. Brooks, Wm. Chauncey, Amos Davis and John Payne, of New York, and L. J. Knight, of Lowndes county, Ga., were elected directors. It is expected that Solomon Foote will be elected president of the company. A letter from Brunswick to the Savannah *Republican*, says:

"Delegates were in attendance from most of the southern counties of Georgia, and these gentlemen pledged themselves to furnish five hunured thousand dollars towards the completion of the road to Thomasville, with a branch to Albany. This sum with the amount already subscribed at the North, was considered by the meeting sufficient to carry the road to these two points. Propositions were received for the construction of the work, and recommended by the stockholders, to be accepted by the

board of directors. Great enthusiasm prevails in all this section of the state, and it is confidently believed that the road will be speedily built to Thomas and Baker counties."

Indiana.

Terre Haute and Alton Railroad.—Mr. Phelps, one of the company who have undertaken to build the Alton and Terre Haute Railroad, arrived at this place a few days since, in company with his son, and two other gentlemen, who have come on for the purpose of taking a section on the road. We understand they have a considerable number of hands with implements on the way, and that the work will be commenced on this side of the State line, immediately upon their arrival. Mr. Phelps is now on his way to Alton, to bring a corps of engineers to this end of the line.

Our readers will be much gratified to hear that it is the intention of Mr. Phelps to have the cars running to this place in about a year.—*Paris, Ill., Beacon.*

Peru and Indianapolis—Mr. De Graff, the great Railroad Contractor of the West, has taken the entire contract for this work, and will in a few days be on with a strong force. The first division of 17 miles, from Noblesville to Tipton, is to be put in running order by the 1st January next, and the remainder within the year 1853. We shall thus have open the entire line in about eighteen months, furnishing an outlet to the produce of central Indiana, and an inlet to the merchandize from New York.

Messrs. De Graff and Drake passed twice over the entire line of the road, and were very much gratified with the line, and with the country through which it passes. They expressed their convictions that it would be one of the best paying roads in the State, and manifested their sincerity by taking $40,000 in the stock of the company.—*Ind. Statesman.*

Wabash Valley Railroad.

Railroad Meeting at Logansport.—By the Logansport Journal of the 26th inst., we have the proceedings of a convention of delegates from various counties in Illinois, Indiana, and Ohio, convened at Logansport on Wednesday last to take into consideration the construction of a railroad from St. Louis by way of Danville, Illinois, the Wabash and Maumee valleys to Lake Erie. Sheeches were made by Messrs. Pettit, Myers, Wright, Elsworth, Potter, Fithian and Wallace.

Resolutions were passed and articles of association adopted for the regulation of the work.

The "Articles fix the line between Ohio and Indiana on the east, and between Indiana and Illinois on the west, as points; also the towns of Roanoke, Ft. Wayne, Huntingdon, Lagro, Wabashtown, Peru, Logansport, Camden, Delphi, Lafayette, Attica and Covington.

The capital stock is named at $4,000,000, in $50 shares.

Muscogee Railroad.

We learn from the Savannah Republican, that "thirty miles of this road from Columbus, east, is now in operation. The bridging and masonry on the whole line is completed, and but twenty miles more of superstructure to lay—the timber for which, for ten miles, is delivered on the line. A large force of hands is now engaged in laying down the superstructure and completing the grading."

"There is now no doubt but that the whole of the part of the road owned by this company—50 miles—will be completed and in operation by the 1st day of November next: and I am informed that the Southwestern company is progressing rapidly with their fork connecting with this road. They have commenced laying the superstructure at Fort Valley, and are pushing the work on with great despatch. They will try hard to meet us at the connecting point."

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction. on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 10 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Suspension Bridge!

STONE MASONRY!

PROPOSALS will be received on the 26th July, 1852, at the Office of the Niagara Falls and International Suspension Bridge Company, for the construction of the Abutments, Towers, Wings, and Approaches, containing 6,000 cubic yards of Masonry, more or less, of the new Railroad Suspension Bridge of 800 feet span, to be erected in place of the present temporary structure, over the Niagara river, one-and-a-half miles below the Falls.

Separate proposals for the Masonry on the East and West shore, including four Towers of 80 and 90 feet high, will be required. The work is under the charge of JOHN A. ROEBLING, Civil Engineer, whose plans and specifications may be examined at the said Office, on the Canada side, on the 23rd and 24th of next month.

DAVID SMITH,
Superintendent.

Office, Suspension Bridge,
June 28, 1852.

Notice to Contractors.



PROPOSALS will be received until 10th July next, for the filling and masonry of "Whetstone," "Arms" and "Vinings" Bridges. Bids for each bridge, earth work and masonry will be considered separately; but should a bid for the whole work (and from responsible parties) be more favorable than separate bids, it will be considered. The work to be commenced immediately, and to be prosecuted under direction of the General Superintendent, so as to insure its completion within one year from the date of letting. The bridges are in a high and healthy section of the country between Atlanta and Marietta, and will contain about 400,000 yards of earth, and 3300 perches of masonry.

Any information relative to the work can be had by applying to the undersigned, or to G. G. Hall, Resident Engineer.

WM. M. WADLEY,
General Superintendent.

Western and Atlantic Railroad,
Atlanta, Ga., June 9, 1852.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS of the NEW-CASTLE and RICHMOND RAILROAD.

—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE, Chief Engineer.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon,

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3102 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK 'IM IN," containing about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc, etc, all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9½ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9½ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS.
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

To Contractors.

ENGINEER'S OFFICE, S. C. R. R. COMPANY,
June 16, 1852.

SEALED PROPOSALS will be received by the South Carolina Railroad Company at their Office, in Charleston, until the 10th of July next, for building Five Stone Piers and Two Abutments for a Bridge across the Savannah River, at or near the City of Augusta, the Contractor furnishing all materials, and of the best quality.

The plans and specifications may be seen at the Railroad Office in Charleston, or with W. J. Magrath, Esq., the Agent at Hamburg.

Any further information will be obtained on application to the President in Charleston, or to the undersigned at Aiken.

GEO. W. LYTHGOE,
Chief Engineer and General Sup't.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES, { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES, { Late Davenport, Bridges & Co., Fitchburg, Mass.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.
June 2, 1852.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to exeeute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg

—

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them. I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction.

W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country.

H. D. BIRD,
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours. respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R. R. and Trans.

Notice to Contractors.

LEXINGTON AND DANVILLE RAILROAD.

SEALED proposals for the construction of this road will be received as follows:

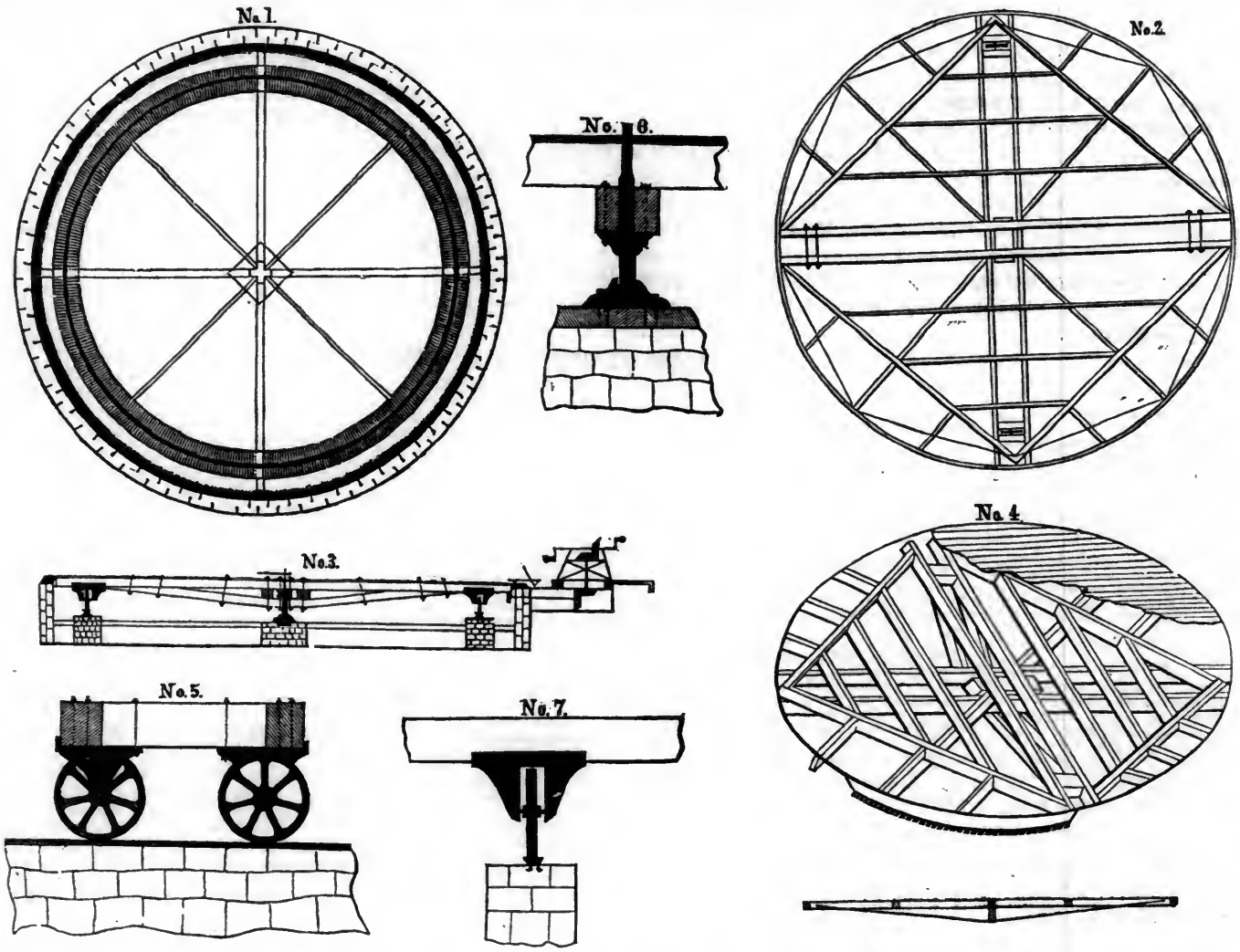
At the Office in Lexington, from 1st to 15th of July, for the grading and masonry of 12 miles of the road between Lexington and Nicholasville.

At the Office in Lexington and at the office in Danville, from the 1st to the 15th August, for the grading, masonry, and bridges of the remainder of the road (22 miles) from Nicholasville to Danville.

Plans, profiles, specifications, &c., may be seen at either of the offices within the times specified.

GEORGE C. SCHAEFFER,
CH. ENG. LEX. & DAN. R. R.
Danville, Ky., May 28, 1852

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies, Contractors etc. It has been in use on the Hudson River Railroad during the last three years since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are its *cheapness durability* and *capacity*. It is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of $5 a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the band and track walls; centre pier, cross-timber for bolting the step of pivot to the track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J., or at Wooster, Ohio.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 29] SATURDAY, JULY 17 1852 [WHOLE No. 848, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Dividends on New Works.....449
City Railroads and Pavements.....450
General Railroad Law of Ohio.....451
Ohio and Indiana Railroad.....452
Proceedings of Franklin Institute.....454
Tioga Railroad.....454
Louisiana Railroads.....455
Steubenville and Indiana Railroad.....456
Central Michigan Railroads.....456
Rabun Gap Railroad.....456
Lexington and Danville Railroad.....456
Lake Erie, Wabash and St. Louis Road..459, 456
Alton and Sangamon Railroad.....456
Stock and Money Market.....457
Cincinnati and Dayton Railroad.....458
Henderson and Nashville Railroad.....458
Resources of Wisconsin.....459
Cincinnati, Hillsboro' and Parkersburgh Road.460
Railroads in Tennessee.....460
Cleveland and Pittsburgh Railroad.....460
Androscoggin and Kennebec Railroad.....460
Cincinnati and Chicago Railroad.....460
Ohio Central Railroad.....461
Covington and Louisville Railroad.....461

American Railroad Journal.

Saturday, July 17, 1852.

Dividends of New Works.

We regret to see a very strong disposition on the part of the managers of some roads that have recently gone into operation, to make an extraordinary show of dividends. We think it always an incorrect policy to declare large dividends from the *first* earnings of roads, for the reason that it is impossible, till after a considerable period, frequently years, have elapsed, to ascertain correctly the actual amount of dividend earned. A road is always opened before it is *finished*, and if it be doing well apparently, it is much the most prudent and correct way of doing things, to declare such a dividend as shall make the stock a good investment, and lay aside any balance for contingencies, which are sure to occur. Stockholders are just as well off with a *renewal* fund to be divided at a future day, if not needed for construction, as they would be with the amount in their own pockets. Should further expenditure be required, it is much better all round, that the surplus never be paid into the pockets of stockholders, to be refunded again at a future day. Such an operation must always result in a loss, besides causing frequently great inconvenience to the parties called upon.

One of the evil effects of excessive dividends is, their tendency toward an undue inflation of the stock upon which they are declared. They beget, too, a habit of extravagance in the expenditures upon, and management of, a road. This was well illustrated a few years since, by the results that followed the eight and ten per cent dividends, declared upon some of the leading Massachusetts roads. Their stocks in consequence went up to some 20 per cent above par. This apparent prosperity led to very large expenditures of all kinds, that were not really needed. A year or two disclosed the fact, that these rates could not be maintained. The companies were compelled to fall back to six and seven per cent dividends, and their stock fell from 120 to par, or below it. The causes of the inflation were fictitious. The excess of dividend over the ordinary rate, proved to have been taken from construction and running accounts. The fund applicable to these accounts, was not only encroached upon, but the accounts themselves immensely increased. Large sums were lost by those who purchased at the top of the market; and the whole result was injurious every way.

What was true of the Massachusetts roads will be found true everywhere. Seven per cent is a high rate of interest, in the long run, in Massachusetts. The average net receipts of her roads cannot for a series of years, (except in isolated cases) much, if any, exceed the ordinary rates of interest prevailing in the community where they are located. The rates of interest on capital regulate themselves. Large dividends invite the competition of rival lines, and stimulate the construction of new works, which are certain to bring down the profits to the ordinary level of returns upon other kinds of permanent investment. This is a natural law. Railroad companies, therefore, must not expect in the long run, to receive a better interest on their money, than they would from an equal amount invested in bond and mortgage, in state or city securities or bank stock. Whenever a particular kind of investment pays largely, capital is sure to flow in that direction. The supply offering brings down the rates to the prevailing level of other investments.

In the west, we are willing to admit that ten per cent per annum would not be an excessive dividend for the present time, nor probably for many years to come. At the rates of fare charged in the east, western roads could earn this amount, and be able to reserve a sufficient surplus. This rate does not, nor will it, exceed the rate of interest charged for money in the new States for a long time to come. Other kinds of investments yield an equal return. Ten per cent dividend in railroad stock will not provoke rivalry, nor tend to promote speculative projects. As in the east, so in the west, the condition of things peculiar to each section must be taken into consideration. A ten per cent dividend on a western road, will not carry their stock higher than will seven per cent, eastern roads. The former, from their distance from us, and from the risk attached to their management, cannot expect to command at present the same relative price as our tried eastern projects. There is little fear that, at present, the above rate will lead to speculation, or to unwise movements and extravagant expenditures. But as roads multiply in the west, the rates of dividend will gradually fall there. In view of this, we have placed ten per cent as the safe *maximum* limit, But we are sorry to see companies, by no means content with the *paltry* rate. They talk of fifteen and twenty per cent annually, as an easy matter, and promise to pay it in *their* roads. In such cases we are constrained to believe that other motives than the real good of the investment lies at the bottom of such promises. The object is to inflate the stock, for the sake of making money upon the rise. It comes about in this way. A company of shrewd operators buy upon an old road, or build a new one, and will either take in pay, or divide among themselves, a very large bonus in *stock*. This stock costs the first holders little or *nothing*. All they can sell at par is clear gain. They all join hands to put it up upon the market. Every system of puffing is resorted to. But the most efficient means is to declare extravagant dividends. To do this, money is taken belonging both to the running and construction accounts. The road is left in an unfinished state. Shantees are used for depots. Everything, in fact must give way to *dividend*. The original parties clear themselves of their stock, during the period in which these expedients can be resorted to, to keep up appearances, and then leave the concern to take care of itself. Gradually the truth comes to light. A new loan must be resorted to, or future

earnings applied, for the completion of the road, or to replace the sums improperly paid out in dividends.

We do not apply these charges to any particular work; but indications seem to justify the belief, that what we have said will in time prove true of some projects conspicuously before the public. We speak by way of caution. Do not let us soil a good thing. Our roads are doing well enough. Those in the west can, on an average, *earn* and divide ten per cent per annum. This is sufficient, in all reason, to satisfy any body; and what they can do above this should be remitted, in the shape of reduced charges, for the benefit of the public that support them. Let us not pitch our tune too high, nor hallo "till we get out of the woods." Ten per cent will do to start with. If we can earn more the balance can be very conveniently laid aside for a wet day.

For the American Railroad Journal.

City Railroads and Pavements.

Mr. Editor: There will soon be three or four railroads at work in the streets of this city, and several more are projected, for the transit of city passengers, in addition to the two roads which extend beyond the Island of Manhattan. Although these roads are not of so much interest to your readers as country roads, a brief comment upon them may not be entirely out of place.

The railroads laid down in this city are so constructed that common vehicles can cross them without inconvenience. Their surface is flush with the pavement; and the rail has a groove for the flange to run in. This groove will generally be filled with mud and dirt, which will add greatly to the resistance; how much I cannot state, as no experiments have been recorded that I hear of. But on a smooth pavement, the increase of resistance caused by mud is more than 30 per cent of the power required upon a clean pavement. Mere dust also causes a considerable resistance. Morin (vide Memoire Mecanique, page 337) states the resistance to a diligence, at a walk, on a dry pavement, at one-fifty seventh; on a muddy pavement, one-forty fourth. These resistances are about 54 and 39 lbs. per ton; and the difference is 15 lbs. Now the resistance upon rails, at a slow movement is 8, and sometimes 7½ lbs. per ton. In muddy weather the grooves will be constantly filled, and the compression and displacement will probably be greater than it is upon the surface; and were the vehicles of the same weight, it appears that the grooves might cause the resistance to be about thrice what it is upon common rails. At all times there will be more or less dirt, mixed with more or less water, and a serious waste of power will be incurred. I shall now consider another form of iron road, which I think will be superior to the one already in use, for streets.

Cast iron pavements have been tried in England at different times during the past 25 years. They were given up because horses slipped upon them. They are now again under trial in Glasgow, with an improved grooving, which is said to afford a firm foot hold. Mr. Roosevelt of this city has proposed a plan in which he adopts the Glasgow grooving for the horse tracks, and smooth wheel tracks; and he makes holes clear through the plates, in the grooves, so that the dirt and water may pass through, and be conducted to the sewer, through which, as experience has shown, it will readily be carried to the sea. The surface of this pavement would always be free from mud, and very little dust would remain upon it; the resistance of the wheel tracks would be less than that of rails, because the flange and its lateral friction would be avoided; moreover, the wheels would be twice the size of car wheels, and therefore, according to Morin, the resistance would be but one-half. Considering this advantage of large wheels, and the freedom from mud and dust, it is not improbable that the average resistance of the flat and clean iron surface would be less than a third of the resistance to cars upon rails of this form, in the condition they would be in when the pavements are of stone, and the cleaning such as we have at present —which condition, be it observed, cannot be much improved without an expense greater than would be required to pave with iron.

I have thus far considered these roads in relation to horse power. But this power, for all vehicles to carry twenty passengers or more, even at the moderate speed allowable in streets, is at least twice as expensive as steam. Therefore take the ground that horses must be banished from the streets, as unnecessary, expensive and offensive on account of their dirt, and the excessive wear and tear they make upon the pavements. Steam is the known and well tried power which can be substituted for them; or rather, it is a power, which, if properly applied, will be economical and perfectly inoffensive, and for which animal power is a substitute during the infancy of civilization. Perhaps compressed air, or some other more convenient though more costly agent, may by and bye be used; but that is uncertain—steam is sure and good, and will lead to whatever other elementary power may be on the whole better for the purpose.

Substituting steam, and excluding horses, we have advantages both to the railroad and the iron pavement. The former will be relieved from the resistance of dirt, and its traction reduced to eight lbs. per ton; and the latter will be relieved from its grooves, and become everywhere as flat and smooth as good work can make it, at a reasonable expense. I take it, that it will be formed of iron planks, bolted together into platforms, and laid lengthwise, and that its surface would be fully equal to that of rails. The wheels being larger and without flanges, I take it that the traction would be in the inverse ratio of the diameter of the wheels. But the great advantage will be, that a street of given width will accommodate more traffic upon a flat surface than it can upon rails. It is necessary for *accommodation*, to stop whenever one passenger wishes to mount or dismount; and therefore the vehicle must be of such moderate size that not too many persons or too bulky a vehicle shall be detained for the accommodation of one. If twenty be the maximum load, then twelve will be the average load, and a greater number would not wish to stop for one; and the stoppage of a larger vehicle would be an undue incumbrance of the street.

The railroad of course is better adapted for long routes. A train of three hundred passengers, stopping at stations ten miles apart, is not inconvenient, and it economises machinery and labor, and therefore makes it economical for passengers. But city vehicles must stop everywhere, at all times; and they must be small, or they will incommode each other, or fail to accommodate the public. Now the number of men required to work steam omnibuses upon pavements will be the same as are required to work upon rails—one man to each vehicle; and the cost of the vehicles will be about the same. The advantage in favor of the omnibus will be, that its steering apparatus will enable it to go wherever required, and stop without stopping others.

The cost of laying a railway is about equal to paving the same breadth with cast iron laid upon concrete. The durability is about the same for the iron—it will last from 20 to 120 years or more, according to the traffic; but the woodwork of the railroad will last but 12 years, or if wood is not used, then a greater first cost must be incurred. About $128 per mile per year must be expended upon the sleepers of a double track. The balance would therefore be in favor of the pavement, even if the railway were of the ordinary kind. But there must be a pavement in addition to the rails; and the two will cost double.

The whole cost of street cleaning will be saved by the adoption of iron pavements, except when snow is to be removed; no dust will be made upon it. If, from the vulgar habits of a few, whom the inefficient police do not restrain, some dirt be thrown or dropped upon it, the removal of that will not be legitimately chargeable to the pavement or the traffic; and there is no difficulty in repressing such nuisances—they are repressed in all well-governed cities—and the vast damage to clothing, furniture and goods will be saved, and the wear of vehicles will be lessened.

I have not alluded to the grades. Neither the railway nor the iron pavement can operate with full advantage unless the grades are improved to correspond with the improved surface. Upon a common road, an inclination of one in twenty can be ascended by horses with the loads which they can draw at a quick trot upon a level; but upon a railroad a grade of one in a hundred could not be ascended with the load that would be drawn at a trot upon a level. Hence, if the grade is bad, the motive power must be in excess, and cannot work with economy.

In Broadway the steepest grade is about 1 in 34. In Greenwich street and the Eighth and Ninth avenues there are no grades that may not without inconvenience be reduced so that the power might be applied with tolerable economy. And this street, though narrow, with an iron pavement, would accommodate more traffic than Broadway could with all the rails that could be laid in it; and steam power could work upon it with convenience.

The room occupied by steam power upon the road would be about the same in all cases; if a cheap omnibus, carrying outside passengers, upon the top, were run, it would occupy no more room than one which carried only inside passengers, and yet it would carry twice the number. But if more horse power be added, more room will be occupied. All the room occupied by the machinery of an omnibus would accommodate only four passengers, whether it be a large or small one, and carry 12 or 50; but the team of such an omnibus for a stone pavement would occupy near forty feet in length, instead of three; and on an iron pavement it would occupy ten feet or more. This is a consideration which is becoming of importance as the streets become more and more thronged. J. K. F.

Cincinnati and Marietta Railroad.

A large lot of iron, designed for the Marietta and Cincinnati railroad, arrived in our city last week. It will be placed on the track, beginning on the northwestern border of this city and running westward, to facilitate the work of embankment and excavation including the Island running beyond Purcell's summit. On the completion of the road from Wheeling and Belpre to Cincinnati, in 1854, it is the purpose of the company to use throughout the "compound rail," 75 lbs to the yard—8000 tons

of which have already been purchased.—*Scioto Gazette.*

General Railroad Law of Ohio Under the New Constitution.

Sec. 1. *Be it enacted by the General Assembly of the State of Ohio*, That any number of natural persons, not less than five, may become a body corporate, with all the rights, privileges and powers conferred by, and subject to all the restrictions of this act.

TO CREATE AND REGULATE RAILROAD COMPANIES.

Sec. 2. That any number of persons as aforesaid, associating, to form a company for the purpose of constructing a railroad, shall under their hands and seals, make a certificate, which shall specify as follows:—

1st. The name assumed by such company, and by which it shall be known. 2nd. The name of the place of the termini of said road, and the county or counties through which such road shall pass.—3d. The amount of capital stock necessary to construct such road. Such certificate shall be acknowledged before a justice of the peace, and certified by the clerk of the court of common pleas, and shall be forwarded to the Secretary of State, who shall record and carefully preserve the same in his office; and a copy thereof, duly certified by the Secretary of State, under the great seal of the State of Ohio, shall be evidence of the existence of such company.

Sec. 3. That when the foregoing provisions have been complied with, the persons named as corporators in said certificate, are hereby authorized to carry into effect the objects named in said certificate, in accordance with the provisions of this act; and they and their associates, successors and assigns, by the name and style provided in said certificate, shall thereafter be deemed a body corporate, with succession, with power to sue and be sued, plead and be impleaded, defend and be defended, contract and be contracted with, acquire and convey, at pleasure, all such real and personal estate as may be necessary and convenient to carry into effect the objects of the incorporation, to make and use a common seal, and the same to alter at pleasure, and do all needful acts to carry into effect the object for which it was created; and such company shall possess all the powers, and be subject to all rules and restrictions provided by this act.

Sec. 4. Said corporations shall be authorized to construct and maintain a railroad, with a single or double track, with such side-tracks, turn-outs, offices and depots, as they may deem necessary, between the points named in the certificate, commencing at or within and extending to or into any town, city or village, named as the place of the termini of such road, and construct branches from the main line to other towns or places within the limits of any county through which said road may pass.

Sec. 5. The capital stock of such company shall be divided into shares of fifty dollars each, and consist of such sum as may be named in the certificate; such shares shall be regarded as personal property, and shall be subject to execution at law.

Sec. 6. An instalment of five dollars on each share of stock, shall be payable at the time of making the subscription, and the residue thereof shall be paid in such instalments, and at such times and places, and to such person, as may be required by the directors of such company.

Sec. 7. If any instalment of stock shall remain unpaid for sixty days after the time it may be required, whether such stock is held by an assignee, transferred, or the original subscriber, the same may be collected by action of debt, or the directors may sell the stock so unpaid at public auction, for the instalment then due thereon; first giving thirty days public notice of the time and place of sale in some newspaper in general circulation in the country where such delinquent stockholder resided at the time of making such subscription, or becoming such assignee or transferee, or of his actual residence at the time of said sale; or, if such stockholder reside out of the state, such publication shall be made in the county where the principal office of the company is located; and if any residue of money shall remain, after paying the amount due on said stock, the same shall, on demand, be paid over to the owner; if the whole of said instalment be not paid by such sale, the remainder shall be recoverable by an action of debt against the subscriber, assignee or transferee.

Sec. 8. That whenever any railroad company, heretofore incorporated, or created and incorporated under the provisions of this act, shall, in the opinion of the directors thereof, require an increased amount of capital stock, they shall, if authorized by the holders of a majority of the st ck, file with the auditor of state a certificate, setting forth the amount of such desired increase, and thereafter such company shall be entitled to have such increased capital, as is fixed by said certificate.

Sec. 9. That the persons named in said certificate of incorporation, or any three of them, shall be authorized to order books to be opened for receiving subscriptions to the capital stock of said company, at such time or times, and at such place or places, as they may deem expedient, after having given at least thirty days' notice, in a newspaper published or generally circulated in one or more counties where books of subscription are to be opened, of the time and place of opening books; and so soon as ten per centum on the capital stock shall be subscribed, they may give like notice for the stockholders to meet at such time and place as they may designate, for the purpose of choosing seven directors, who shall continue in office until the time fixed for the annual election, and until their successors are chosen and qualified; at the time and place appointed, directors shall be chosen, by ballot, by such of the stockholders as shall attend for that purpose, either in person or by lawful proxies; each share shall entitle the owner to one vote, and a plurality of votes shall be necessary for a choice; but after the first election of directors, no person shall vote on any share (on) which any instalment is due and unpaid. The persons named in such certificate, or such of them as may be present, shall be inspectors of such election, and shall certify what persons are elected directors, and appoint the time and place for holding their first meeting; a majority of said directors shall form a board, and be competent to fill vacancies in their board, make by-laws, and transact all business of the corporation; a new election shall be annually held for directors, at such time and place as the stockholders, at their first meeting, shall determine, or as the by-laws of the corporation may require; and the directors chosen at any election, shall, so soon thereafter as may be convenient, choose any one of their number to be president, and shall appoint a secretary and treasurer of the corporation. The directors, before entering on their duties, shall each take an oath, or affirmation, faithfully to discharge his duties, and they shall, from time to time, make such dividends of the profits of said company, as they may think proper.

Sec. 10. Such corporation is authorized to enter upon any land, for the purpose of examining and surveying its railroad line, and may appropriate so much thereof as may be deemed necessary for its railroad, including necessary side tracks, depots and workshops, and water stations, materials for construction, except timber, a right of way over adjacent lands, sufficient to enable said company to construct and repair its road, and a right to conduct water by aqueducts, and the right of making proper drains; but no appropriation of private property to the use of any corporation provided for in this act, shall be made, until full compensation therefor be first made, in money, or first secured by deposite of money, to the owners or owners, irrespective of any benefit from any improvement proposed by such corporation, as shall be prescribed by law.

Sec. 11. That whenever any railroad company heretofore incorporated, or which may hereafter be incorporated, shall find it necessary, for the purpose of avoiding annoyance to public travel, or dangerous or difficult curves or grades, or unsafe or unsubstantial grounds or foundations, or for other reasonable causes, to change the location or grade of any portion of their road, whether heretofore or hereafter to be made, such railroad companies shall be and are hereby authorised to make such changes of grade and location, not departing from the general route prescribed in the certificate of such company; and for the purpose of making any such change in the location and grades of any such road, as aforesaid, such company shall have all the rights, powers and privileges, to enter upon and take and appropriate such lands, and make surveys necessary to effect such changes and grades, upon the same terms, and be subject to the same obligations, rules and regulations, as are prescribed by law, and shall also be liable, in damages, when any have been caused by such change, to the owner or owners of the lands upon which such road was heretofore constructed, to be ascertained and paid or deposited as aforesaid; but no damages shall be allowed, unless claimed within thirty days after actual notice of such intended change, shall be given to such owner or owners, if residing on the premises, or notice by publication in some newspaper in general circulation in the county, if non-resident.

Sec 12. If it shall be necessary, in the location of any part of any railroad, to occupy any road, street, alley, or public way, or ground of any kind, or any part thereof, it shall be competent for the municipal or other corporation or public officer, or public authorities, owning or having charge thereof, and the railroad company, to agree upon the manner and upon the terms and conditions upon which the same may be used and occupied; and if said parties shall be unable to agree thereon, and it shall be necessary, in the judgment of the directors, of such railroad company, to use or occupy such road, street, alley or other public way or ground, such company may appropriate so much of the same as may be necessary for the purposes of such road, in the same manner, and upon the same terms, as is provided for the appropriation of the property of individuals, by the 10th section of this act.

Sec. 13. Such corporation may demand and receive for the transportation of passengers on said road, not exceeding three cents per mile, and for the transportation of property, not exceeding five cents per ton per mile, when the same is transported a distance of thirty miles or more; and in case the same is transported for a distance less than thirty miles, such reasonable rate as may be from time to time fixed by said company, or prescribed by law.

Sec. 14. Such company shall have power to borrow money on the credit of the corporation, not exceeding its authorised capital stock, at a rate of interest not exceeding seven per cent per annum, and may execute bonds or promissory notes therefor, in sums of not less than one hundred dollars; and to secure the payment thereof, may pledge the property and income of such company.

Sec. 15. Such company may acquire by purchase or gift, any lands in the vicinity of said road or through which the same may pass, so far as may be deemed necessary or convenient by said company to secure the right of way, or such as may be granted to aid in the construction of such road, and the same to hold or convey in such manner as the directors may prescribe; and all deeds and conveyances made by such company, shall be signed by the president, under seal of the corporation; and any existing railroad corporation may accept the provisions of this act, and after such acceptance, all conflicting provisions of their respective charters shall be null and void.

Sec 16. It shall be lawful for such corporation whenever it shall be deemed necessary, in the construction of such road, to cross any road or stream of water to divert the same from its present location or bed; but said corporation shall without unnecessary delay, place such road or stream in such condition as not to impair its former usefulness.

Sec. 17. Such corporation shall, as soon as convenient after its organization, establish a principal office at some point on the line of its road, and change the same at pleasure, giving public notice in some newspaper of such establishment or change.

Sec. 18 Every company organized under this act, shall be required to erect, at all points where their road shall cross any public road at a sufficient elevation from such road to admit of the free passage of vehicles of every kind, a sign with a large and distinct letters placed thereon, to give notice of the proximity of the railroad, and warn persons of the necessity of looking out for the cars; and any company neglecting or refusing to erect such sign, shall be liable in damages for all injuries occurring to persons or property from each neglect or refusal; and each railroad company shall be required to fence its roads, with a good substantial wooden fence, under such rules as the county

commissioners of the several counties through which the same may pass, shall prescribe.

Sec. 19. That each and every railroad company, incorporated under this act shall annually in the month of January, make a full report of the condition of its affairs, to the Auditor of state, showing the amount of capital stock of such company, the gross amount of tolls or receipts during the previous year, the costs of repairs and incidental expenses, the net amount of profits, and the dividends made; with such other facts as may be necessary to a full statement of the affairs and conditions of such road; and the Auditor shall annually present an abstract copy of such report to the general assembly.

Sec. 20. That whenever the line of any railroad company now existing, or which may hereafter organize under this act, shall cross any canal, or any navigable water, the said company shall file with the "board of public works," or with the acting commissioners thereof, having charge of the public works where such crossing is proposed, the plan of the bridge, and other fixtures for crossing such canal or navigable water, designating the place of crossing; and if the said board or acting commissioner thereof, shall approve of such plan, he shall notify such company, in writing of such approval; but if the said board or acting commissioner, shall disapprove such plan, or fail to approve the same within twenty days from the filing thereof, then it shall be lawful for such company to apply to the court of common pleas, or any judge thereof in vacation, and upon reasonable notice being given to the board of public works, or said acting commissioner, said court or judge shall, upon good cause shown, appoint a competent disinterested engineer not a resident of any country through which said road passes, to examine such crossing, and prescribe the plan and condition thereof, so as not to impede navigation; and such engineer shall, within twenty days from his appointment, make his return to the court of common pleas of the county where such crossing is to be made subject to exceptions by either party, and thereupon the court shall at the next term after the filing of said return proceed to examine the same, and unless good cause is shown, shall approve and confirm the same; and such order or confirmation shall be sufficient authority, for the erection use and occupancy of such bridge, in accordance with such plan; provided, that no railroad company shall be authorized to construct a permanent bridge over any canal of this state which shall be less than ten feet in the clear above the top water line of said canal; and the piers and abutments of such bridge shall be placed so as not in any manner to contract the width of the canal, or interfere with free passage on the towing path.

Sec. 21. That whenever the lines of railroad of any railroad companies, in this state or any portion of such lines, have been or may be constructed, so as to admit the passage of burden or passenger cars over two or more of such roads continuously without break or interruption, such companies are hereby authorized to consolidate themselves into a single corporation, in the manner following:

I. The directors of said two or more corporations may enter into an agreement, under the corporate seal of each, for the consolidation of the said two or more corporations, prescribing the terms and conditions thereof; the mode of carrying the same into effect; the name of the new corporation; the number of the directors thereof, which shall not exceed thirteen; the time and place of holding the first election for directors; and the number of shares of capital stock in the new corporation; the am't of each share; the manner of converting the shares of capital stock in each of said two or more corporations into shares in such new corporation; the manner of compensating stockholders in each of said two or more corporations who refuse to convert their stock into the stock of such new corporation; with such other details as they shall deem necessary to perfect such consolidation of said corporations; and such new corporation shall possess all the powers, rights and franchises, conferred upon such two or more corporations, and shall be subject [to] all the restrictions, and perform all the duties, imposed by the provisions of this act; provided, that all stockholders in either of such corporations who will refuse to convert their stock into the stock of such new corporation, shall be paid at least par value for each of the shares so held by them, if they shall so require, previous to said consolidation being consummated.

II. Such agreement of the directors shall not be deemed to be the agreement of the said two or more corporations, until after it has been submitted to the stockholders of each of said corporations, separately, at a meeting thereof; to be called upon a notice of at least thirty days; specifying the time and place of such meeting, and the object thereof, to be addressed to each of such stockholders, when their place of residence is known, and deposited in the postoffice, and published for at least three successive weeks in one newspaper in at least one of the cities or towns in which each of said corporation has its principal office of business, and has been sanctioned by such stockholders, by a vote of at least two thirds in amount of the stockholders present at such meeting, voting by ballot, in regard to such agreement, either in person or by proxy, each share being entitled to one vote; and when such agreement of the directors has been so sanctioned by each of the meetings of the stockholders separately, after being submitted to such meetings in the manner above mentioned, then such agreement of the directors shall be deemed to be the agreement of the said two or more corporations.

Sec. 22. Upon making the agreement mentioned in the preceding section, in the manner required therein, and filing a duplicate or counterpart thereof in the office of the Secretary of State, the said two or more corporations mentioned or referred to in the said first section, shall be merged in the new corporation provided for in such agreement, to be known by the corporate name therein mentioned, and the details of such agreement shall be carried into effect, as provided therein.

Sec. 23. Upon the election of the first board of directors of the corporation created by the agreement in the twenty-first section of this act mentioned, and by the provisions of this act, all and singular the rights and franchises of each and all of said two or more corporations, parties to such agreement, all and singular their rights and interests, in and to every species of property, real, personal and mixed, and things in action shall be deemed to be transferred to and vested in such new corporation, without any other deed or transfer; and such new corporation shall hold and enjoy the same, together with the right of way, and all other rights of property, in the same manner, and to the same extent, as if the said two or more corporations, parties to such agreement, should have continued to retain the title, and transact the business of such corporations; and the titles and the real estate acquired by either of said two or more corporations, shall not be deemed to revert or be impaired by means of anything in this act contained; Provided that all rights of creditors, and all liens upon the property of either of said corporations, parties to said agreement shall be and hereby are preserved unimpaired; and the respective corporations shall continue to exist so far as may be necessary to enforce the same; and provided further, that all the debts, liabilities and duties of either company shall henceforth attach to such new corporation, and be enforced from the same, to the extent and in the same manner, as if such debts, liabilities and dues, had been originally incurred by it.

Sec. 24. Any railroad company heretofore or hereafter incorporated, may at any time, by means of subscription to the capital of any other company, or otherwise, aid such company in the construction of its railroad, for the purpose of forming a connection of said last mentioned road, with the road owned by the company furnishing said aid; or any railroad company organised in pursuance of law, may lease or purchase any part or all of any railroad constructed by any other company, if said companies' lines of road are contiguous or connected as aforesaid, upon such terms and conditions as may be agreed on between said companies respectively; or any two or more railroad companies whose lines are so connected, may enter into any arrangement for their common benefit, consistent with and calculated to promote the objects for which they were created; Provided that no such aid shall be furnished, nor any such purchase, lease or arrangement perfected, until a meeting of the stockholders of each of said companies shall have been called by the directors thereof, at such time and place, and in such manner as they shall designate, and the holders of at least two thirds of the stock of such company represented at such meeting, in person or by proxy, and voting thereat, shall have assented thereto.

Sec. 25. The commissioners of any county, the city or town council of any city or town, and the trustees of any township, which county, city, town or township, has heretofore subscribed to the capital stock of any railroad company, or turnpike, or plank road company, and have issued, or may hereafter issue any bonds for the payment of such subscription, are hereby authorised to sell the said stock, or any part thereof and on such terms as they shall deem to be the interest of said county, city, town or township, respectively, and may apply the proceeds of such sale to the payment of the bonds by such county, city, town or township, respectively subscribed.

Sec. 26. That every railroad company in this State, shall cause all its trains of cars for passengers, to entirely stop, upon each arrival at a station advertised by such company as a station for receiving passengers upon such trains, at least one-half of one minute; and every company, and every person in the employment of such company, that shall violate, or cause or permit to be violated, the provisions of this section, shall be liable to a forfeiture of not more than one hundred dollars, nor less than twenty dollars; to be recovered in an action of debt, upon the complaint of any person, before any justice of the peace of the county in which such violation shall occur: and in all cases in which a forfeiture shall occur under the provisions of this section, the company whose agent shall cause or permit such violation, shall be liable to the amount of such forfeiture, and in all cases, the conductor upon such trains shall be held prima facie to have caused the violation of this section, which may occur upon the train in his charge; said forfeiture to be recovered in the name of the State of Ohio, for the use of common schools.

Indiana.

EXHIBIT OF THE OHIO AND INDIANA RAILROAD CO.

The eastern end of this road is at Crestline, in Ohio, the point on the Cleveland and Columbus road where the Ohio and Pennsylvania road terminates, and forms the direct extension of that road to Fort Wayne, in Indiana.

It is the third link in the chain of roads now building from Philadelphia, via Pittsburg to Chicago, Rock Island and Galena. It also forms the second link in the line from Cleveland, via Crestline and Fort Wayne, to Lafayette, Peoria and Burlington, Iowa.

The charter of this company, under the concurrent legislation of the states, Ohio and Indiana, is perpetual, liberal in its provisions, unrestricted in dividends, and free from vexatious or oppressive alterations.

The company has been duly organized, a liberal amount of stock procured along the line, locations completed, releases to the right of way and depot grounds in general procured, and the work of grading, delivery of cross-ties, and track-laying, put under contract since the 28th of January last.

The work along the whole line is now progressing as rapidly as the supply of laborers will permit. It is confidently expected that the whole roadbed will be prepared ready for the rails next spring, as early as navigation will permit the delivery of iron, when, by laying track at four several points, the road may be brought into profitable use in 18 months from the time of its first commencement.

The cheapness of construction warrants this expectation. The whole amount of excavation and embankment is 2,425,000 cubic yards; no expensive bridges are to be built, and good timber for cross-ties abounds along the whole road.

CHARACTER OF ROAD.

The length is 131¼ miles, of which 127½ miles is straight, and 3¾ miles curved line. One straight line is 43 miles long; another over 30 miles; and the total amount of curvature is only 214 degrees, nearly all of which is curved at towns or stopping places.

In gradients, this line is equally remarkable, hav-

ing no grade greater than 26½ feet per mile, and of the whole road, 63 miles is level. An averaged grade would be 9½ ft. per mile.

It is intended to use the edge, or T rail, of 56 lbs. per yard, on a bed prepared with sub-sills and crossties, to secure the greatest possible amount of surface-bearing, and prevent, as much as possible, the settling at the joints.

The contracts and estimates include five miles of sidings and turn-outs, passenger, freight and water buildings sufficient only for the business at first coming upon the road; so, also, of the engines and rolling stock.

POSITION AS TO OTHER ROADS.

1st. *Connection at the Eastern end.*—From Crestline to Cleveland, the Cleveland and Columbus road furnishes an outlet direct to New York by Dunkirk or Buffalo, the whole of which is now nearly ready to be brought into use. From Crestline to Pittsburg, thence to Philadelphia, is in the charge of the Central Pennsylvania and the Ohio and Pennsylvania railroad companies, and will be entirely completed during the coming winter. From the east end of the Ohio and Indiana road, then, a direct route will be completed to New York, and another direct route to Philadelphia and Baltimore, before this road can be finished.

2d. *Connections at the West end.*—From Fort Wayne to Chicago city the surveys are already in progress, by the construction of which, together with an extension from Warsaw to Lasalle, will form a perfect and direct connection with all the roads construeted and constructing in Northern Indiana and Illinois.

The Fort Wayne and Lafayette road, in the rich valley of the Wabash, will furnish the most direct and desirable route from Peoria and Burlington to the Eastern cities. The Ohio and Indiana road holds a commanding position as a main trunk line between these converging roads radiating from each of its ends. By stretching a thread *from any point* in Northern Indiana and Illinois, to *any one* of the Eastern cities, the position this road holds will be apparent.

3. *Lateral Connections and Local Advantages.*—Besides the immense accumulation of traffic that will be ready at the termini, it has along its line a region of the highest fertility, made widely available by the North and South connections of railways, canals, and plank roads, already constructed.

In 12 miles from the eastern end is Bucyrus, a county-seat; in 28 miles, Upper Sandusky, a county-seat, to which a plank road from the north extends; in 40 miles, the Mad river and Lake Erie railroad from Cincinnati to Sandusky; in 72 miles, Lima, a county-seat, and connection of the proposed railroad from Troy on the south; in 86 miles, the Miami canal, at Delphos; in 99 miles, Van Wert, a county-seat; in 110 miles, the state line; and in 131 miles, Fort Wayne, a county-seat, on the Wabash canal, which now has near 200 miles of plank roads leading into it from points north and south of it. This point alone exports and imports at an average, daily, during canal navigation, 154 tons.

For local traffic, that can have no other outlet, the country along this line affords, in its present state of improvement, abundant assurance of a good remunerative business for a railroad, and compares favorably with the region traversed by the Southern and Central Michigan railroads, both in distance and character of country.

The well known profitableness of western roads now brought into use, may be accounted for by the small cost of construction, cheapness of fuel, and especially from the fact, that the whole face of the country, almost every acre, is highly adapted to agriculture, yielding a large amount of tonnage compared with the population; a soil, too, that prevents the construction of good carriage roads, and *forces* on to railroads the almost entire local traffic.

This portion of Ohio, already in condition to sustain a road, is increasing at the rate of 93 per cent in ten years, while the population of the state increased but 32 per cent. In taxables, the proportionate increase is still greater; that of Allen Co., Ia., being 52 per cent in *three* years, and those counties in that state that will become directly tributary to the Ohio and Ia. road, upon the completion of the proposed lines, now contain 177,526 inhabitants, with $34,000,000 taxables.

The increase of the local business in so fertile a region is accurately registered on the Central Michigan road. Upon this subject their report for last year says.

"The local increase has been so large, that the *gross local earnings* of the road, for the last three years, amount on the average for each year within a fraction of the *entire earnings* of the previous year."

The gross receipts of that road, for the year ending 1st May, 1851, was $947,347, of which $656,831 was local earnings; and for the year ending May, 1852, it is estimated at $1,100,000 gross earnings, with way receipts amounting to $800,000.

Upon these data, the Ohio and Indiana road, *upon its way business alone*, would earn on its length, 131 miles, $460,000. Deducting 40 per cent for expenses of repairs, etc., leaves a net earning of 16 7-10 per cent on the estimated cost of the road.

That this estimate is moderate, it needs only for proof, a schedule of an assumed daily traffic, like the following:

100 passengers, each way, *a* $3	$600
80 tons through freight, each way, $3 75	600
40 " way " half distance	187
Mail service and express goods	79
Makes $460,000 per year, as above	$1466

ESTIMATED COST OF ROAD, MADE BY J. R. STRAUGHAN, CHIEF ENGINEER.

Road bed, track-laying, chairs, spikes, and station buildings, per contract	$740,000
1,200 tons rails, 56 lbs. per yard	600,000
Machinery for first year	210,000
Right of way, engineering and incidentals	90,000
Making an average of $12,520 per mile.	$1,640,000

The above estimates, based upon contracts, is given with entire confidence, as abundant cash means to complete and equip the road.

Releases for the right of way are in general secured by donation from the citizens along the line; large and valuable grounds at the termini, and the several points on the line, secured, estimated in value at $80,000.

Besides the donations, the citizens and counties along the line, are, as yet, the only stockholders, thus attesting their confidence in the enterprise, and making it a domestic interest, and to be guarded as such.

CAPITAL STOCK AND SECURITY TO LOAN.

The capital stock of the company, authorised by the law, is $2,000,000, and may be increased when desired, but this will not be needed until a double track is required.

The corporate and individual stock subscription	$750,000
Value of donations, depot grounds, etc..	80,000
To be raised on loan, secured by mortgage on the road and franchise, for which $1,000,000 bonds will be issued, to cover commissions and all other contingencies	890,000
Total security	1,720,000

A large proportion of the stock is paid in, and the directors feel confident of realizing the remainder as rapidly as it can be required in the construction of the road. Additional subscriptions are still being made to the stock of the company.

For the purchase of the rails and machinery to stock the road, the directors have ordered the sale of the bonds of the company to the amount of one million of dollars, bearing seven per cent interest, payable semi-annually in the city of New York. The punctual payment of both principal and interest to be secured by a deed of trust to Mr. John Ferguson, of the city of New York, of the road, depot grounds, franchises, and the personal property of the company.

These bonds are convertible into the stock of the company at par, at the pleasure of the holder, and at any time before the principal shall fall due—fifteen years. In case of failure in the payment of either interest or principal, the trustee is authorised to take possession of the road, grounds, equipments, etc., or any part thereof, and to use, occupy, or sell the same, without legal process or delay, and apply the proceeds to the payment of such interest or principal.

A copy of the laws authorising the issue and sale of these bonds, is herewith annexed.

In this statement we have desired to keep within bounds as to the favorable character of the ground for the cheap construction of a first class railway; as to the complete aggregate cost of such a road ready for use, and as to its local and relative position for business. It is the road, completed and equipped, which we now offer for the security of these first and only bonds of the company.

Messrs. Winslow, Lanier & Co., No. 52 Wall street, New York, are the authorised agents for the sale of the bonds, who are prepared to furnish any additional information, maps of the lines etc.

WILLIS MERIMAN,
President Ohio and Indiana R. R. Co.

The Submarine Telegraph Between England and Ireland.

The following extremely interesting history of the submarine telegraph between Holyhead and Howth is given by *Saunder's Dublin News Letter*:—

This undertaking, which has been so suddenly and unexpectedly executed, and which has more or less taken the public by surprise, is now complete, and its success certain. It certainly appeared to have been hitherto shrouded in unnecessary secrecy; but the fact was that there were but few engaged in the gigantic enterprise, and those few have been up to this moment, unremittingly and absorbingly engaged in its performance. There were other reasons for reserve; the task was daring, difficult—and, in respect to distance, unprecedented; the projectors, some private individuals, might fail under one or other of the numerous accidents to which it was liable, and they might become subject to the charge of rashness and incompetency. Publicity is, no doubt, serviceable to a powerful and chartered company; in it the responsibility is divided, and personal risk in the event of failure is consequently diminished; but a speculation attempted by an individual, and yet of great national importance, is differently circumstanced. However, the Howth and Holyhead Submarine telegraph is now an established fact, and its promoters are well worthy of the earnest congratulations of all who are capable of appreciating the attributes of decision, energy, and skill. It is to Messrs Newall and Co., of Gateshead-upon-Tyne, assisted by the Gutta Percha company of London, that Europe and America are indebted for the Howth and Holyhead Submarine Electric Telegraph.

Three several companies had been advertised for telegraphing across the Irish sea; the usual means for alluring shareholders, electing directors, appointing agents, engineers, etc., had all been put into operation. These necessarily ponderous and unwieldy corporations were slowly and laboriously proceeding to put their much-talked of schemes into practice, when about three weeks ago the idea flashed across the mind of Mr. R. S Newall, "This Irish telegraph will be a paying concern; it will not require much capital. The firm with which I am connected have facilities for doing the thing—why should we not set about it and do it at once ourselves?" He accordingly explained his views to his partners, got their consent, and immediately applied to Samuel Statham, Esq., conductor of of the Gutta Percha works, City Road. "Can you supply us with eighty miles of telegraph wire, doubly covered with gutta percha, within a fortnight?" "I'll try," was Mr Statham's response; and accordingly it was commenced and finished within the time agreed on, being latterly done at the rate of 12 miles a day. The coated wire was then sent down to Gateshead-on-Tyne to be surrounded with twelve galvanized iron wires twisted around it in a spiral. The cable being finished, Mr. Newall called on Mr. Statham last Tuesday week, and then for the first time told him the object for which it was manufactured. It was agreed that Mr. Statham should bring a staff of assistants and the requisite apparatus, to Holyhead the next day to meet the wire. The admiralty was commu-

nicated with, and kindly sent down Captain Beechy R. N., to give his valuable advice and assistance; and they also lent the *Prospero* government steamer, Lieut. Aldridge, R. N., to aid in carrying out the undertaking. Meanwhile the *Britania* was hired to bring the cable from Whitehaven, and afterwards pay it out from Holyhead to Dublin.

The enormous cable, eighty miles in length, weighing a ton per mile, and all in one continuous piece, was wound up into immense coils, placed on trucks, one after the other, and drawn by steam from Newcastle-upon-Tyne to Whitehaven—from one side of England to the other. The Britannia as has been stated, steamed to Whitehaven to take it on board, when, unfortunately, it was found that the entrance to the dock was too narrow to permit the vessel to enter. The coils had then to be replaced on trucks and carried to Maryport, where they were at length embarked and speedily conveyed to Holyhead. Now, it might be hoped that all difficulties had been overcome, and that there was nothing to do but to lay down the line; but Mr. Statham, who had already achieved the Dover and Calais connexion, knew too well the dangers and accidents to which those concerned were liable in the event of a gale to trust anything to chance, or to proceed one step further without a careful preliminary inspection. The insulation of copper was tested, and found to be defective, then the portions stowed in the various departments of the ship were examined separately and at last it was ascertained that the fault lay in some eight miles of the line lying in the bottom of the hold. There was no thing for it but to disembark the leviathan bulk, and to track it step by step to the exact seat of the defect. This was accordingly done, the fault remedied, and by Tuesday morning the giant rope was in readiness to be placed in its abiding home.

Early on Tuesday morning the *Britania*, under the command of Captain Browne, and towed by the *Prospero*, under Lieut. Aldridge, R. N., commenced paying out the cable, according as it sunk by its own weight to the bottom of the sea, along the route from Holyhead to Howth. There were on board, besides the officers and crew, R. S. Newall, Esq., with a gang from the Gateshead Works; Samuel Statham, Esq., with a gang from the Gutta Percha works; Thomas Allen, Esq., the inventor of a new telegraph instrument; and Mr. Reid, jun. L. D. Gordon, Esq., (Mr. Newalls's partner) had previously departed to Dublin to supervise the land line from the latter city to Howth. Occasional difficulties were experienced in the paying out of the coils; but they were all overcome by the skill and energy of Messrs. Statham and Newall. Slowly the vessels ploughed on at a rate varying from three to five miles an hour; and at length between seven and eight o'clock on the same evening, the *Britania* anchored off Howth. An electric current was sent through the wire to Holyhead, and the returning answer brought the pleasing intelligence that the line was all right throughout, and perfectly insulated. The portion of cable requisite for completing the connexion with the shore and land line was now laid down, and the parties engaged in this arduous undertaking sought some repose, after nearly two days and nights of excessive and harrowing exertion, about daybreak on Wednesday morning.

It might be supposed that everything was now smooth and prosperous. Buoyant with hope, those who had already suffered so much in the attempt went down at noon on Wednesday, to the Amiens street terminus, to test the success of their enterprise. The batteries were put in action, the wires were connected, and they anxiously waited a reply, but none arrived! They telegraphed to Howth and were answered—the fault was further off than the land line. An express train was provided and they dashed down to Howth. Again they telegraphed to Holyhead from the shore—no answer! They took a boat and rowed to the ship. A message sent to Holyhead, brought back the reply that "all was right there." It was now manifest that the fault lay somewhere between the *Britania* and the shore.

It was necessary again to take up this portion of the line, and test it little by little. The defect was probably caused by the straining of the ship upon a line comparatively short. When discovered it was soon remedied on board. It was again recoiled into an open boat, the crew of which made a renewed attempt to lay it down to the shore. In the mean time Messrs Statham and Newall proceeded to shore in another boat with the instruments, but when they overtook the boat which had been engaged in paying out the cable they found it at a stand, the crew having managed to sink the whole line while still some distance from the shore. Again Mr. Statham had to return to the ship, get another mile of cable uncoiled, recoil it in the boat and then row to where the deficient extremity of the cable remained; and there, in an open boat, at two o'clock a. m., with the aid of a little burning spirits, to solder the wires, re-unite the gutta percha, and restore the cable to a continuous and insulated whole. This was effected the remaining distance to the shore laid down, and that night of toil was at length repaid by a success the most ample and complete. On Thursday the *Britania* let go the cable and steamed away; while those on shore, after repeated experiments, were satisfactorily convinced that the communication with Holyhead was now at length without impediment.

Franklin Institute.

Proceedings of the Stated Monthly Meeting, June 17th, 1852.—Mr Geo. W. Smith reminded the meeting that on February 20, 1851, he had presented a list of the number of miles of railroads at that time completed in the United States, and an estimate of the number of miles that would be completed during the present year. Nearly two years having elapsed since the presentation of that estimate, he now had it in his power from the reception of information from the whole of the United States, to test the accuracy of the predictions. The amount completed, and to be completed during the present year, inclusive, may be stated at 13,200 miles, including therein every description of railway, either public or private, an amount somewhat exceeding his former estimate, and derived mainly from the construction of lines not at that time in progress.

He then proceeded to give an estimate from the information that he had collected of the progress of these works during the next three years, ending at the termination of 1855; admitting, however, that the same accuracy was not attainable as in the former estimate, inasmuch as that the period would be greater, and many contingencies which might affect the result could not be made the subject of calculation; the amount, however, he estimated at 18,900 miles at the minimum, and might attain at the maximum 19,700 miles, and even reach 20,000 miles if the bills now before congress, in aid of Iowa and Missouri, should become law, and provided no commercial convulsion should create a stringency in the money market.

He then described the vast army of laborers on these works, and the various establishments directly or indirectly connected with them, as one of the great causes of the rise in the price of food, the others being emigration to California, the unprecedented immigration to this country from the great swarming hive of Europe, and the unprecedented increase of our urban population in a great measure attributable to this immigration, and the activity of commerce consequent thereon, and the result moreover in a great degree of these very railways, plank roads, canals, and steam navigation. The high price of provisions was thus enhanced on the one hand, and on the other prevented rising still higher by one and the same set of causes, which are likely still to continue for some time in operation. The drought of the last year and the unusual cold of the present, could but partially account for this rise.

In speaking of the density of population already attained in some parts of the United States, Mr. Smith referred to a map which he had constructed, which represented a curious illustration of this density. He traced the boundary of an area as large as the kingdom of Great Britain, as follows: commencing on the Atlantic at the mouth of the St. Croix river, ascending it to the head; from this point a line was drawn to the Saco, where it debouches from the White Mountains in New Hampshire, thence to Sandy Hill on the Hudson, in New York; thence to Oswego on lake Ontario, including all south of it in New York, and all of New Jersey, Pennsylvania, and Maryland, north of the Blue Mountains; along this mountain to the Potomac in Maryland, thence by the latter river to Washington, D. C., thence by a straight line to New Haven on Long Island Sound, and thence by the sea to the place of beginning in Maine. The included area will be 84,000 square miles, a close approximation to the kingdom aforesaid, and the population of this area at the present moment, including the usual increase since the census, is 8,180,000 in round numbers, an amount equal to that of Great Britain at the accession of George III, and about one-third of that at the present day. The present population of the American area within the boundaries just mentioned is *twice as great* as the *average* population to the square mile in Europe, and vastly greater than the population of eastern or northern Europe, although much less, of course, in comparison, than the British, French, German, Austrian and Italian countries, &c.

A line drawn from Massachusetts bay to the Potomac, almost in a straight line, passes through more numerous and more populous cities than can be found on a similar line of about 400 miles in extent, drawn on any part of the globe, with the exception of China; London must also be excepted. The population of New York, with its suburbs in Long Island, New Jersey, &c., included in a circle of twelve miles radius round the City Hall, (as the metropolis of London is in a circle of twelve miles round St. Paul's,) is at the present moment, (1852,) 860,000 people, and at the termination of 1855, which will be the period when the 20,000 miles of railway mentioned in his address to the meeting this evening, would be completed, namely, in a little more than three and a half years from the present time, New York will contain more than one million.—*Journal of the Franklin Institute.*

Exhibit of the Tioga Railroad Company.

The Tioga railroad company extends north from the rich bituminous coal mines, near Blossburg, Tioga county, Pennsylvania, to the New York State line, near Lawrenceville, a distance of twenty-six miles, and at that point connects with the Corning railroad of fourteen miles in length, forming a continuous road terminating at the town of Corning, situate on the New York and Erie, and Buffalo Corning and New York railroads, and Chemung canal.

The Corning railroad is now being relaid with heavy iron H rails, and has been leased for a period of ten years to the Tioga railroad company, so that the latter named company will operate and work the entire line of railroad between the coal mines, Blossburg and Corning.

The track of the Tioga railroad is now laid with a flat bar rail, and its original cost was about $440,000.

Under authority of recent Acts of the Legislature of Pennsylvania, and with the concurrence of the parties in interest, the bonds, stock and claims have been consolidated as follows:—

Preferred dividend consolidated stock, 3,800 shares at $50	$190,000
Common consolidated stock, 3,850 shares at $50	192,500
The Legislature has authorized the State authorities to deliver up for cancellation, stock amounting to about	50,000

The Tioga railroad company have made a contract with responsible parties for relaying the track upon the New York and Erie, or six feet guage, and placing thereon very superior heavy iron H rails. This road, the entire completion of which is guaranteed on or before the 15th of August next, will, when finished, equal, in the permanency of its structure, any railroad in the United States.

For the purpose of meeting the expense of relaying the road and its equipment, the company have, under the most ample authority from the Legislature of Pennsylvania, issued seven per cent. coupon bonds to the amount of $350.000, payable, principal and interest, in the city of New York, convertible into stock, and secured by a mortgage, in trust, to Theodore Dehon, Alfred S. Fraser, and Watts Sherman, Esq'rs, of the city of New York, which mortgage is the first and only lien upon the road, its furniture and franchises.

Locomotive engines and cars are contracted for sufficient to transport the immense quantities of

lumber, coal, and miscellaneous freight, which will pass over the roads, as well as passengers.

The coal, which is of the very best quality and inexhaustible, is now mined and delivered in cars at Blossburg, at about fifty cents per ton; and during the past and present year has commanded three dollars and fifty cents per ton at Corning.

With ample facilities of transport, the sale and consumption of this coal will be immensely increased, and it is confidently believed that the demand will only be limited by the capacity of the road.

Apart from the conveyance of coal, there is a very large local business from timber, lumber, shingles, coke, iron, glass, and miscellaneous articles. There are now over twenty millions of feet of lumber in and near the line of road, which will be carried to a ready and good market when the track is relayed. Many who have heretofore rafted their lumber will avail themselves of the more rapid and certain conveyance by railroad. A plank road, seventeen miles in length, and running through a section of good pine timber land, is now being constructed and will terminate at an important point on the railroad; the business and profitable revenue of the company will thus be greatly increased.

In the vicinity of Blossburgh are abundant deposits of iron ore and fire clay of the best quality; fire stone and fine white sand for glass works; stone furnishing the best material for millstones, whetstones, grindstones, and hearthstones for furnaces, also abound in the same neighborhood.

The valley through which the road runs, is not surpassed in the fertility of its soil, yielding abundantly superior wheat, and all agricultural products common to the rich valley lands of southwestern New York.

The population of the county of Tioga has increased three-fold since this company was chartered the local passenger travel is consequently increasing rapidly, and with a steadily increasing through travel north and south, the passenger business must be large and profitable.

The company have the most liberal and ample powers granted to them by the legislature. Branches to mines and mills in any direction are authorized, and will be made whenever such extensions will insure a profitable return for the outlay. Th re are several very important extensions authorized and contemplated, which, when made, will add greatly to the value of the company's property and earnings. The road being of the same gauge as the New York and Erie railroad, facilitates the uninterrupted change of produce at the least expense along the extended line of country bordering on that great work.

The following estimate of business over the road for one year after its completion, is made after a careful consideration of the elements of revenue which surround it.

150,000 tons coal, at 62½ cents per ton is...		$93,750
35,000,000 feet of lumber, at 40 cents per million		14,000
Passengers and miscellaneous freight.....		15,000
		122,750
Expenses, say 50 per cent.....		61,375
Estimated net earnings for the year ending Aug. 1853.....		$61,375
From which there are to be deducted—		
For interest, say 7 per cent. on $350,000	$24,500	
For dividend on preferred stock.....	$11,400	
Less amount assumed and payable by the state under her guarantee.....	7,500	
	3,900	
		28,400
Leaving a surplus for non-preferred stockholders.....		$32,975

By reference to previous statements it will be observed that property costing, when relaid and equipped, $790,000, is mortgaged for $350,000, and that the estimated net earnings amount to $61,375 a sum largely exceeding the 7 per cent agreed to be paid on the bonds issued.

Referring to sections 7 and 9 of the act of the legislature of Pennsylvania passed the 6th of April 1850, and copied herewith, full authority is given to issue these bonds, and create a mortgage to secure them, and a sale of them is made as valid below as at or above par.

JOSEPH W. RYERSS, *President.*

Louisiana Railroads.

The late act of the Legislature for the organization of corporations for works of public improvement and utility, is based upon very liberal principles, and is a great step in advance of our past policy. Under this act, charters have been framed for the Jackson and Opelousas railroad companies, which have both been organized.

New Orleans and Jackson Railroad Company.—Officers—President, James Robb; *Directors*—James Robb, A. D. Kelly, J. P. Benjamin, J. P. Harrison, Isadore Labutut, W. S. Campbell, John Slidell, W. P. Converse, E. W. Moise, Emile La Sere, H. S. Buckner, Charles Pride.

We extract the first five provisions of the charter—

1. The said corporation shall be called the "New Orleans, Jackson, and Great Northern railroad company," and its domicil is fixed in the city of New Orleans.

2. The said corporation is established for the purpose of constructing, working and maintaining a railroad from New Orleans to Jackson, in the State of Mississippi, thence northward, through the State of Mississippi, towards the point that shall be deemed most favorable for continuing the communication to Nashville, in the State of Tennessee. The road to be made on such a scale as shall serve for the main trunk of a continuous line of communication between New Orleans and the northern and western portions of the confederacy.

3. The capital stock of the company is fixed at three millions of dollars, divided into one hundred and twenty thousand shares of twenty-five dollars each. A payment of five per cent. on the amount of each share shall be made at the time of subscribing. The subsequent payments shall be made in such sums, and at such periods, as shall be fixed by the Board of directors; *provided*, that no call shall be made for more than ten per cent. at one time, and that sixty days' notice of each call shall be given, by publication in two newspapers in New Orleans and two in Mississippi. Not more than three calls shall be made in any one year.

4. The said corporation shall go into operation and be organized, as soon as shares of stock to the amount of three hundred thousand dollars shall have been subscribed.

5. The business of the corporation shall be conducted at its domicil, in the city of New Orleans, by a board composed of eighteen directors, who shall be stockholders, of whom six shall be selected from amongst the stockholders residing in the State of Mississippi. A *quorum* shall consist of at least seven directors. The directors shall elect one of their body as president of the company, at their first meeting after their election. At all elections by the stockholders at all their meetings, each share shall be entitled to one vote.

Opelousas Railroad Company.—Officers—Christopher Adams, president; *Directors*—C. Adams, Jr., A. Lanfear, J. Y. de Egana. J. W. Stanton, A. Chiapella, J. D. Denegre, R. B. Sumner, L. J. Sigur, L. Leon Bernard, Gen. A. Declouet, Harvey Hopkins, M. O. H. Norton.

The first five provisions of the charter are as follows:—

1. The said corporation shall be called "The New Orleans, Opelousas and Great Western railroad company," and its domicil is fixed in the city of New Orleans.

2. The said corporation is established for the purpose of constructing, working and maintaining a railroad from Algiers, on the opposite bank of the Mississippi river from New Orleans, and thence westward through or near Thibodaux; thence to Berwick's Bay; crossing which, thence to Washington or near it, on the Courtableu, in the parish of St. Landry, and from thence hereafter to be continued to the point on the Sabine river most favorable for the purpose of continuing said road through the State of Texas to El Paso, on the Rio Grande. The road to be made on such a scale as shall serve for the main trunk of a line of railroad, as shall form a continuous communication between New Orleans, Texas and the Pacific States or Territories, and such branches as they may hereafter choose to make.

3. The capital stock of the company is fixed at three millions of dollars, divided into one hundred and twenty thousand shares at twenty-five dollars each. A payment of five per cent. on the amount of each share shall be made at the time of subscribing. The subsequent payments shall be made in such sums and at such periods as shall be fixed by the board of directors: Provided, that no call shall be made for more than ten per cent. at one time, and that sixty days' notice of each call shall be given, by publication in one newspaper in New Orleans, which shall be known to the stockholders as the official paper of the company, and such newspapers as may be designated along the line of the road. Not more than three calls shall be made in this year—the subsequent years, the calls to be fixed by the stockholders at their annual meeting in January, 1853.

4. The said corporation shall go into operation and be organized, as soon as shares to the amount of three hundred thousand dollars shall have been subscribed.

5. The business of the corporation shall be conducted at its domicil, in the city of New Orleans by a board composed of eighteen directors, who shall be stockholders. The directors shall elect one of their body as president of the company at their first meeting after their election. A quorum to do business shall consist of at least seven directors.—At all elections by the stockholders, at all their meetings, each share shall be entitled to one vote. —*De Bow's Review.*

How Coal was Made.

Geology has proved that, at one period, there existed an enormously abundant land vegetation, the ruins of which, carried into seas and there sunk to the bottom, and afterwards covered over, by sand and mud beds, became the substance we now recognize as coal. This was a natural transition of vast consequence to us, seeing how much utility we find in coal, both for warming our dwellings and for various manufactures, as well as the production of steam, by which so great a mechanical power is generated. It may naturally excite surprise that the vegetable remains should have so completely changed their apparent character and become black. But this can be explained by chemistry; and part of the marvel becomes clear to the simplest understanding when we recall the familiar fact, that damp hay, thrown closely into a heap gives out heat and becomes of a dark color. When a vegetable mass is excluded from the air, and subjected to a great pressure, a bituminous fermentation is produced, and the result is mineral coal, which is of various characters, according as the mass has been originally intermingled with sand, clay, or other earthly impurities.

On account of the change effected by mineralization, it is difficult to detect in coal the traces of a vegetable structure; but these can be made clear in all except the highly bituminous coking coal, by cutting or polishing it down into thin transparent slices, when the microscope shows the fibres and cells very plainly.

From distant isolated specimens found in the sandstones amidst the coal beds, we discover the nature of the plants of this era. They are almost all of simple cellular structure, and such as exist with us in small forms (horse tails, club mosses, and ferns,) but advanced to an enormous magnitude. The species are all long since extinct. The vegetation generally is such as own grows in clusters on tropical islands; but it must have been the result of a high temperature obtained otherwise than that of the tropical regions now is, for the coal strata are found in the temperate, and even the polar regions.

The conclusion, therefore, to which most geologists have arrived, is, that the earth, originally an ercandescent or highly heated mass, was gradually cooled down until in the carboniferous period it fostered a growth of terrestrial vegetation all over its surface, to which the existing jungles of the tropics are mere barrenness in comparison. This

high and uniform temperature, combined with a greater proportion of carbonic acid gas in the manufacture, would not only sustain a gigantic and prolific vegetation, but would also create denser vapors, showers and rains; and these again gigantic rivers, periodical inundations, and deltas. Thus all the conditions for extensive deposits of wood in estuaries would arise from this high temperature; and every circumstance connected with the coal measure points to such conditions.—*Chambers' Miscellany.*

American Railroad Journal.

Saturday, July 17, 1852.

Steubenville and Indiana Railroad Company.

We are advised that the remaining 35 miles of the Steubenville and Indiana railroad, to Newark, has been let on the 8th of last month to responsible bidders on terms highly favorable to the railroad company. This 35 miles comprises the distance from Coshocton to Newark. The graduation and masonry on this part of the line are let to good and responsible bidders, at a rate something under $5,000, per mile. On this portion of the road it is expected the cars will be run in less than one year from the time of letting.

This is the entire line from Steubenville to the Central Ohio railroad at Newark. From Coshocton it is proposed at an early day to make a connection at Mt. Vernon, with the Owl Creek valley railroad, of which no ice will be hereafter taken. On the road from Steubenville to Coshocton many of the sections are nearly completed, and some will be completed in a month or less. Iron for the whole road has been contracted for on terms favorable to the company.

A subscription has been actively set on foot in the town of Lancaster, for the purpose of constructing a connecting road from the Wilmington road to the Steubenville and Indiana road at Newark.

These connections, *i. e.* the Wilmington road and the Bellefontaine road, through the Owl Creek valley road alluded to, which are so earnestly sought for by those interested, indicate the centrality of the Steubenville and Indiana road with reference to the Ohio improvements.

The Pittsburg and Steubenville road by which the Steubenville and Indiana road connects with the Pennsylvania Central railroad and other eastern improvements, is now entirely under contract, and work actively commenced.

Michigan.

Central Railroad.—"The efficient managers of this road," says the Detroit Free Press, "have made another advance movement. Hereafter the cars will leave Chicago at half-past eight in the morning, and quarter before nine P. M., arriving here at 8 o'clock P. M. and 7 A. M. The time of departure from Detroit westward, will hereafter be at 9 o'clock A. M., and five (instead of three quarters past five, as heretofore,) in the afternoon. The running time from here to Chicago, will be 11 hours; from Chicago to Detroit 10¼ hours. By this arrangement the travel from Chicago to New York will be reduced to about 45 hours! The incredible improvement in travel through the country—the rapidity of motion, it will be seen is fully kept up by the Michigan Central railroad. There has been much said of this road; but we doubt if in all the States of the Union a more perfect work can be found, one more elaborately provided with the conveniences of travel, and conducted with more regularity and success, or at less expense, considering the receipts of the road. We say this with a pretty large experience of railroad travel, and with an excusable feeling of pride in a work which reflects credit upon its projectors and managers."

Rabun Gap Railroad.

A great meeting in favor of this project, took place at Anderson S. C. on the 1st inst. We learn from the *Palmetto State Banner*, that Judge O'Neale presided; and that a committee of 21 was appointed, to which were referred all propositions and questions relative to the object of the meeting. The committee made a report with resolutions, which were unanimously adopted. One of these provided for a committee to memorialize the legislature for a charter incorporating the Blue ridge railroad, from Anderson C. H., and by the Rabun Gap; another for a committee to prepare an address to the states interested. The meeting which was numerous, enthusiastic and harmonious from beginning to end, was addressed by Judge O'Neall, Col. J. P. Reid, of Anderson, Col. Whitesides, of Tennessee, Dr. Philips and Mr. Habersham of Georgia, Mr. Pratton and Col. Thomas, of North Carolina, and C. M. Furman, Esq., of Charleston.

There can no longer be any doubt says the *Banner*, that the Rabun Gap road *will be built.*

Kentucky.

Lexington and Danville Railroad.—The stockholders in the Lexington and Danville railway have voted to extend their road to McMinville, on condition that $500,000 stock be immediately raised between Danville and the Tennesseee lines, and a like sum in addition within a year. More than $300,000 has been subscribed, and no doubt is entertained that the whole will be taken. The stock in Tennessee has been nearly all taken. A continuous railway will ere long be opened from Cleveland to the Gulf of Mexico. John Barclay, of Boyle county, has been appointed president, in the place of Mr. Barbour, resigned.

Correction.

In our paper of June 5, an article entitled "Covington and Lexington railroad," caused some misapprehension, from the wording of its title, which should have read "Covington and Lexington, and Maysville and Lexington railroads." The reader will see that, with the above correction, the article would have been perfectly intelligible.

These roads start from points upon the Ohio river some 75 miles distant. They both find it convenient to make the town of Paris, 19 miles from Lexington, a common point, and they wisely joined forces, and are making a common road for this distance, in preference to constructing *two parallel* lines. The roads are in no respects rivals to each other, running, as they do, for the most of the way, in very different directions.

Lake Erie, Wabash and St. Louis Railroad.

We give in another column the proceedings of the friends of this project, at a convention recently held at Logansport, Indiana. The above route is one of the best unoccupied fields for a railroad, in the United States. It traverses the great natural route of travel and freight moving from the western end of Lake Erie westward, toward St. Louis. It also runs through a region of unsurpassed fertility in this country. With such inducements, and the means that the people on the line of the proposed road can easily contribute, the complete and immediate success of the project, cannot for a moment remain a problem.

Carhart's Improved Turntable

We invite attention to the advertisement of Mr. Carhart, of his improved *Turntable*, which will be found in another column. We are informed that the *Turntables* constructed by Mr. Carhart have given entire satisfaction to the companies for whom they have been built. They have been placed upon several roads in this vicinity. We believe Mr. Carhart to be a good workman, and as his prices are very reasonable, we commend his advertisement to the attention of those who may be in want of such an article.

Saut Ste Marie Canal.

We learn by the Montreal Courier that the Hon. J. Young, and Hon. Mr. Killaly, the chief commissioners of the Board of Public Works, are now on a visit to Saut Ste. Marie, to ascertain some facts necessary to be known, preliminary to the construction of a ship canal round the Saut. The Courier expresses gratification that the government is alive to the necessity of this important work, which will enable Canada to secure a full share of the Lake Superior trade to British waters.

Lake Ontario Auburn and New York R. R.

The directors of the Lake Ontario, Auburn and New York railway company, at a meeting recently held at Auburn, elected Thomas Y. How, president; Benjamin F. Hall, secretary; Joshua Burt, treasurer. An executive committee, consisting of Messrs. R. F. Russel, Isaac Bell, and B. Hall, was appointed to prepare with the aid of the engineers, the necessary specifications for the constructing of the proposed railroad, and power to advertise for proposals as soon as specifications shall be prepared.

Susquehannah Railroad--Appointment of Chief Engineer.

We learn that the directors of this company have appointed James P. Kirkwood chief engineer. Mr. K. is an engineer of great experience and high reputation. He was formerly employed on the Boston road, and resided for a short time in this city. Subsequently he was employed on the Erie road as engineer and also as superintendent. The last appointment held by him was that of chief engineer of the Pacific railroad, leading from St. Louis west. This post he was obliged to leave in consequence of a severe attack of billious fever, which prevents his return to the southwest. So highly are his services appreciated by that company, however, as to have induced his being retained as consulting engineer, with a liberal salary.

In all these positions, Mr. Kirkwood has sustained himself with eminent ability, and proved himself an accomplished engineer.

We learn that it is the intention of the directors to put the road under contract at as early a day as possible. With this view the surveys will be resumed and the road located, and it is expected that the work will be ready for the contractors before winter.

In the meantime, our citizens will have an opportunity to become subscribers to the capital stock. Considerable progress has been made in obtaining the amount allotted to our citizens, and it is to be hoped that the city will respond to the appeals of the directors with the same promptitude and liberality with which they were met by the people along the line of the road.

We are informed that the road will surely be put under contract without delay if this be done. If it depends upon Albany we have no doubt of a favorable result.—*Albany Journal.*

Railroads in Spain.

The Spanish provincial correspondence and newspapers are full of accounts of railroads and projects of railroads, by means of which every province looks forward to have its resources developed and its riches increased. Cadiz hopes to see her fallen trade revive; Barcelona to drive even the English smuggling trade in cotton out of the market. The semi-official organ of the ministry avails itself of the enthusiasm awakened on the subject by representing the present ministry as the government whose special commission it is to endow the country with these means of communication, which are expected to change the face of Spain, and put her on a level with the other nations of Europe.

Stock and Money Market.

The money market presents few points of interest. Money continues abundant, with active operations in the fancies, which are at a high figure. Sound securities are firmly held, with generally advancing rates. The whole aspect of the market is favorable, and the whole railroad interest seems to be in the most prosperous condition.

The market for new loans is dull. This inactivity is due rather to the season of the year than to the want of money. Too many of our active business men are out of town to allow much activity in any branch of business. The prospect of an active bond market upon the commencement of the fall business, is good.

The operations of the United States Mint at Philadelphia, for June, 1852, will be seen by the following table:

COINAGE FOR JUNE.

Gold.

168,170	Double Eagles	$3,363,400 00
22,630	Eagles	226,300 00
41,633	Half Eagles	208,165 00
97,670	Quarter Eagles	244,175 00
227,875	Dollars	227,875 00
557,978	Pieces	$4,269,915 00

Silver.

105,000	Dimes	10,500 00
1,850,700	Three Cents	55 521 00
2,513,678	Pieces	$4,335,936 00

Copper.

936'788	Cents	9,367 88
3,450,466	Pieces	$4,345,303 88

GOLD BULLION DEPOSITED FOR COINAGE IN JUNE.

From California	$6,560,000 00
From other sources	127,000 00
Total	$6,687,000 00
Silver Bullion deposited	27,400 00

GOLD DEPOSITS.

	1851.	1852.
January	$5,071,667	$4,161,680
February	3,004,970	3,010,222
March	2,880.271	3,892,156
April	2,878 353	3 091,037
May	3,269,491	4,335,578
June	3,637,560	6,687,000
Total	$20,742,312	$25,177,673

The deposits of gold at the United States Mint, up to to-day, for June, amount to $6,500,000. The following is a statement of the exports and deposits for the first half of the year 1852:

Deposits from Jan. 1 to June 1	$20 511.343
Deposits from June 1 to July-1	6,500,000
Total deposits for 6 months	$27 011.343
Exports during same period	12,663,560
Excess of deposits over exports	$14,347,783

In this statement the deposits for June at the New Orleans and other branch mints are not included. These will probably swell the total amount of deposits nearly a million.

We append the following series of statements relative to the operations of the mint, prepared from an elaborate table recently made out:

COINAGE OF ALL THE MINTS.

To close of 1847	$145,111.295 61
To close of 1848	5 879,720 49
To close of 1849	11,164 695 82
To close of 1850	33,892 306 00
To close of 1851	63 488 524 33
Five months 1852	22,336 331 74
Total coinage at all the mints	$281,878,874 59

TOTAL COINAGE OF EACH MINT.

U. S. Mint at Philadelphia	$228,690,568 59
Branch mint at New Orleans	45.491,665 00
Branch mint at Charlotte, N. C.	3,211,563 50
Branch mint at Dahlonoga, Ga.	4,485,077 50
Total coinage	$281,878,874 59

COINAGE OF THE DIFFERENT METALS.

Gold coinage	$202,205,888 50
Silver coinage	78,252,060 90
Copper coinage	1,420.925 19
Total coinage	$281,878,874 59

The following is a statement of the value of gold, of domestic production, deposited at the Mint and its branches, from their organization to May 31, 1852:

DEPOSITS OF AMERICAN GOLD.

From California	$118,608,082
From other sources	16,166,581

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JULY 17, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	107½
U. S. 6's, 1868	114½
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	117½
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	119
Indiana 5's	95
Indiana 2½	54½
" Canal loan 6's	—
" Canal preferred 5's	47
Alabama 5's	94
Illinois 6's, 1847	81
Illinois 6's—interest	51
Kentucky 6's, 1871	117½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	106½
New York 6's, 1854-5	—
New York 6's, 18 0-'61-'62	114
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	120
New York 5½'s, 1860-'61	108½
New York 5½'s, 1865	109
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	106
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	101½
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	104
Ohio 6's, 1860	108
Ohio 6's, 1870	115
Ohio 6's, 1875	117½
Ohio 5's, 1865	103½
Ohio 7's, 1851	—
Pennsylvania 5's	97
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	108
Virginia 6's, 1886	110

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	107
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	94½
Pittsburg 6's, 1869-1871	—
New York 7's, 1857	109
New York 5's, 1858-'60	100½
New York 5's, 1870-'75	103½
New York 5's, 1890	107
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	107
Erie income 7's, 1855	106½
Erie convertible bonds, 7's, 1871	99½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	94½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	86½
Reading mortgage, 6's, 1860	90
Michigan Central, convertible, 8's, 1860	109
Michigan Southern, 7's, 1860	99½
Cleveland, Col. and Cin. 7's, 1859	109½
Cleveland and Pittsburg 7's, 1860	101½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	—

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	July 8.	July 15.
Albany and Schenectady	109	109
Boston and Maine	106	106½
Boston and Lowell	108½	108
Boston and Worcester	103½	104
Boston and Providence	87	89½
Baltimore and Ohio	75	82
Baltimore and Susquehanna	29½	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	125
Eastern	98½	198½
Erie	88½	87½
Fall River	99½	—
Fitchburgh	102½	103½
Georgia	—	—
Georgia Central	103	—
Harlem	73½	71½
" preferred	112	111
Hartford and New Haven	118	—
Housatonic (preferred)	35	35
Hudson River	67	64
Little Miami	—	—
Long Island	20½	20½
Mad River	—	—
Madison and Indianapolis	112	—
Michigan Central	114½	113½
Michigan Southern	119½	118½
New York and New Haven	113	113½
New Jersey	136	137
Nashua and Lowell	106	—
New Bedford and Taunton	117	117
Norwich and Worcester	54½	55½
Ogdensburgh	27½	—
Pennsylvania	44½	44½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	88½	88½
Rochester and Syracuse	122½	122½
Stonington	54	59
South Carolina	—	—
Syracuse and Utica	132	133
Taunton Branch	115	115
Utica and Schenectady	135	137
Vermont Central	16½	15½
Vermont and Massachusetts	22½	21
Virginia Central	—	—
Western	103½	104
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

EDITOR OF RAILROAD JOURNAL:

Dear Sir—An effort has been made by several individuals, to get stock subscribed for the construction of a "short line" railroad, from Dayton to Cincinnati, which has excited some attention.

As many persons may be led to believe that the proposed line would be the shortest and best road between Cincinnati and Dayton, and that the public interest would be promoted by the construction of the road, I will state my reasons for believing that the proposed road should not be built.

1. This line is not in fact, for railroad purposes, the shortest line. The curvatures, as reported by the engineer, are greater than the curves on the Cincinnati, Hamilton and Dayton railroad. The grades are much higher. It appears by the official reports of the engineers that the difference in the grades going north, is 310 feet, and going south, 420 feet. It is admitted by practical engineers, that an ascent of 20 feet is equal to one mile of level road. By an equated length of line, made up of lineal distance, grades and curves, the length of the "*short line*," so called, is 21·94 miles greater than the other, as will be seen by the following extract from the recent report of the Chief Engineer of the Cincinnati, Hamilton and Dayton railroad, which is herewith submitted to public consideration.

Total amount of curvature on "Short Line" is	846½ deg.
Total amount of curvature on Cincinnati Hamilton and Dayton railroad	844 "
Total elevation going north on "Short Line"	671.5 feet
Total elevation going north on Cincinnati Hamilton and Dayton railroad	361.3 "
Difference in favor of Cincinnati Hamilton and Dayton railroad	310.2 "
Total elevation on "Short Line" going south	531.5 feet
Total elevation on Cincinnati Hamilton and Dayton railroad	110.8 "
Difference in favor of Cincinnati Hamilton and Dayton railroad	420.7 "

The "Short Line" has 21 5-10 mile grades of 39 6-10 feet per mile, as against 14 8-10 miles 20 feet grades on Cincinnati Hamilton and Dayton railroad.

By estimating each degree of curvature as equal to four feet additional distance, and every 20 feet of elevation equal to one mile of level road, as is customary in practice, to equalize merits of lines, and the case stands as follows:

EQUATED DISTANCE C. H. & D R. R.	"Short Line."
Going North	
For curvature.....64	.64 miles
" Ascending grades....18.06	33.55 "
" Actual length.....59.80	52.50 "
78.50	86.69
Going South.	
For curvature.....64	.64 "
" Ascending grades.....5.50	26.55 "
Add actual length.....59.80	52.50 "
65.94	79.69

Difference in favor of Cincinnati Hamilton and Dayton railroad going north 8.19 miles.
Difference in favor of do., going south 13,75 "

The location of the Cincinnati, Hamilton and Dayton road was simply a question of *engineering*, and the *best* line between the termini was adopted, as will be seen by the above table. The line was located upon the route selected by the engineers of the company, reference being had briefly to the object of obtaining the *shortest* and *best* line.

2. But admitting that the "short line" would be as good a route for a railroad as the one occupied by the Cincinnati, Hamilton and Dayton road, the next inquiry is, whether the new road, if constructed, would better accommodate the business of the country? If it would not do so, it would probably be admitted that it should not be built.

The Little Miami railroad runs from Springfield to Xenia, and thence down the valley of the Little Miami river to Cincinnati, 85 miles. The Miami canal runs from Dayton down the valley of the great Miami, on the east side of the river to Hamilton, and thence to Cincinnati. The Cincinnati, Hamilton and Dayton railroad runs from Cincinnati to Hamilton, west of the canal, and from Hamilton to Dayton on the west side of the river. Here are already *two* first class and nearly parallel railroads, averaging less than fifteen miles apart for 60 miles, and a canal between them. It would seem from this statement that the construction of a *third* railroad, running between these two roads, and alongside of the canal, is not required for the public convenience.

It is true that under the *plunder* law of Ohio two turnpikes were constructed from Dayton to Cincinnati, and two others from Hamilton to Cincinnati. But this was under a law which permitted private and local interest to put its arms, elbow deep, into the public treasury. It was these abuses which sunk nearly two millions of state capital, and rendered the law odious. Individuals without some private or local interest would not so have squandered or misapplied their own funds. Let capitalists who wish to make safe and judicious investments in railroads, beware that they are not mis led by mere private interests to make similar mistakes.

Already the competition between the two railroads and the canal has rendered the rate charged for freight, between Cincinnati and Dayton, to almost a nominal price. For several months past, flour has been carried from Dayton to Cincinnati, 60 miles, for eight cents per barrel!

The expense for carrying freight, upon the Cincinnati, Hamilton and Dayton road, will always be less than upon the "short line." The road having the highest grades must be the most expensive road, other things being equal. There is nothing in the comparison between these two routes which can compensate for the great difference in their grades. The comparison in other particulars would be found to be in favor of the Cincinnati, Hamilton and Dayton road.

Passenger trains can always, for the same reason, be run upon the Cincinnati, Hamilton and Dayton road in less time than upon the River valley "short line." The equated distance is less; and the speed of the trains will be much less impeded by running along turnpike roads, through streets, and along the canal work, than they would be on the "short line."

3rd. It may be said that the short line would have the advantage in the location of its depots. This cannot be pretended in regard to the location in Dayton. It is not practicable to get a more convenient and central location than the depot grounds owned by the Cincinnati Hamilton and Dayton railroad company in Dayton.

In Cincinnati the company have depot grounds which cannot be excelled. They are located in the new and growing part of the city, and will soon be in the centre of its population and business, dividing the city by a line running north from the Ohio, and are almost upon the bank of the river just above the reach of the highest flood. They are more convenient for the transhipment of freight to the river and for the general business of the city than any other location which could be obtained in the city. The depot proposed for the "short line," is I believe more than a mile from the Ohio river, and more than 150 feet above it at the ordinary stage of water.

4th. The investment in the road, if it should be constructed. must be unprofitable. The estimate for building the road is about two millions of dollars. Experience has proved that the estimates for roads are generally far below their actual cost. In this case any person of practical experience, who is acquainted with the character of the work in the proposed line, must be satisfied that the actual cost would be much nearer three millions than two.

It is not probable that the business of the country, with all the through freight and travel from connecting roads, would be sufficient to make the stock or cost of constructing three parallel railroads within the space of fifteen miles, profitable, allowing each to have an equal share of the business, and without taking into account the active competition of the canal. Certainly it cannot reasonably be expected that the "short line," located between the other two, and alongside of the canal, and without feeders from the east or the west, would take more than one third of the freight and travel of the country.

The main feeders of the road already constructed come in from the east and from the west and from the north. The Cincinnati Hamilton and Dayton road will derive a large portion of its business from its western and northwestern connections. The "short line" could not not even share in this business, all it could certainly depend on, would be a portion of the local business between Cincinnati and Dayton, and this would be circumscribed within very narrow limits.

5. But if it was practicable to obtain the money by subscriptions of stock, or by selling bonds, or otherwise to build this "short line" road, should it be done? Are there not other roads, even in Ohio, that are much more important for the accommodation of the public, that are not in direct competition with roads already in successful operation, and that promise a more certain and profitable return for the capital invested? To persons acquainted with the lines of railroad now constructing in Ohio, it is not necessary to specify these roads. They may be found in every quarter of the State.

Why should capitalists, and enterprising citizens, who have invested their money in building roads which fully subserve the public convenience and interest, have their investments rendered of little value by the construction of merely rival roads which are not required by the business of the country? If individuals are disposed, not only to make an unprofitable investment of their own money, (though it is generally the fact that some private interest or object influences them,) but to reduce the value of their neighbors prosperity, such schemes as this "short line" road may furnish the means of accomplishing their object.

If it is desirable that the credit of the railroads of the west shall be sustained, and these improvements extended so far as the interest and convenience of the public require, then encouragement should be given to such roads only as are necessary for these purposes; and such enterprises as rest upon mere local competition, or a narrow spirit of local rivalry, or disappointment, should not be encouraged.

Again; the money cannot be raised for this road

in Ohio. The great mass are well accommodated, and well supplied with the roads already in operation. These roads have been located by men directly interested in selecting the best *paying* lines. Such lines have been selected. The interest in favor of new projects is local and sectional. Now, however important such interest may be to *individuals*, they are not to *capitalists* Such people look only as to the *result*. The consider the question upon its broad merits. They are not going to aid in building purely rival roads; nor will they touch a project that does not promise to yield a large advance upon their investment. The short line must go into the market under all these disadvantages; and from a considerable experience in raising money for railroads, I do not hesitate to state the short line railroad could not borrow money for their work upon any basis that could raised in Ohio.

These remarks, Mr. Editor, might be applied to more than one of the rival schemes for railroads in Ohio, and perhaps in other States. I regard the principles stated as of general application, though suggested by the case of the proposed "short line" road from Dayton to Cincinnati. PRUDENCE.

A National University for Practical Science.

H. V. POOR, Esq:

SIR: Under the above head in Appleton's Mechanics' and Engineers' Journal, for May, is an article from the able pen of John A. Roebling, Engineer of Trenton, New Jersey.

Beginning with the announcement of a fact that no one engaged in Scientific Mechanical occupations will dispute, namely that "*the great want of our time is a Polytechnic Institution, or a University for the teaching of Practical and Natural Science,*" he goes on to state, that although the unparalleled advancement of our country is mainly owing to the activity of our mechanics, engineers and miners, yet, while there are institutions in abundance for the education of men of all other professions, medicine, law, theology, etc., with the single exception of the West Point Academy, (which is essentially *military* in its organization,) the scientific student has no where to go to seek that thorough knowledge which alone can fit him rightly to act his part on the great stage of life, in the character he proposes to take. These truths are well known and are to be deplored.

Mr. R. estimates that an institution calculated to accomplish this desirable end, will require from twelve to twenty professors, and that a capital of from $200,000 to $300,000 is necessary to establish it on a fair and respectable footing. This amount seems to be about what will be wanted.

Now in comparison to the object in view, it is almost too trifling a sum to be named. Surely when millions and tens of millions of dollars are annually invested through the means of the very talent it is proposed to develope, so small an amount as the interest on $300,000 (at 6 per cent, $18,000 per year,) can be spared for this object.

Let the matter then be taken up in a practical manner. Nothing less than hard work will accomplish such an undertaking, and in a very short time the benefits of the institution will be acknowledged by all classes of the community.

If the committee of organization which the article in question refers to, has not yet been formed, let it be so at once. If it is already constituted, let every intelligent person interested in the cause do his utmost to further its objects.

Let a subscription list be opened; solicit friends. let every member of the professions and callings that are interested, be waited upon for aid, let the General and State Governments be invoked—and undoubtedly the means can be obtained.

The greatest amount of the labor in calling into being such a university, must necessarily devolve upon a few individuals, but I doubt not that there are those of sufficient intelligence and patriotism to be found having the requisite energy, who would be willing to bear their share of it.

I have not the pleasure of knowing Mr. R. personally, but think, perhaps, if he was solicited, he might be induced to take the initiative in some such plan as he has suggested; if so, it might be considered that the project was actually established.

E. W. S.

St. John city, N. B., July 7, 1852.

The Henderson and Nashville, and Edgefield and Kentucky Railroad Companies.

We learn that Gen. W. Barrow, the agent of the latter company, has recently returned from Madisonville, Ky., at which place the former company was organized on the 7th inst. The object of Gen. Barrow's visit was to secure a junction of these two roads—each having a separate charter within the respective states—at the line between Kentucky and Tennessee; and we are happy to understand that this object has been accomplished. Two resolutions upon this subject were unanimously adopted by the board of directors of the Henderson and Nashville company—the *first*, agreeing to unite with the Edgefield and Kentucky company upon mutually advantageous terms: and the *second* appointed a committee to confer with said company as to what those terms shall be. This committee are to visit Nashville, with this view, during the month of July.

From the inquiries we have made, we are satisfied that the road from Henderson to Nashville—made continuous by the recent union—will prove of vast advantage to our city and country. It will pass through inexhaustible beds of excellent coal, not more than 75 or 80 miles distant, which, it is positively asserted by numerous persons well acquainted with the subject, can be delivered at Nashville at from 6 to 8 cents per bushel. Coal at such a price is the only thing needed to make our town a great manufacturing point.

Besides the important consideration of furnishing cheap fuel, this road deserves the attention and countenance of our citizens, from the fact that by means of the various railroads which will terminate at Evansville, Indiana, twelve miles north of Henderson, on the Ohio river, and of the canal leading from the former point to lake Erie, which will be completed by the beginning of next spring, we shall become the great thoroughfare for the trade and travel of the larger portions of the northwest and of other sections of the country, passing to and from the Atlantic ocean, through that important improvement, the Nashville and Chattanooga railroad.

We understand that steps will be speedily taken for the purpose of obtaining subscriptions to stock in the Edgefield and Kentucky company, being the Tennessee portion of the Henderson road.

The following are the names of the directors of the two companies:

Edgefield and Kentucky Company.—Wm. B. A. Ramsey, president; N. Hobson, John Shelby, Samuel R. Anderson, Washington Barrow, A. W. Johnson, P. W. Maxey.

Henderson and Nashville Company.—Hon. Arch'd Dixon, president; A. B. Barrett, James Alves, Jackson McClain, John H. Lambert, E. D. McBride, of Henderson county, P. M. Robertson, John L. Woolfolk, of Hopkins county, R. J. Torian, of Christian county, E. G. Sebree, of Todd county.—*Nashville Banner.*

Lake Erie, Wabash and St. Louis Railroad.

We have previously alluded to the convention held at Logansport, Indiana, on the 23d ult., to take the steps preliminary to the organization of the above company. The convention was large, and most respectable in its character, embracing the leading railroad men of the northern part of the State. The greatest unanimity and the best spirit prevailed, giving every assurance of an immediate and vigorous commencement of the work. Below we give the substance of the proceedings of the convention.

The following resolutions were offered by the Hon. A. S. White, President of the Lafayette and Indianapolis railroad, and unanimously adopted.

Resolved, That nature has marked the Wabash valley as the best route of a great commercial thoroughfare (by railroad) from the cities of Boston and New York, to St. Louis. The superiority of this line to any other running south of it, consists principally in the fact that it connects homogeniously with the Lake shore interest in its whole extent, and traverses a country which from point to point is already bound together by intimate commercial and business relations, while it presents from Buffalo to St. Louis as direct a route as any other on the map.

Resolved, That this convention in presenting this route to the consideration of the northern cities and the Lake shore lines on the one hand, and to St. Louis and the citizens of the Mississippi valley on the other hand, deem it advisable for the purpose of an easy connection and free and open competition with the eastern lines, to fix the terminus on the eastern borders of Indiana, at a point which looks with equal directness, both to Toledo and Sandusky, the keys of the two western doors of Lake Erie. That point is the eastern line of Allen or Dekalb county, its precise location to be rendered more certain by further surveys and proposed connexions. The coal deposits of the Vermillion and the Illinois system already established, point to the state line near Danville, as the certain western terminus of its Indiana portion.

Resolved, That it is inexpedient between the Indiana termini aforesaid, to fix any intermediate points, or bind the company to any tract narrower than the Wabash valley, satisfied that in this way alone the best surveys can be secured, and the greatest amount of subscription be raised from the towns and citizens along the line—thus giving to the large amount of capital necessary to be employed in its construction the best guaranties for a secure and profitable investment to capitalists, the free and discretionary application of their means to the purposes for which it is invited.

Resolved, That as this road within the limits of Indiana, will be about two hundred miles in length, it would not be prudent to name the capital requisite for its completion and full equipment on the basis of a first class work, which we alone design it to be, at a less sum than $4,,000,000, at the same time our knowledge of the level and unbroken character of the Wabash plain and of the prairie section, the convenient distribution of lime stone quarries of the best description along its whole Wabash division, and the abundance of oak timber and saw mills in full operation along the line, justify the belief that $9,000 per mile is a full estimate for graduation, masonry and ties for a single track road with the necessary side track and therefore that one million of dollars with a small margin for contingencies, such as right of way, engineering, etc., will build the road bed ready for the iron.

Resolved, That it would be inexpedient to commence operations upon a less subscription than $250,000 of unconditional stock, which the friends of the enterprise, irrespective of small local advantages, ought to make up. Subsequent appeals to citizens, towns and corporations whose more immediate final advantages will be manifested by the location of the line, and the value of its connexions

and associations will easily make up another million of subscription, and such a road can safely make a debt equal to its subscription. The Lake Eric, Wabash and St. Louis railroad will find no difficulty, on such a basis in selling her bonds to the amount of the full residue of its capital as above, or to a much larger amount if the business of the road should require it.

Resolved, That it is expedient that a full and thorough survey should be made as soon as practicable, and that the means voluntarily advanced for that purpose shall be reimbursed by the company when fully organized.

Resolved, That we recommend the framing of Articles of Association on the above basis, and that no contract for constructing or other operations on the road except the necessary surveys of the route be made until $250,000 of solvent subscription shall have been made in the aggregate, such fact to be settled and declared by the Governor of the State of Indiana, for the time being, on proper and satisfactory evidence to be furnished, who is hereby respectfully requested to assume such umpirage.

The following articles of association were adopted by the convention, as the basis for the future organization of the company.

Art. 1st. The name and style of the corporation shall be "The Lake Erie, Wabash and St. Louis railroad company."

Art. 2d. The capital stock of the company shall be four millions of dollars to consist of eighty thousand shares of fifty dollars each.

Art. 3d. The eastern terminus of said road shall be a point on the east line of Allen or Dekalb county, in said State of Indiana; thence running down the vallies of the Little Miami and Wabash rivers, and passing through the counties of Dekalb, Whitley, Huntington. Wabash, Miami, Cass, Carroll, Tippecanoe, Fountain, Warren and Vermillion, of as many of them as may be necessary, all in the State of Indiana, on the most eligible route, and terminating at some point on the west line of said State of Indiana, in the general direction of Danville, Ill.

Art. 4th. The length of said road is stated, as near as may be, to be one hundred and ninety miles.

Art. 5th. The number of directors to manage the affairs of the company shall be thirteen.

Books were then opened and stock to the amount of $50,000 taken on the spot.

Wisconsin.

INTERNAL FACILITIES AND RESOURCES.

The most western link of the great chain of lakes is connected with a prong of the Mississippi, called the Wisconsin river, by a hook—named the "Fox and Wisconsin river Improvement." The Fox river is navigable, and empties its waters into Lake Michigan, through Green Bay—a kind of fungus attachment resembling a jug-handle. This great water communication between the Lakes and Mississippi river extends in a south-western direction from Green Bay, through the interior of the settled regions of the State; and is the only great thoroughfare between the Lakes and Mississippi, north of Illinois. The confluence of the Wisconsin river with the Mississippi is a little below Prairie du Chien, one of the most beautifully romantic, as well as most ancient river towns in the West. This river is navigable for two hundred miles, and, with its tributaries, flows through the most extensive lumber regions in the Union, furnishing the lower Mississippi country with annual supplies of rafts of pine lumber, shingles, etc. Steamers are now plying as regularly between the upper and lower trade on the Wisconsin river as the St. Louis and Galena packets on the Mississippi.

Milwaukee, occupying an eligible position for commerce, is located on the Wisconsin side of Lake Michigan, near the center of the western shore, and is destined to be the custom-house recipient for the heavy products of the north-west, in spite of all rivals. This assertion may be coolly received in some quarters; but when the projected Milwaukee and Mississippi railroad is completed, (40 miles of which are now finished, and sixty miles more under contract) common sense and a glance at the geographical position of the route, must convince any one that our conclusion is anything but chimerical. This great arterial trunk, extending from Milwaukee through an already densely populated region, will send forth branches in every feasible direction, to gather in and empty into Milwaukee the surplusage of nearly all the country lying north of latitude 42½°, including Wisconsin, Minnesota, Northern Iowa, and the new Indian purchase—than which no other regions of the great West can boast of receiving more than half the like emigration during the past year or two, nor will likely for years to come.

Madison, the capital of the State, situated in the interior, and in the focus of a rich and healthy agricultural region, will be the secondary central terminus for plank and railroad ingathering—the cargoes, freight and storage of which will flow into Milwaukee by way of the great trunk, for shipment to New York city.—*Grant County Wisconsin Herald.*

Ships and Ship Building.

The following is the amount of tonnage of the several districts in Maine, as it stood at the date of the last official report, June 30, 1851.

	Total tonnage.	Tonnage built during the year ending June 30, 1851.
Passamaquoddy	25,349.38	8,496.70
Machias	22,876.88	2,767.44
Frenchman's Bay	34,899.86	2,358.66
Penobscot	40,809.25	2,153.37
Belfast	44,835.22	4,739.68
Bangor	27,571.62	2,576.44
Waldoboro'	103,593.51	17,793.94
Wiscasset	19,718 26	618.64
Bath	103,795.91	18,782.05
Portland	96,571.70	12,309.38
Saco	2,825.88	781.11
Kenebunk	11,204.44	4,020.78
York	1,263.66	
Total	536,315.91	77,398.49

The total tonnage of the United States is 3,772,439.43—increase 236,985.20. Maine stands third of the ship-owning states—and first of the ship-building states. New York owns 1,045,500 tons, but she built during the year but 76,805. In the building of ships Maine is ahead of any other *three* states.

Cincinnati, Hillsborough and Parkersburg Railroad.

We copy from the Parkersburg Virginia Gazette the following, in reference to this line, the construction of which is gradually progressing, under the extended charter of the Hillsborough and Cincinnati railroad company, whose road is now in operation to a point 58 miles out of Cincinnati, on the direct route to Parkersburg, and is doing very well. The Gazette says:

The surveys, estimates and report of this important section of our through line from Baltimore to St. Louis, are now completed and will be soon submitted in a proper form to the parties interested.

They confirm fully the favorable impressions we have ever entertained, relative to this route.

The distance by the shortest line measured from the *east side* of the Little Kanawa to Cincinnati, when all the cut offs contemplated are made, will not exceed 174 *miles*, and the Chief Engineer has it in contemplation soon to abbreviate this *a mile or two.*

This highly favorable result, more than confirms the calculation made last fall in the pamphlet of our railroad company, and which was then considered *quite apochryphal*, by certain parties on the other side of the Ohio.

This result, too, has been achieved with a remarkably favorable system of grades and curves.

Thus, no grade over 39 6-10 feet per mile, will be encountered between this place and Cincinnati, opposing traffic going west—and none over 52, 80-100 (the maximum of our own road) coming eastward.

The curves are of large radii, and the whole route in fact of the first class.

Twenty-five miles of the line are on *a dead level*, one straight line of *twelve miles* long, and numerous courses of from two to five miles in length.

It is a line upon which the very highest speed known on railways, can be successfully maintained, and it is our opinion that the Engineers have well acquitted themselves of their duty.

From what we can learn, this road appears likely to become *the preferred route* for the extension of the Baltimore line across the State of Ohio. They adopted it, in the map of the late annual report, and we perceive in Mr. Swann's late speech in Baltimore a favorable notice of it.

It is intended to run *coal* into Cincinnati by this route, at a rate so low, as to compete successfully with the Ohio river, and we understand that it has been emphatically pronounced by the Chief Engineer of the Baltimore and Ohio railroad, *the great coal railroad of Cincinnati.*

Tennessee.

A writer in the Nashville Union thus compares the distance on the two routes via Florence and via Lagrange and Holly Springs, to Jackson, Mississippi, there to connect with the New Orleans road.

Upon the *air line* theory, let us now compare the distance of the respective Florence and Clifton routes to Jackson, Mississippi, which city is peremptorily called for in the charter of the Nashville and New Orleans railroad, starting from Mount Pleasant, the diverging point:

From Mount Pleasant to Florence	60	miles.
From Florence to Tuscumbia (river included)	5	"
From Tuscumbia to Aberdeen (air line)	85	"
From Aberdeen to Jackson [air line]	147	"
	297	miles.
From Mount Pleasant to Lagrange, as above stated	147	miles.
From Lagrange to Holly Springs	30	"
From Holly Springs to Jackson	190	"
	367	miles.
	297	"
Difference in distance	70	miles.

—*De Bow's Review.*

Cleveland and Pittsburgh Railroad.

The amount of business on this road is exceeding the expectations of its most sanguine friends. The stock now sells readily at 105 cents, and without doubt will reach a much higher rate than that, when the Wheeling branch is completed. This will be within a year, and perhaps by the first of January next. The company have already declared a dividend of eight per cent for earnings up to the first of January last, and six per cent for the first six monts of the present year. The great benefit of the road to the farmer is evinced by the fact that those of us who nave to buy provisions, even of the growth of our own townships, are compelled to pay very nearly the New York price, or everything will be hurried away to satisfy the hungry Gothamites. On the other hand our merchants who purchase the farmer's products, are enabled to pay him in goods at a much lower price than heretofore. Whatever may be said to the contrary, railroads in the west benefit the farmer more than any other class of the community.—*Hudson Visitor.*

Maine.

Androscoggin and Kenebec Railroad.—The annual meeting of the Androscoggin and Kenebec railroad company held at Waterville on the 6th inst., called together the largest body of stockholders that has been present at any meeting. The forenoon was occupied in reading the reports of the president, treasurer, and superintendent, and fixing the number of directors to be chosen this year. Seven being the number finally agreed upon.

Messrs. Taylor, Goodenow and Dunn, of the old board of directors, having declined being candidates for re-election, the following gentlemen were chosen directors: Edward Crane, William M. Longley, Nath'l. Ross, Samuel P. Benson,

Henry C. Newhall, Lysander Cutler, and Asher Hinds.—*Portland Advertiser.*

Cincinnati and Chicago Railroad.

We give below a letter from the Hon. S. A. Douglass, United States Senator from Illinois, to the Hon. John Woods, the agent of this company, for the purpose of showing the estimate in which the above project is held by the leading minds of the country.

WASHINGTON, *July 8th*, 1852.

MY DEAR SIR:—

Accept my thanks for the report of the New-Castle and Richmond railroad, with the accompanying map of the railroads northwest of the Ohio river. I take great interest in your road as a link in the chain which is to connect Cincinnati with Chicago. That the whole chain will soon be completed I cannot doubt, and that it will pay admirably, when completed, cannot be doubted by any one familiar with the country through which it passes. I hope that Congress will not hesitate to give you a grant of land, in aid of this work, equal to the one made to Illinois for the Chicago and Mobile road. But the road must be made, and the stock will be a good investment, whether the grant of land is made or not. Cincinnati and Chicago are destined to be the great cities of the Northwest, and must be connected by railroad. I would not desire any better investment than the stock of this road; and I do not hesitate to assure you, that whatever I can do to promote its success, either in Congress or elsewhere, will be cheerfully done.

I have the honor to be, very truly,
Your obedient servant,
S. A. DOUGLASS.

JOHN WOODS, Esq.

Massachusetts.

Eastern Railroad Company.—The annual meeting of the Eastern railroad company, will be held at Newburyport on Monday next, when the annual report of the directors will be made. We learn that the financial condition of the road is excellent, and that everything has gone on smoothly for the past year.

The number of passengers carried over the road the past year, as we are informed, was one million four thousand nine hundred and ninety one! Not one of this number has received the slightest injury, nor has there happened any accident by which life or limb has been endangered, during the year. This speaks well for the care and skill of those who have control of the management of the road.—*Salem Observer, 10th.*

Ohio Central Railroad.

A few weeks since the board of trade of this city passed a resolution inviting a visit from a committee of the Direction of the Central Ohio railroad company, with a view to the presentation of such details as would place in its proper light the importance of the relations existing between that work and the Baltimore and Ohio railroad—both of which have a common terminus at Wheeling. A committee from the Central Ohio road, consisting of Col. J. H. Sullivan, George James and William Galigher, Esqrs., are now in this city, and it is in contemplation to call, in the course of the present week, a general meeting of the directors and members of the board of trade for the purpose of hearing the interesting exposition which the gentlemen from Ohio will be prepared to make.—*Baltimore Patriot.*

Kentucky.

Covington and Louisville Railroad.—The Covington and Louisville railway company has been duly organized, the stock necessary for that purpose having been taken. The following gentlemen have been chosen directors, viz: Ishmad Henderson and Thomas C. Rowland, of Louisville; J. T. Robinson and Dr. Baxter, of Gallatin; Col. E. T. Berry, of Henry; Col. Sam. B. Steels, of Oldhame and Geo. P. Frazer, of Jefferson. Mr. Ishmad Henderson was appointed president. "The great advantages of the route of the road which this company proposes to build, says the Louisville Courier, have been demonstrated by the report of the engineer which we published recently and from our knowledge of thi energetic character of the gentlemen composing the board, we look for speedy and persevering action in this great enterprise.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North-Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.
BENJ. H. LATROBE, Chief Engineer.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R.R. and Trans.

Suspension Bridge!

STONE MASONRY!

PROPOSALS will be received on the 26th July, 1852, at the Office of the Niagara Falls and International Suspension Bridge Company, for the construction of the Abutments, Towers, Wings, and Approaches, containing 6,000 cubic yards of Masonry, more or less, of the new Railroad Suspension Bridge of 800 feet span, to be erected in place of the present temporary structure, over the Niagara river, one-and-a-half miles below the Falls.

Separate proposals for the Masonry on the East and West shore, including four Towers of 80 and 90 feet high, will be required. The work is under the charge of JOHN A. ROEBLING, Civil Engineer, whose plans and specifications may be examined at the said Office, on the Canada side, on the 23rd and 24th of next month.

DAVID SMITH,
Superintendent.

Office, Suspension Bridge,
June 28, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon,

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK-'IM IN," containing about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1941, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Brauch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson. Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS.
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

To Contractors.



SEALED PROPOSALS will be received at the Office of the Secretary of the Lake Ontario, Auburn and New York railroad company, at Auburn, until the 20th July instant, for the grading and masonry of the said railroad. The length of the line is 73 miles. It will be divided into sections by the engineer, as may be seen in the schedule of specifications to be exhibited before the 10th inst. Proposals may be made for the whole or separate sections of the line.

Bids offering to accept stock in the company as part payment will be preferred, although bids on condition of cash payment exclusively will be favorably considered.

THOMAS Y. HOW, Jr., Pres't.
B. F. HALL, Secretary.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,
JAWS, BOXES, AND CASTINGS FITTED.
WROUGHT NUTS, BOLTS AND WASHERS,
ENGINE AND CAR SCREW BOLTS, all SIZES,
COACH LAG AND TELEGRAPH SCREWS,
LOCOMOTIVE ENGINE LANTERNS,
From the BEST Manufacturers and at their Prices.
CAR, HAND and SIGNAL LANTERNS.
COTTON DUCK, FOR CAR COVERING,
of any required width to 124 inches.
ENAMELED HEAD LININGS,
The best article made in this country.
PLUSH, and CURLED HAIR.
HAND CARS AND BAGGAGE BARROWS.
PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.
BRASS and IRON WOOD SCREWS.
BRASS AND SILVER PLATED TRIMMINGS
For Windows and Seats.
VARNISH, COACH JAPAN, AND GLUE,
Paints, Varnish and Glue Brushes.
SILVER PLATED AND WHITE METAL LETTERS.
ENGINE and SIGNAL BELLS.
ANTI-FRICTION, OR BABBITT METAL.
PORTABLE FORGES & JACK SCREWS.
HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.
CONDUCTOR'S BADGES AND BAGGAGE CHECKS.
Iron Bronzed and Brass Hat Hooks.
VENTILATORS AND WHITE METAL RINGS,
And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.
ALFRED BRIDGES. { Late Davenport, Bridges & Co., Fitchburg, Mass.

To Contractors.

SEALED PROPOSALS will be received at the office of the Engineer in Syracuse, until the 20th day of July next, for the Grading, Masonry, and Bridging of the Syracuse and Binghamton Railroad. Length of line 76 miles. Separate proposals may be made for the bridging in conformity to plans exhibited at the office of the engineer. The work to be let will be divided into sections of about one mile in length, a large portion of which will be well worth the attention of contractors.

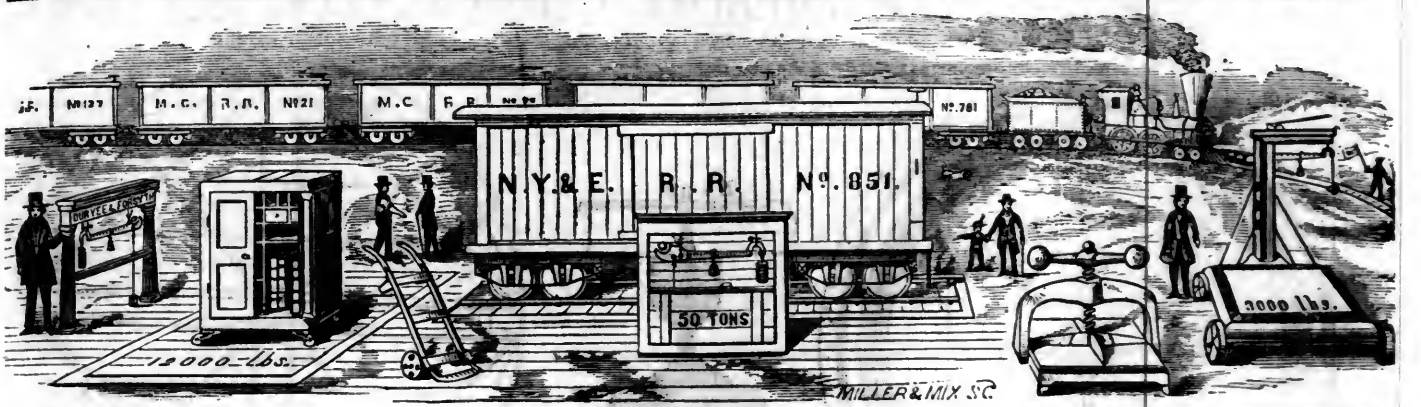
Bids proposing to receive a portion of pay in the stock of the road would be preferred, but such preference will not exclude the favorable consideration of bids for cash payments wholly.

Proposals may be made for the whole line, or for distinct sections.

The line will be prepared for examination on the 10th day of July. Plans, Profiles, and Specifications, and all necessary information will be furnished at the office of the Engineer in the city of Syracuse.

HENRY STEPHENS, President.
June 2, 1852.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS at the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT CONVERTIBLE BONDS OF THE NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

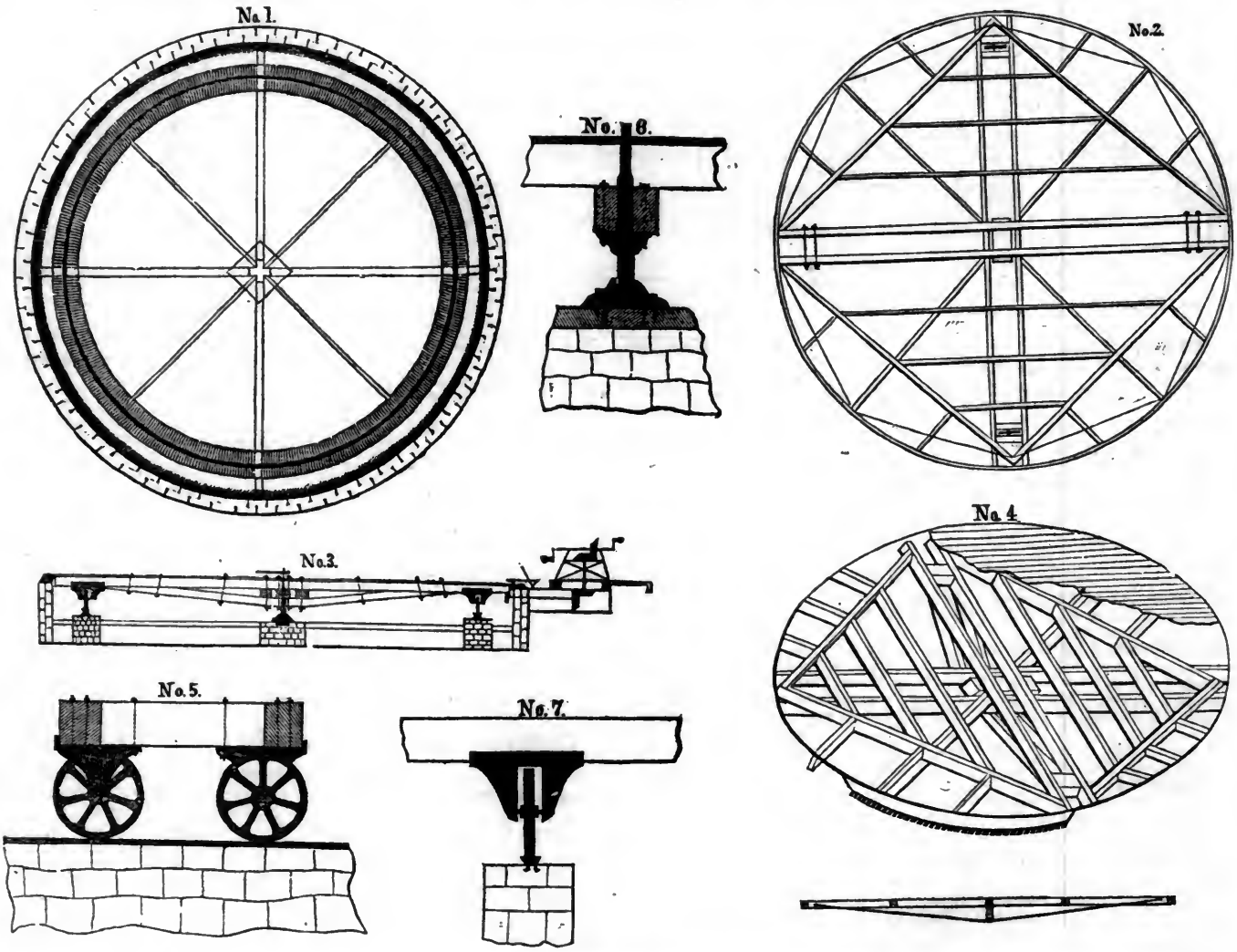
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JFE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 30] SATURDAY, JULY 24, 1852. [WHOLE No. 849, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Exhibit of the Alabama and Tennessee River Railroad Company....465
Marine Railroad Across the Ohio....469
Ericsson's Caloric Engine....470
Cleveland and Wellsville Railroad....471
Canada and its Prospects....472
Ohio and Mississippi Railroad....473
Maysville and Big Sandy Railroad....473
Pennsylvania Railroad....473
Stock and Money Market....473
Lexington and Danville Railroad....474
Emigration Westward....475
County Bonds of Ohio....476
Bloomington Extension Railroad....476

American Railroad Journal.

Saturday, July 24, 1852.

Exhibit of the Alabama and Tennessee River Railroad Company.

The Alabama and Tennessee River railroad company was incorporated by the Legislature of the State of Alabama, March 4th, 1848, and was organized in October, 1849.

The charter authorizes the company to construct a railroad from the Alabama river, at the city of Selma, to the Tennessee and Coosa railroad, extending from the town of Gadsden, on the Coosa river, to Guntersville, on the Tennessee river. A subsequent act of the Alabama Legislature authorizes the Tennessee and Coosa railroad company to be incorporated with the Alabama and Tennessee River railroad company. Thus the entire route from the Alabama to the Tennessee river, is to be under one company and under one direction.

The charter is perpetual. It confers authority to hold, purchase, lease, sell and convey, real, personal and mixed property, so far as shall be necessary for the purposes of the incorporation; also, it requires stockholders to pay the instalments called on their respective shares of stock; and upon failure, or refusal of any stockholder to pay the instalment, the company may sell the stock, on thirty days' notice; and if the stock should be sold for less than the amount due, judgment may be obtained against the defaulting stockholder for such deficiency, which judgment shall be a lien on the real and personal property of the stockholder, and execution shall issue as upon other judgments.

The company is also authorized to contract and receive conveyances of land, stone, timber, etc. required for the road, and in case of disagreement with the owners, to condemn the same—the jury taking into consideration the advantages and disadvantages which the property will sustain by the construction of the road.

The company may also lay and collect tolls from all persons, property, merchandize, and other commodities transported over their road; but the net profits of the company shall never exceed twenty-five per cent. per annum.

The President and directors, or a majority of them, are empowered to borrow money, to issue certificates or other evidences of such loan, and to pledge the property of the company for the payment of the same, with interest.

Authority is also given by an act, amendatory to the charter of the Alabama and Tennessee River railroad company, approved February 10th, 1852, to increase, from time to time, the capital stock of the company to such an amount as the board of directors may deem necessary to cary into full effect the object and purposes of the company.

It also confers full and additional powers to enforce the payment of instalments on stock, and to the procurement of right of Way, Depot Grounds, etc.

And further, in regard to the powers of the board of directors, the amended charter contains the following section:

SEC. 6. *Be it further enacted.* That to remove all doubts which may exist as to the powers of the board of directors of said company, the said board of directors shall be, and they are hereby fully authorized and empowered to issue bonds in the name of and on the faith and credit of said company, in such form, and payable in such time, and bearing such rate of interest [not exceeding eight per cent. per annum] payable annually or semi-annually, as the board of directors may prescribe. And the said board of directors shall also have full power and authority to negotiate, pledge, hypothecate or sell the promissory notes, or bonds, or obligations of any persons, or any other body corporate, or of which said board of directors may have control; and to secure the payment of any bond or bonds, or other obligation of said company, or the interest thereon, or to secure the fulfilment of any contract or duty, or obligation of said company, full power and authority are hereby given to the board of directors of said company to pledge in such form as the board of directors may think proper, by resolution or mortgage, or deed of trust or otherwise, all the means, property and effects of said company, or any part thereof, including subscriptions to the capital stock of the company; and any pledge so made by said board of directors, whether by resolution or mortgage, or deeds of trust, or other form of contract, shall be valid and effectual to all intents and purposes. All duties required by this act, or the act to which this is an amendment, to be performed by a Sheriff, may be performed by the deputy of such Sheriff.

APPROVED, February 10th, 1852.

DESCRIPTION OF THE ROUTE.

The Alabama and Tennessee River railroad commences at Selma, on the Alabama river, and passes through the counties of Dallas, Perry and Bibb, to the town of Montevallo, Shelby county; thence through Shelby, Talladega and Benton counties, by way of Talladega town and Jacksonville, to the Coosa river, at or near the town of Gadsden, a distance of 167½ miles. Here it connects with the proposed Tennessee and Coosa railroad, forty-one-and-a half miles in length, which, however, may be considered as an extension of the Alabama and Tennessee River railroad to the Tennessee river, as it is the intention of the two companies to unite together, under the name of the Alabama and Tennessee River railroad, the right to do so having been granted by the Legislature of Alabama, as before stated.

Accurate and detailed surveys have been made, and the entire line has been located. These surveys demonstrate that the route is well adapted for a railroad economical in its first cost, and effective by its easy grades and curves.

The maximum grade going south, the direction in which the heavy freight is to be transported, from the Tennessee to the Alabama river, 209 miles, is only forty feet per mile, and shortest radius of curvature 1432½ feet, except near the Tennessee river, where a curve of 1146 feet radius occurs.

Between Gadsden on the Coosa river, and Selma, the maximum grade going north is 53.33-100 feet; and between the Tennessee and Coosa rivers, the maximum grade going north is 80 feet per mile, for a short distance.

Excellent materials for construction—such as timber, stone and gravel—abound generally along the whole line.

PROGRESS OF CONSTRUCTION.

About 120 miles of the road are under contract for grading, to be completed in May, 1853. Seventy miles are graded. The iron rails for fifty-six miles have been purchased, the greater portion delivered, and the balance on their way. The track is laid the distance of 25 miles, and is now daily operated upon with a train conveying freight and passengers. The work of laying the track is proceeding at the rate of one and one-quarter miles per week. It is confidently expected that the road will be completed and in operation to Montevallo, (55½ miles,) where the trade of the extensive iron and coal region of Alabama can be rendered available to the road, by next December. Up to this date the expenditures in the construction of the road amount to about $400,000.

The railroad is in the course of construction in the most substantial manner, and in all respects as a first-class railroad, with a heavy T rail [60 lbs. per yard] laid on cross ties two feet apart, from center to center. The superstructure of the bridges (Howe's patent) over the large streams is supported by piers and abutments of stone masonry. The grading and drainage of the road are executed in a thorough manner; and all the materials used in construction, as well as the equipments, are of the most approved quality and description.

RIGHT OF WAY.

The right of way, one hundred feet wide, has been given to the company for nearly the whole length of the road; and lands for depots and stations have also been secured, in all cases as yet, without charge to the company.

ESTIMATE OF THE PROBABLE COST.

The Engineer's estimate of the entire cost of a first class railroad, with a heavy T rail, (60 lbs. per yard,) including a full equipment of depots, stations, motive power, etc. is, from Selma to Gadsden, (167.69 miles,) as follows:—

Graduation, masonry and bridging	$1,015,735
Superstructure, including turn-outs and side tracks	1,207,411
Road crossings, cattle guards, road signs and fencing	50,309
Agencies, engineering, etc. etc.	117,388
Depot grounds, engine and station houses and water tanks, right of way, etc	133,157
Motive power, cars, engines, etc.	253 500
	$2,776,500

or an average of $16,557 per mile.

In this estimate the sum of about $400,000 is for materials and work required to perfect the road after it is in running order, and is expected to be derived from the earnings of the road. The amount, deducted from the estimate, will make the amount necessary to put the road in operation for business equal to $2,376,500.*

WAYS AND MEANS, AND SECURITY FOR LOANS.

To defray the above estimate of expenses, the company have obtained private subscriptions to stock on the road, including stock agreed to be taken by planters and others on the road who have taken contracts	$866,984
Private subscriptions from the citizens of Mobile	170,000
State of Alabama subscription from the 2 and 3 per cent. fund †	178,016
City of Selma corporate subscription	85,000
Present means	$1,300,000
To be raised by additional subscriptions	576,500
Do. do. by a loan on bonds	500,000
	$2,376,500

To obtain this loan of $500,000, the company propose to issue their bonds. These bonds are to be secured by a mortgage, [the first and only lien,] upon the whole length of the road; also upon the materials and the equipments purchased with the proceeds of the bonds, and upon the private subscription to the capital stock of the company, and upon all its rights, franchises and privileges.

From the known ability of the country traversed by this route, the great success which has attended the efforts to obtain stock from individuals, and the lively interest which the people cherish for the project, the directors entertain no doubt of their ability to increase the stock subscriptions to the amount named; and with this conviction they have limited, at present, the amount to be borrowed to $500,000, which is about $3,000 per mile, a sum much less than the cost of the iron for the road.

But should the contingency arise by which the company may want a larger loan for the completion or equipment of their road, the sum specified in the mortgage is to be $838,450, or $5,000 per mile; and bonds are to be issued for that amount, and placed in the hands of the trustees; but with the agreement and understanding, that bonds for the sum of $500,000 only, are to be issued until at least one hundred miles of the road are in actual operation; the balance to be issued only for the payment of the rails and equipments for the remainder of the road.

The bonds will be in sums of $1,000 and $500, bearing interest at seven per cent. per annum,—principal payable in twenty years, and interest semi-annually, in the city of New York.

They will be convertible into stock of the company, at the option of the holder, at any time before maturity.

It will be noticed as a remarkable fact in the present era of railroad construction, that all the subscriptions to the capital stock of this company, with the exception of about $263,000 subscribed by the State of Alabama and the city of Selma, are by individuals, a large majority of whom live along, or near the line of the road. There is scarcely a farmer or planter along or near the road, who has not taken stock, and who is not directly interested, not only in the construction of the road, but in its success after it is in operation. Many of them are able and willing, at the proper time, to materially increase their subscription.

DESCRIPTION OF THE COUNTRY TRIBUTARY AND ADJACENT TO THE RAILROAD.

Geological Character.—From Selma, to within ten miles of Montevallo, the road passes over the Cretaceous formation, characterized by sand, gravel and clay deposits. Thence it passes into the Carboniferous and Silurian formations, through which important formations it continues to the Tennessee river, running, however, on the east side of the Coosa river from two to ten miles of the Metamorphic system of rocks in Talladega and Benton counties.

The Carboniferous, Silurian and Metamorphic system of rocks in Alabama, intersected by and adjacent to the Alabama and Tennessee River railroad, are exceedingly rich in their useful ores and minerals.

There are three extensive coal fields in Alabama, in striking distance of the railroad, viz: the "Tuskaloosa coal field," lying in the valleys of the Warrior river and its tributaries; the "Cahaba coal field," occupying the valleys of the Cahaba river and its tributaries, and also the valleys of Broken Arrow creek and its branches; and the "Sand Mountain coal field," occupying the highlands on the south side of the Tennessee river. All these coal fields are convenient and accessible to the road, particularly those on the Cahaba river and Broken Arrow creek, and on Sand Mountain.

The Cahaba coal measures will be opened to a market by the railroad next December, when it is completed to Montevallo. Partial explorations have been made of the coal seams lying within a mile of the road, near Montevallo, and while the coal has proved to be excellent in quality, it has also been ascertained that it exists in great abundance, and that it can be profitably worked. The seams vary from three to eight feet thick. Seven workable seams have been opened on the Cahaba river, and have been fairly tested, both as to quality, facility and convenience for mining. The Cahaba coal field occupies an area of about 540 square square miles. Assuming the tons of coal to each acre at 4,000, which is less than the average as developed by the mining operations on the south-western edge of this field, and deducting three-fourths for unproductive areas, and for areas covered by rocks, which would prevent mining operations, and also for erosions of strata, and there would be the enormous quantity of 345,600,000 tons of workable coal in this field.

On the northern end of the road, between Gadsden and Guntersville, the extension of the road passes over beds of coal lying nearly horizontal.—This coal has all the appearance of being of good quality; the thickness of the seams has not yet been ascertained.

The present demand for coal on the Alabama river and at Mobile is estimated, at a low figure, at	65,000 tons.
That in the ports of the Gulf of Mexico and the West Indies, according to Taylor's "Statistics of coal"	200,000 tons.
Total present annual demand	265,000 tons.

The proximity of the Cahaba coal field to these places of consumption, and the economy, facility and certainty with which the coal can be transported to the markets of the Alabama river and of the Gulf of Mexico, by the Alabama and Tennessee River railroad and the river, will cause a large proportion of the above estimate of consumption to be transported over the railroad.

In close proximity to the coal field are immense beds of rich hematite iron ore. The Cahaba coal field is almost surrounded by iron ore, while in the Silurian system of Shelby, Bibb, Talledaga, Benton, Cherokee and DeKalb counties of Alabama, near the line of railroad, there are also numerous and very extensive beds of this valuable ore.

Notwithstanding the want of access to market, costing from $8 to $9 per ton to transport the iron to a navigable river, the ore is now profitably worked.

Many varieties of limestone over which the road passes for upwards of 100 miles yield an excellent quality of quicklime. When it is considered that South Alabama, Eastern Mississippi and South Louisiana are now almost entirely supplied with lime from the New England States and Pennsylvania, causing a demand of upwards of 200,000 casks per annum, there can be no doubt that the transportation of lime will also become a source of great profit to the road.

The Silurian and Carboniferous limestones traversed by the road also furnish marble of excellent quality and beautifully variegated colors, such as blue, grey, jet black, buff and dove colors.

The Metamorphic rocks of Talledaga county, from four to nine miles of the road, are remarkable for extensive beds of pure white crystalline marble, some of it equal in texture, and susceptible of as fine polish as the Italian marble. The finest specimen of white marble in the Washington Monument is from a quarry near the road.

Agricultural Character—The counties of Dallas and Perry, on the southern part of the road, are very productive. Those of Bibb, Jefferson, Shelby and St. Clair are not so much so in an agricultural point of view, but have resources which more than compensate for the difference in this respect. These counties are, however, intersected by numerous valleys of red lands, which yield abundantly, and they are capable of sustaining a much more numerous population than any portion of the State. The pursuits of the population are at present chiefly agricultural; and while the lands will not compare in fertility with other counties on the road—for instance, Dallas, Talladega, Benton, Cherokee and DeKalb—yet an examination of their agricultural productions, as exhibited in the census of 1850, indicates a productiveness of soil unusual in districts abounding in coal, iron, etc. Judging from the effects of railroads upon similar countries elsewhere, there can be no doubt that, in a few years after this part of Alabama is opened to a market by the railroad, it will become the most wealthy and populous, and, from its contiguity to cotton and provision producing sections, the most independent part of the south-western States. The health of this country is undoubted.

After leaving the coal and iron districts the road passes through the fertile and thickly inhabited counties of Talladega, Benton and Cherokee.—These counties are settled by a numerous, industrious and intelligent people. The soil is well adapted to the cultivation of cotton, wheat and corn. The country is very healthy. It is also well watered—abounding in streams, affording ample water power for manufactures; and, in fact, it combines all the elements for sustaining a dense industrial and manufacturing population.

From the Coosa to the Tennessee river the highlands are generally poor; but the valleys are fertile, and are thickly settled by small farmers.

The mountain table lands of this section afford extensive ranges for cattle and sheep. Crossing these highlands the extension of the road terminates in the Tennessee valley, one of the richest and most densely settled agricultural districts in the south-west.

There are in Alabama twenty-two counties tributary to the Alabama and Tennessee River railroad and its extension, viz: Benton, Bibb, Blount, Cherokee, Dallas, DeKalb, Jackson, Jefferson, Lawrence, Limestone, Marshall, Madison, Morgan, Randolph, Shelby, St. Clair, Talladega, Tus-

* The road between Selma and Montevallo, 55½ miles, will be completed by next December, at a less cost, as now determined by actual contracts, than the engineer's estimate of this part of the road. Should the price of iron not increase, the same favorable difference in the cost of the remainder of the road may be reasonably anticipated.

† This amount may be increased to $250,000 or $300,000; depending on the settlement which the State of Alabama will have with the general Government in relation to this fund.

kaloosa and part of Autauga, Coosa and Perry counties.

The following statement exhibits the population and productions of agriculture, etc. of these counties according to the seventh census (1850) of the United States, and other authorities.

Population	270,102
Acres of land in improved farms	1,639,493
" " unimproved farms	2,965,502
Cash value of farms	$24,050,427
Value of farming implements and machinery	$1,942,516
Number of Horses, Asses and Mules	74,276
" of Cattle	240 213
" of Sheep	143,267
" of Swine	745,987
Value of live stock	$7,622,160
Bushels of wheat produced per annum.	800,000
" Indian Corn " "	11,531,567
Bushels of Oats	1,229,758
Lbs. of Rice	229,695
" Tobacco	136,806
Number of (400 lb.) bales of ginned cotton	216,685
" lbs. of wool	262,296
" bushels of peas and beans	364,772
" " Irish potatoes	126,978
" " Sweet potatoes	1,240,997
" lbs. of butter	1,367,975
" " Beeswax and Honey	312,190
Value of home made manufactures	$867,228
" Animals slaughtered	1,695,967

The greater part of this important and valuable agricultural country depends on wagons over common earth roads for the transportation of its productions and supplies. The planters on the west side of the Coosa river haul their cotton from fifty to ninety miles to Selma or Tuskaloosa, or float it down the water courses in high freshets. Those on the east side of the river also send it down the river in freshets, or haul it to Wetumpka from 50 to 80 miles, and in some cases they haul it to the Georgia roads, from 80 to 120 miles, by which it is conveyed to the south Atlantic ports; while in the Tennessee valley, the surplus productions are either transported down stream by the Tennessee, Ohio, and Mississippi rivers to New Orleans, a distance of from 1500 to 1700 miles, or up stream to Chattannooga, and thence by railroads about 450 miles to Charleston and Savannah.

Such is an imperfect sketch of the country which is to supply the Alabama and Tennessee river railroad with its *local business*. When the vast extent of this rich country, its already developed great agricultural productions, its immense and comparatively untouched mineral resources are considered in connexion with the fact, that the greater part of this region is deprived of access to market, except by tedious and expensive wagon and flat-boat transportation, it must be admitted that a railroad penetrating such a country, in the natural direction and course of trade, cannot fail to receive an amount of *local business* which will render it profitable in the highest degree.

The *foreign or through business* on the Alabama and Tennessee river railroad will, from its admirable location and connections be also immense.

The Alabama and Tennessee river railroad forms a link in the great chain of railways now constructing on the shortest, most expeditious and attractive line for travel between the north-eastern states and the Gulf of Mexico; and it is also a part of another great system of railways connecting a large portion of the most populous western states on the most desirable route with the gulf.

The great National trunk line of railroad, north east, and south-west, commencing at Portland, in the state of Maine, passes through Boston, New York, Philadelphia and Washington. Up to this point the communication by railway is complete. At Alexandria, nearly opposite Washington, on the south bank of the Potomac, commences the Orange and Alexandria railroad, now in operation and extending 90 miles to Gordonsville, on the Central Virginia railroad. Thence to Charlottesville the Virginia central railroad forms a part of the Grand Trunk for 18 miles; thence to Lynchburgh (65 miles) is the only portion of this great national line the means for which are not provided. But from the important relation which this link bears to the great chain, no doubts are expressed but that it will be soon commenced. Until, however, this link is secured, this part of of the great chain will be supplied by the following roads, viz: the Richmond, Fredericksburgh and Potomac railroad; the Richmond and Danville railroad, now completed to the junction with the South Side railroad at "Burkes," and the South Side railroad which is now on the eve of opening from "Burkes," to Lynchburg—so that from Portland to Lynchburg the whole of this great line may be set down as in operation. From Lynchburg the Virginia and Tennessee railroad carries this great line forward 205 miles to the northwestern boundary of Tennessee, most, if not the entire line of which is under contract, and about 50 miles in operation. To provide the means for this link, the state of Virginia, is a subscriber to its stock in proportion to three-fifths of the full cost of the road, and the work is being pushed forward under very able management to its completion.

The portion of the *Grand Trunk line in Tennessee* is made of two links—the first composed of the *East Tennessee and Virginia railroad*, extending to Knoxville, about 130 miles—nearly the whole of which is under contract. Towards this line, the state of Tennesse has appropriated $1,040,000. for the purchase of iron and equipments. The state has also made an additional appropriation of $303,000 for bridges. The above sums, with the private means already secured place the early construction of this road beyond doubt. The second link, from Knoxville to Dalton, Georgia, is made up of the *East Tennessee and Georgia railroad*, which is already in operation from Dalton to Loudon, on the Tennessee river, a distance of about 80 miles, and 30 from Knoxville; which last section is in rapid progress with abundant means.

From Dalton to the Alabama and Tennessee river railroad, there are several lines projected and chartered, and means are now raising to build them. One of these lines extends from Dalton to Gadsden, and the other from Rome, Georgia, on the line of Georgia railroads, to Jacksonville.

From thence to Selma, the grand national line is continued by the Alabama and Tennessee river railroad. On reaching Selma the grand trunk line forms a connection with the navigable waters of the Gulf of Mexico, by the Alabama river, which runs in a direction nearly coinciding with that of the whole line, and which at present will sufficiently accommodate the business and travel moving towards the Gulf, concentrating at the above point. But it is proposed to construct a railroad on the east side of the Alabama river to Mobile, crossing the river at a convenient point above Mobile. A charter for this road has been obtained. The importance of this road will at once be appreciated, and there can be little doubt that it will be completed at no distant day. This road, however, forms no part of the Alabama and Tennessee river railroad scheme.

The main chain of railroads will, however be continued to Mobile and New Orleans, by other lines of roads, the means for which are nearly all provided, though the route is somewhat more circuitous than the one already described. These roads are, first, the Alabama and Mississippi railroad, leading from Selma to a junction with the Southern railroad at the dividing line between Alabama and Mississippi. The means for constructing this road from Selma to Uniontown, about 30 miles, are obtained, the surveys have been made and the road is to be immediately placed under contract for this distance. Measures are in progress which, it is believed, will secure sufficient means to extend the road from Uniontown to the state line, a distance of about 60 miles—a large portion of the country through which it will pass being the richest section in the south.

Second; the southern railroad, extending from the state line to Jackson, and Vicksburg, Mississippi. This road is in operation from Vicksburg east, to Brandon, a distance of 60 miles, and measures are in progress to secure the balance of the road to the Alabama line. About 15 miles west of the Alabama line, the southern railroad intersects the Mobile and Ohio railroad, which is now in operation 33 miles to Citronelle, and means provided for its construction to a point beyond its junction with the southern railroad. A large portion of this part of the Mobile and Ohio railroad is under contract. The line for seventy miles north of the junction will be under contract by the August next, and the work is progressing rapidly to the Ohio river, under very efficient and successful management.

At Jackson a communication with New Orleans will be effected by the New Orleans and Jackson railroad, which is to be immediately placed under contract, and towards which the city of New Orleans has recently subscribed $2,000,000.

By inspecting the accompanying map, prepared for general circulation under the direction of the accomplished editor of the American railroad Journal, H. V. Poor, Esq., the directness of this *Grand National Trunk Line*, from Portland, Maine, to the Gulf of Mexico, will be noticed as one of its distinguishing characteristics. It has favorable grades and curves for its whole length, and the railroads composing it are designed to be first class railroads, and are constructing at a moderate cost per mile. From Portland to Lynchburg it has a uniform gauge of 4 feet 8½ inches, and from Lynchburg to the Gulf 5 feet; thus permitting produce and merchandize to be transmitted between Lynchburg and the Gulf of Mexico without change of cars. As a great national line of road it combines, in an extraordinary degree, all the conveniences and attractions of a route adapted both to the business and pleasure traveller. From Portland to the city of Washington the line follows the general inclination of the coast, passing through all the great cities. Leaving Washington, the route still pursuing the same course, in almost an exact direction towards Mobile, enters and follows until it reaches the interior of Alabama, the valleys between the lofty parallel ranges of the great Appalachian chain. As far as grandeur and variety of scenery, salubrity of climate, capacity for high speeds, and shortness of line between the two extremes of the country, the commercial cities of the north and those of the south, are concerned, this route must forever stand unrivalled.

The second Grand International line of which the Alabama and Tennessee river railroad will form the southern trunk, is the line connecting the Great lakes on the one hand with the Gulf of Mexico on the other.

From the lakes there are several lines of railroads already constructed, extending to Cincinnati. From Cincinnati to Danville, Kentucky, a distance of 128 miles, the line is under contract, with ample means for its completion. From Danville to the Tennessee state line, about 120 miles, the company is organized and active measures are in progress to raise the means necessary for this link. For that portion of the line through Tennessee, the state has appropriated $8,000 per mile, which, with the private means of the companies already organized, will secure its construction at an early day. A portion of the line extending from Winchester, on the Nashville and Chattannooga railroad to Guntersville, at the northern terminus of the Alabama and Tennessee river road is under contract.

The Alabama and Tennessee railroad will also be connected with lake Michigan and the north-west by the following lines of railroads, viz: First the Winchester and Alabama railroad already referred to. Second, the Nashville and Chattannooga railroad, now in operation from Winchester to Nashville. Third, the Louisville and Nashville railroad, the means for which are already provided (the city of Louisville having taken $1,000,000 stock in the same). Fourth, the several lines which make up the through line from Louisville to Chicago, composed of the Jeffersonville railroad, now completed to its junction with the Madison and Indianapolis railroad, the northern part of the Madison and Indianapolis railroad; the Lafayette and Indianapolis railroad, which is to be opened in September next; and that portion of the New Albany and Salem railroad extending from Lafayette to the south shore of lake Michigan, (where it connects with two roads running to Chicago,) and which will be completed by the 1st day of July, 1853. Until the Louisville and Nashville portion of this line is completed, the route will be supplied by the Cumberland and Ohio rivers. It may also be stated that by the 1st of January next, the cities of Louisville and Cincinnati, will be connected by railroads.

An inspection of the map hereto annexed will show the location of the routes described, and will illustrate the important position of the Alabama and Tennessee river railroad, in being the *Grand Trunk Line* of two immense systems of railways, extending from the farthest limits of the Union to the Gulf of Mexico.

The following table of comparative distances will further illustrate the important position of the Alabama and Tennessee river railroad—

Table of Comparative Distances.—1st, in relation to the through travel, north-east and south-west. Washington city will be taken as the point of comparison—it being a point common to all routes.

Washington city to Mobile via Richmond, Wilmington, Manchester, Atlanta, West Point, Montgomery and Alabama river—464 miles steamboat and 947 miles railroad	1,411 miles.
Washington city to Mobile via Alexandria, Lynchburg, Rome, *Alabama and Tennessee River Railroad*, and Alabama river	1,190 "
Difference nearer by Alabama and Tennessee river railroad, in time 14 hours, and in distance	221 miles.
Washington city to Mobile via Alexandria, Lynchburgh, Dalton, Atlanta, Montgomery and Alabama river.	1,310 miles
Washington city to Mobile via Alexandria, Lynchburg, Knoxville, Dalton, direct line to Alabama and Tennessee river railroad, Selma and Alabama river	1,147 "
Difference nearer via Alabama and Tennessee river railroad	163 miles.

And as regards the shortest line which can ever be obtained to compete with the Alabama and Tennessee river railroad, the comparison of distances will be as follows—

Washington city to Mobile via Alexandria, Lynchburgh, Dalton, Atlanta, Montgomery and proposed line to Mobile	1,071 miles,
Washington city to Mobile via Alexandria, Dalton, Alabama and Tennessee river railroad, Selma, proposed line to Montgomery and Mobile, and thence by that road to Mobile	1,021 "
Difference nearer by Alabama and Tennessee river railroad	50 miles

2nd, As to the comparative distances by the different routes from the Gulf ports to an interior point of the south-west—for instance Knoxville, Tennessee.

New Orleans to Knoxville, Tennessee, via Gulf of Mexico, Charleston and Georgia and South Carolina railroads	1,741 miles.
New Orleans to Knoxville via Mobile Alabama river and Alabama and Tennessee railroad	751 "
Difference nearer via Alabama and Tennessee railroad	990 miles.
Galveston to Knoxville via Charleston, etc	2,122 miles.
Galveston to Knoxville via Mobile, Alabama and Tennessee river railroad etc	1,120 "
Difference nearer via Alabama and Tennessee river railroad	1,002 miles.
Isthmus of Tehuantepec to Knoxville via Charleston, etc	2,182 miles.
Isthmus of Tehuantepec to Knoxville via Mobile etc	1,638 "
Difference nearer via Alabama and Tennessee river railroad	544 "
Isthmus of Panama to Knoxville via Charleston, etc	2,497 miles.
Isthmus of Panama to Knoxville via Mobile, etc	2,198 "
Difference nearer via Alabama and Tennessee river railroad	299 miles.

From these comparisons of distances, and an inspection of the accompanying map, the following general conclusions are drawn:

1st, That for all the territory, including the British Provinces, north of a line drawn from Richmond, Virginia, to Rome, Georgia, and thence to Selma, Alabama, and east of a line drawn from Selma to the eastern boundary of lake Michigan, the most expeditious route to the Gulf of Mexico is presented by the Alabama and Tennessee river railroad.

And, 2nd, That north-western Georgia, east and part of middle Tennessee, western North Carolina, and south-western Virginia, comprising a population of of over 700,000, can be supplied with southern groceries, in exchange for their produce, in less distance, time and cost, over the Alabama and Tennessee river railroad, than over any other. This saving in distance and time, together with the superior advantage of the Gulf market for the purchase of southern groceries, will have the effect of directing to this road a large proportion of the business of this vast inland region. In this connexion it should also be considered that the cotton and sugar producing Gulf states now afford the best market for the products of the corn and wheat growing and stock raising sections of Tennessee and Kentucky.

ESTIMATE OF BUSINESS INCOME AND PROFIT.

The estimates will be confined to that part of the railroad between Selma and Gadsden.

DOWN FREIGHT.

There are now produced about 75,000 bales of cotton in Perry, Autaga, Dallas, Bibb, Shelby, Jefferson, St. Clair, Blount, Tuscaloosa, Marshall, DeKalb, Cherokee, Benton, Talladega and Randolph counties. All these counties are adjacent to or are intersected by the railroad, and will, of necessity, transport their produce over this railroad. Estimating however, that 10 per cent of this cotton seeks market by other channels, and there will be 67,500 bales at an average of $1,10—$74,250.

There are now over 5000 tons of iron made on and near the line of the road, and new works are springing up. The present production, however is only considered; this at $2,60 per ton—$13,000.

From the great and constantly increasing demand for coal, the present demand being 260,000 tons per annum, and the facility and economy with which it can be mined and transported to a navigable river by the railroad, as shown in a former part of this exhibit, it is fair to presume that at least 60,000 tons per annum will be conveyed on this road, which at an average of $1,30, would be $78,000.

As before stated, South Alabama, east Mississippi and south Louisiana are now supplied with lime from New England and Pennsylvania. The lime thus consumed and imported from abroad is estimated at $200,000 casks per annum. Inexhaustible quantities of limestone yielding excellent quick lime, are found along the road from 40 to 100 miles from the Alabama river, and as fuel is very cheap, there can be no doubt that an active commerce in this useful article will spring up immediately on the road. Estimating only one fourth of the demand, 50,000 casks, as that quantity which will be at an early day transported over the road, and the income from this source, at 30 cents per cask will be $15,000.

Of lumber, cord wood, building stone, brick etc. etc. The amount transported must be very large, from the fact, that the country about Selma, and the fertile prairies west of that city must obtain its building materials from the region travelled by the road. To be moderate, the number of tons of these materials transported is assumed to be 25,000 per annum.

Flour, Corn, etc.—It is estimated in the patent office report, of 1847, that the deficiency in the supply of wheat in the states of Alabama, Mississippi, and Louisiana amounts to 3,700,000 bushels, or about 672,000 bbls of flour, while the excess of supply in the state of Tennessee alone is stated at 5,900,000 bushels, or about 1,000,000 bbls. of flour, much the greater part of which is produced in the counties accessible to the northern part of this road.

In Alabama the demand for flour exists in the cotton counties surrounding the southern terminus of the road, while the counties on its northern end produce large quantities of flour for export. Such being the nature of the supply and demand it is believed that at least 60,000 bbls, not one-tenth of the present demand, will be conveyed on the road.

The price of corn in the Tennessee valley is from 14 to 25 cents per bushel; in South Alabama it is from 50 to 80 cents. This great difference in the price will cause a large quantity of corn to be transported over the road—at least 60,000 bushels per annum.

Transportation of Stock.—Experience has demonstrated that the saving alone in the condition of horses, mules and cattle will justify the payment of 25 per cent more for transporting them on railroads than by driving; and that hogs, still more troublesome and relatively more expensive to drive can be transported as cheap as rolling freight, and by transporting them alive there is also saved the carriage of 100 lbs of barrel and brine to each hog; this saving is estimated at fifty per cent. In connexion with these facts it should be stated that the principal markets for the horses, mules, cattle and hogs of the stock raising districts of Tennessee and Kentucky are the cotton-growing sections of South Alabama, Mississippi, and Louisiana, and that the common roads of the country near the line of this railroad, and running south in the same direction, are now the great thoroughfares for stock driving, by which it is estimated from 100 to 150,000 hogs, and a vast number of horses, mules and cattle are annually driven south.

Considering these facts, it is believed that at least 60,000 hogs and sheep, 6,000 cattle, and 5,000 horses and mules, is a low estimate of the number, which will be sent on this railroad to a southern market, instead of being driven over the rough, rocky and muddy roads which characterize the country traversed by the railroad.

Miscellaneous Down Freight, such as bacon, pork, cotton bagging and rope, may be estimated to yield $10,000.

UP FREIGHT.

The *Up Freight* will consist of sugar, coffee, salt, molasses, foreign imports, etc.

The experience of the freighting business on the Alabama river shows that the up freight on that river, consisting principally of light merchandise and groceries, yields more revenue than the down freight, for the reason that although the tonnage is not so great, yet the articles being more valuable than the productions of the country in proportion to weight and bulk, will bear higher rates of charges for transportation; and being generally lighter, they can be transported at a less cost to the carrier. When it is considered that the up freight on the Alabama river supplies a population following the same pursuits and having the same wants as that dependent on this railroad, it is fair to presume that the *up freight* on the railroad will bear the same proportion to the *down freight*, as it does on the Alabama river.

The following statement made from data obtained from several of the most experienced steamboat captains on the Alabama river, shows the average amount of up freight, which is principally groceries on that river.

168 trips of steamboats per annum, averaging 1,500 bbls. per trip	252,000 bbls.
96 trips per annum, averaging 1,000 bbls. per trip	96,000
Total per annum	348,000 bbls.

This amount of up freight, which is considered by well informed persons rather under than over the true quantity, supplies a population not one-half so great as that tributary and accessible to the Alabama and Tennessee river railroad. To be moderate, however, it is assumed that the railroad, as soon as it is in operation, will transport at least one-third more up freight than is now conveyed on the Alabama river. This would give 464,000 bbls. as the amount of up freight, which, at an average of 30 cents per bbl. would give $139,200 as the income from this source—not quite half that which is estimated to be derived from the down freight on the railroad.

That the income from up freight on this road will be very large, is also evident when it is con-

sidered that the comparative table of differences previously given, clearly shows that this railroad presents the shortest and consequenty the cheapest means of communication between a vast extent of territory in Alabama, Tennessee, Georgia, North Carolina and Virginia, comprising a population of over 700,000, and the sugar lands of Louisiana and Texas and the tropical regions of the Gulf of Mexico. In this connection it should not be lost sight of, that the grocery market of the gulf ports is much more favorable to the purchaser than that of the south Atlantic ports.

It will also be borne in mind that the great mass of southern labor is directed to the production of one staple article—cotton—the whole of which has to be exported beyond the limits of the State. This implies not only an exportation of the whole surplus products of the country, but an importation of nearly every article that enters into domestic consumption. The volume of the business, therefore, thrown upon this road must be nearly, if not quite, equal to double the amount of domestic production.

Travel.—The comparative table of distances further indicates the great importance of this railroad as a thoroughfare for travel.

The way travel, for the present, will be supplied by a local population of about 200,000, of which about 129,000 are white people—a large proportion of whom have the means to travel. Estimating that one-third of the white population will travel on the road, which is the experience of the railroads in the new States, as the first or second years' business, the local travel will be 43,000 each way, carried on an average say 60 miles, which, at three cents per mile, is $154,800.

The through travel on this railroad will be supplied by a population of over 700,000, north and northeast of its northern terminus, which can trade with the Gulf of Mexico in less distance and time over this road than over any other; by the 300,000 south and southwest of its southern terminus; and when the railroads connecting with it shall have been completed, by the millions of the northern, middle and western States. The travel which will be thus afforded is beyond present calculation, and more than enough to satisfy all the roads yet projected to the Gulf of Mexico. Not considering the future travel, (to be supplied by roads not yet completed,) but that which will be at once done upon the road through interest, it is reasonable to calculate upon thirty through passengers each way daily, equal to 10,950 each way, per annum—which, at $5, (about three cents per mile) will be $109,500 per annum.

Independent of the very important advantage which the road has for commanding travel, by being the southern trunk of two great national thro' lines, its admirable location, through a healthy and picturesque country, running nearly north and south in the direction and natural current of travel—permitting the citizen of the north to escape, in a few hours, by a safe and pleasant conveyance, from the rigors of a northern winter to the delightful climate of the gulf, and in the summer allowing the southerner to enjoy the mountain air of north Alabama, Georgia, Tennessee, North Carolina and Virginia, will attract to it immense travel.

With all the difficulties, delays and dangers attending the present mode of travel, the number of persons passing north and south by the Mississippi river, by the ocean steamers from New Orleans, and by the mail route through Georgia and the Carolinas, does not fall short of 500,000 per annum. While a fair proportion of this travel will pass over the Alabama and Tennessee River railroad, a great increase of it may be safely calculated upon, when the grand trunk lines of which this road composes the southern base, shall have been completed.

A vast increase of the local travel may also be counted upon from the growth of population in the rich mining and agricultural districts traversed by the road.

In proportion as facilities for travel are created, in the same proportion is travel augmented. In Massachusetts, more than eight times the local population are annually carried on railroads; in New Hampshire and Connecticut the proportion is as 4 to 1, and in New York as 2 to 1; and the average number of passengers on railroads to each inhabitant in all the New England States and New York is 3·28.

RECAPITULATION OF THE FOREGOING DATA,

Showing an estimate of the probable business, income and profit of the Alabama and Tennessee railroad. based upon the present population and resources of the country tributary to the road:

DOWN FREIGHT.

67,500 bales of cotton, at an average of 1·10.	$74,250
5,000 tons of iron at 2·60 per ton	13,000
60,000 tons of coal at 1·30 per ton	78,000
50,000 casks of lime, at 30 cents	15,000
25,000 tons of lumber, cordwood, building stone, marble, etc., at 1·50 per ton.	37,500
60,000 bbls. of flour, at 30 cents	18 000
60,000 bush. corn and other grain, at 10 cts.	6,000
60,000 hogs and sheep, at 80 cents	48,000
6,000 cattle, at 2·50	15,000
5,000 horses and mules, at 3·50	17,500
Miscellaneous freight	10,000
	$332,250
UP FREIGHT	139,200
43,000 way passengers, each way at $1·80.	154,800
10,950 through " " " 5 00.	109 500
Transportation U. S. mail	33,000
Gross receipts	$768,750
Deduct expenses of repairs, running the road and depreciation, 50 per cent.	384,375
Net income	$384,375

Or 13 8-10 per cent on $2,776,500, the estimated cost of the railroad.

EXPENSES.

The expenses on this road, including depreciation, have been assumed at 50 per cent of its receipts. The average proportion of expenses to receipts on thirteen of the leading railroads in the United States for 1850 was 51·4 per cent; while on the Georgia railroad the proportion of expenses to receipts was, for 1850, 36 4 per cent.

On the Alabama and Tennessee River railroad, the articles which compose its local freight are of such a nature that the trains can be so graduated as to run, well filled, throughout the year. When there is not cotton and other productions of the soil to be transported, the down trains can always be well loaded, at different places along the line, with coal, iron, lime, marble, building and mill stones, lumber, etc. The up trains will also have fair loads of groceries, merchandise, etc.

The fact of always being able to run full trains regularly throughout the year will have an important bearing on the economical operations of this road. It is an advantage which few roads have. On the railroads of Georgia and South Carolina, the export freight consists of agricultural productions, the transportation of which, from their nature, must necessarily be crowded into a few months of the year. Nothwithstanding, these railroads pay, probably, better than any in the United States, owing to their moderate first cost, and also to the small cost of repairs and running expenses, arising from the absence of frost and the cheapness of fuel.

If the practical results in operating railroads are examined, it will be noticed that all railroads having full average loads regularly throughout the year, although they may have steep gradients, yet transport at a less expense per ton, and realise greater profits, than other roads which do not have full equal and constant loads. For instance, the Western railroad of Massachusetts, with maximum grade of 83 feet per mile, and an average load of 52½ tons per train, transports freight at a cost of 1·56 cents per ton per mile, while on the Northern railroad of New York, with much lighter grades and easier curves, and average loads of 11½ tons per train, the cost of transport amounts to 3·97 cts. per ton per mile. The Baltimore and Ohio railroad, with grades of 85 feet per mile, delivers coal at a charge of 1½ cts. per ton per mile. The Reading railroad, with trains always fully loaded one way and empty the other, transports coal at an expense of 5 mills per ton per mile, and at a charge of 1·50 cents per ton per mile.

Considering, then, that the Alabama and Tennessee River railroad passes through a country where the frost will have little or no effect upon the road bed, and where fuel, (long leaf yellow pine and bituminous coal) is abundant and cheap; that it can always have fair average loads in both directions; and that it is in the course of construction in a permanent manner at once, at a very moderate first cost, there can be no doubt that its cost of maintenance and its running expenses will be as low as on any of the roads in the United States, and that its result as a good investment for capital will be highly satisfactory.

One of the best evidences of a profitable traffic on the Alabama and Tennessee River railroad will be found in the experience of the operations of the railroads in Georgia.

The following table will show the cost, receipts and dividends of the three leading Georgia railroads, for the year 1851:

	Cost.	Receipts.	Div.
Central	$3,500,000	$748,207	8 per ct.
Georgia	4,000,000	728,923	7
Macon and Western.	1,018,500	208,666	10

The above rates of dividends have been paid regularly for yeas past, leaving a large surplus to each, as a reserved fund. They are properly regarded as among the most successful railroads in the United States, and the stocks of each are in demand, at a handsome premium.

Now the Alabama and Tennessee river railroad cannot fail to pay as well, if not better than the Georgia railroads, briefly, for the following reasons:—

1st. At least three-fourths of the country traversed by the road is good farming land, and where the land is poor, it abounds in coal, iron, limestone, marble, and other useful ores and minerals. The land, both in an agricultural and mineral point of view, is far superior to the country traversed by the Georgia railroads, and the population per square mile is as great. *The local business, therefore,* of the road must be as great, if not greater, than that of the Georgia railroads.

2nd. There is no comparison between the roads as regards their location for *through business.* An inspection of the map and a consideration of the tendency of trade and travel will prove this.

It has equally as great advantage from the absence of frost, and from the cheapness of fuel; and it can be as cheaply built, and better equipped, from the fact that constant improvements are daily making in railroad equipments.

The road will be in operation to Montevallo 55½ miles, next December, at a cost of from $720,000 to $750,600, (depending on the amount of equipment placed on it,) and will commence to yield from 7 to 8 per cent, on its cost as soon as it is in operation. The road completed to this point *only,* will render it morally certain, that the interest of the proposed loan will be punctually paid. And should the loan be obtained, there can be no doubt that the whole line will be completed to Gadsden, 167½ miles early in 1854; most of the grading of the heavy work, from Montevello to Gadsden, being under contract and in an advanced stage of progress and is to be completed in May, 1853. The balance of the grading of the road is generally light, and can be finished rapidly.

That the road will yield as much as has been stated in a previous part of this exhibit, no one acquainted with the subject will deny. The very liberal subscriptions made by the people along the line of the road, who possess the best means of forming a correct opinion as to its probable business, is the best evidence of the soundness of the project. While other companies are considered entitled to borrow money at fair rates, upon a stock subscription equal to one half of the cost of the road, the Alabama and Tennessee company offer as security more than two dollars for every one which they seek to borrow.

LEWIS TROOST,
Chief Engineer and Agent.

NEW YORK, June 28, 1852.

Marine Railroad Across the Ohio.

The Louisville Journal says that a project is in contemplation for the construction of a marine railroad across the Ohio river at that point, to connect Jeffersonville and Louisville. The plan is entirely practicable, and Mr. Hoskins, of New Orleans, together with other men of means, are at the head of the project.

Ericsson's Caloric Engine.

The July number of the Merchants' Magazine contains an elaborate notice of this invention of Capt. Ericsson's, which is soon to be tested on an elaborate scale. A portion of which we give below. The object sought to be found is of incalculable importance. The theory of the matter is correct, but whether Capt. Ericsson has achieved the practical result remains to be seen.

The following is the description referred to.

The engine, (which is now in progress for the steamship) has four cylinders. Two, of seventy-two inches in diameter, stand side by side. Over each of these is placed one much smaller. Within these are pistons, exactly fitting their respective cylinders, and so connected that those within the lower and upper cylinders move together. Under the bottom of each of the lower cylinders a fire is applied. No other furnaces are employed. Neither boilers nor water are used. The lower is called the working cylinder; the upper the supply cylinder. As the piston in the supply cylinder moves down, valves placed in its top open, and it becomes filled with cold air. As the piston rises within it, these valves close, and the air within, unable to escape as it came, passes through another set of valves, into a receiver, from whence it is to pass into the working cylinder, to force up the working piston within it. As it leaves the receiver to perform this duty, it passes through what is called the regenerator, which we shall soon explain, where it becomes heated to about four hundred and fifty degrees, and upon entering the working cylinder, it is further heated by the fire underneath. We have said the working cylinder is much larger in diameter than the supply cylinder. Let us, for the sake of illustration merely, suppose it to contain double the area. The cold air which entered the upper cylinder will, therefore, but half fill the lower one. In the course of its passage to the latter, however, we have said that it passes through a regenerator, and let us suppose, that as it enters the working cylinder, it has become heated to about four hundred and eighty degrees. At this temperature, atmospheric air expands to double its volume. The same atmospheric air, therefore, which was contained within the supply cylinder, is now capable of filling one of twice its size. With this enlarged capacity, it enters the working cylinder.

We will further suppose the area of the piston within this cylinder to contain a thousand square inches, and the area of the piston in the supply cylinder above, to contain but five hundred. The air presses upon this with a mean force, we will suppose, of about eleven pounds to each square inch; or in other words, with a weight of 5,500 pounds. Upon the surface of the lower piston, the heated air is, however, pressing upwards with a like force upon each of its one thousand square inches; or in other words, with a force of 11,000 pounds. Here, then, is a force which, after overcoming the weight above, leaves a surplus of 5,500 pounds, if we make no allowance for friction.—This surplus furnishes the working power of the engine. It will be readily seen that after one stroke of its piston is made, it will continue to work with this force, so long as sufficient heat is supplied to expand the air in the working cylinder to the extent stated; for so long as the area of the lower piston is greater than that of the upper, and a like pressure is upon every square inch of each, so long will the greater piston push forward the smaller, as a two-pound weight upon one end of a balance will be quite sure to bear down one pound placed upon the other. We need hardly say that after the air in the working cylinder has forced up the piston within it, a valve opens, and as it passes out, the piston by force of gravity, descends, and cold air again rushes into, and fills the supply cylinder, as we have before described. In this manner the two cylinders are alternately supplied and discharged, causing the pistons in each to play up and down, substantially as they do in the steam-engine.

We trust our readers will be able, from the brief description we have here attempted, to understand at least the general principles upon which this machine operates. Its cylinders draw their supply from the atmosphere. The cylinders of the steam-engine are supplied by scalding vapor, drawn from hissing boilers. The caloric engine draws into its iron lungs, the same element which expands those of the most delicate child, and derives its motion and its power from that sustaining source upon which depends the existence of all animate life

We have endeavored to explain the construction of the caloric engine. Its most striking feature consists in what is called by its inventor, the regenerator. Before describing this, we will present the grand idea upon which it is based. First let it be remembered that the power of the steam-engine depends upon the heat employed to produce steam within its boilers. It will be seen that from the very nature of steam the heat required to produce it, amounting to about 1,2000°, is entirely lost by condensation the moment it has once exerted its force upon the piston. If, instead of being so lost, all the heat used in creating the steam employed could, at the moment of condensation, be reconveyed to the furnace, there again to aid in producing steam in the boilers, but a very little fuel would be necessary; none, in fact, except just enough to supply the heat lost by radiation. The reason is obvious. Let us suppose the steam has passed from the boiler, has entered the cylinder, has driven the piston forward, and is about to pass into the condenser, there to change its form, and be again converted into water. This steam, yet in the cylinder, and uncondensed, possesses all the heat it contained before passing out of the boiler. It has driven the piston forward, but in that effort it has lost no heat. That source of power it still contains.

Let it be supposed that the heat contained in the steam could, at the moment it is converted into water within the condenser, be saved, and by some device be again used to create steam from water within the boiler, with what exceeding cheapness could the power of the steam engine be employed. But it is quite impossible thus to re-employ the heat of steam: it cannot thus be saved; and hence every effort to economize in this manner would be unavailing.

The propositions we have here advanced were, it appears, more than twenty-five years since familiar to the scientific mind of Captain Ericsson. He was at that early period deeply impressed with their importance; and regarding heat as the sole source of motive-power, was anxious to discover some element in which it could be so employed that, after giving motion to machinery, it should be returned to act over and over again for the same purpose. But little reflection was necessary to convince him that steam was not this element. It must consist of some permanent gas, and atmospheric air seemed admirably adapted to the purpose. Accordingly it was employed by him.

In a work entitled "A Dictionary of the Arts of Life and Civilization," published in London in 1833, the author, Sir Richard Philips, mentions an engine which Captain Ericsson then had in operation in that city, as "his application of excited or rarefied air to the performance of those powers of machinery, which hitherto have been made to depend on the intervention of boiling water and its steam." The author further states that he "has, with inexpressible delight, seen the first model machine, of five horse power, at work. With a handful of fuel applied to the very sensible medium of atmospheric air, and a most ingenious disposition of its differential powers, he beheld a resulting action, in narrow compass, capable of extension to as great forces as ever can be wielded or used by man."

The author adds:—"The principle of this new engine consists in this: that the heat which is required to give motion to the engine at the commencement, is returned by a peculiar process of transfer, and thereby made to act over and over again, instead of being, as in the steam engine, thrown into a condenser, or into the atmospheric, as so much waste fuel."

During the last nineteen years, Captain Ericsson has employed much of his time, and expended large amounts of money, in overcoming those practical difficulties which are ever stumbling blocks in the way leading to the successful development of a great principle in new machinery. This he has now achieved. The principle of this invention, as stated by Sir Richard Phillips, is still retained, embodied in that practical and complete form, which render this engine economical, absolutely safe, durable, simple in construction, and in action effective.

Let us now attempt to describe the regenerator, to which we have referred. Without this, the machine we examined would possess, in point of economy, no advantage over the best constructed steam engine. With it, the advantages are incalculable. We have already fully illustrated the leading idea conceived by Capt. Ericsson, of employing heat over and over again. To attain this is the object of the regenerator.

For the purpose of understanding this instrument our readers will bear in mind the construction and operation of the machine. We have before stated that atmospheric air is first drawn into the supply cylinder, from whence it is forced into a receiver, and that from this it proceeds towards the working cylinder, before reaching which it passes through the regenerator. This structure is composed of wire net, somewhat like that used in the manufacture of sieves, placed side by side, until the series attain a thickness, say of twelve inches. Through the almost innumerable cells, formed by the intersection of these wires, the air must pass, on its way to the working cylinder. In passing through these, it is so minutely subdivided that the particles composing it are brought into close contact with the metal which forms the wires. Now let us suppose, what actually takes place, that the side of the regenerator nearest the working cylinder is heated to a high temperature. Through this heated substance the air must pass before entering the cylinder, and in effecting this passage, it takes up, as is demonstrated by the thermometer, about 450° of the 480° of heat required, as we before stated, to double its volume. The additional 30° are communicated by the fire beneath the cylinder. The air has thus become expanded; it forces the piston upward; it has done its work—valves open—and the imprisoned air, heated to 480°, passes from the cylinder, and again enters the regenerator, through which it must pass before leaving the machine.—We have said that the side of this instrument nearest the working cylinder is hot, and it should be here stated that the other side is kept cool, by the action upon it of the air entering in the opposite direction at each up-stroke of the piston. Consequently, as the air from the working cylinder passes out, the wires absorb its heat so effectually that, when it leaves the regenerator, it has been robbed of it all, except about 30°. In other words, as the air passes into the working cylinder it gradually receives from the regenerator about 450° of heat; and as it passes out, this is returned to the wires, and is thus used over and over, the only purpose of the fires beneath the cylinders being to supply the 30° of heat we have mentioned, and that which is lost by radiation and expansion. Extraordinary as this statement may seem, it is nevertheless incontrovertibly proved by the thermometer to be quite true.

When physical causes, productive of unexpected mechanical results, are carefully examined, they will always be found adequate to effect what, upon a cursory view might appear marvellous or incredible. Thus, after an examination of the reasons why this compact regenerator so effectually absorbs and transmits heat, its operation will cease to create wonder, although it cannot fail to excite profound admiration. We will state the causes of its efficiency.

The regenerator, contained in the sixty horse engine we have examined, measures twenty-six inches in height and width internally. Each disc of wire composing it contains 676 superficial inches, and the net has ten meshes to the inch. Each superficial inch, therefore, contains 100 meshes, which, multiplied by 676, give 67,600 meshes in each disc, and as 200 discs are employed, it follows that the regenerator contains 13,520,000 meshes, and consequently, as there are as many small spaces between the discs as there are meshes, we find that the air within is distributed in about 27,000,000 minute cells. Hence, it is evident, that nearly every particle of the whole volume of air, in passing through the regenerator, is brought into very close contact with a surface of metal, which heats and cools alternately. The extent of this surface, when accurately estimated, almost surpasses belief.

The wire contained in each disc is 1,140 ft. long, and that contained in the regenerator is consequently 228,000 feet, or 41¼ miles in length, the superficial measurement of which is equal to the entire surface of four steam boilers, each forty feet long, and four feet in diameter; and yet the regenerator, presenting this great amount of heating surface, is only about two feet cube—less than 1-1920 of the bulk of these four boilers.

Involved in this wonderful process, of the transfer and retransfer of heat is a discovery, which justly ranks as one of the most remarkable ever made in physical science. Its author, Captain Ericsson long since ascertained, and upon this is based the sublimest feature of his caloric engine, that atmospheric air and other permanent gasses, in passing through a distance of only six inches, in the fiftieth part of a second of time, are capable of acquiring, or parting with, upward of four hundred degrees of heat. He has been first to discover this marvelous property of caloric, without which, atmospheric air could not be effectively employed as a motive power. The reason is obvious. Until expanded by heat, it can exert no force upon the piston. It much time were required to effect this, the movement of the piston would necessarily be so slow as to render the machine inefficient. Capt. Ericsson has demonstrated, however, that heat may be communicated to, and expansion effected in, atmospheric air, with almost electric speed; and that it is, therefore, eminently adapted to give the greatest desirable rapidity of motion to all kinds of machinery.

We here close our imperfect description of a machine destined, as we believe, to work a revolution in the Commerce of the globe. It consumes but a very small proportion of the coal required for the steam engine. It is entirely free from every element of explosion or of danger. Watchfulness is not imperatively required, as in the steam engine. If left unattended, the worst that can happen is, that after exhausting the heat of its fires, and of its regenerator, it will stop. The one we examined, of sixty horse-power, has been run at full speed during twenty-four consecutive hours, consuming but nine hundred and sixty pounds of coal. After feeding the fires, it continues to run three hours without replenishment, and after withdrawing them from the grates, it operates with full power for the period of one hour, in consequence of the astonishing action of its regenerator alone. We believe we have not, in the slightest degree, overrated the immense advantages of this engine, in point of economy and safety. If we have not, the world may well start with exultation. In magnitude of results, no invention can rank with it. The electric telegraph is one of great interest and value, and to him who reflects that the fierce lightning has by that process been tamed, and brought to the very lips of man, there to be freighted with human language, and sent abroad, to girdle the earth with thought, it becomes sublime. Still, it is greatly inferior, in practical importance, to the discovery of a motive power such as we have attempted to describe.—Human speculation fails adequately to estimate its influence upon the social and commercial relations of men and of nations. Its effects will naturally be first exerted upon the ocean. It is here that the value of such a power will be most sensibly felt and appreciated. Here it will soon become the strong arm and right hand of commerce. It may be affirmed with confidence that, with engines upon this plan, a ship of two thousand tons can be propelled from San Francisco to China and back with less coal than is now required for an ordinary ocean steamer to cross the Atlantic.

The annals of the mechanic arts furnish no instance of an important invention having been brought before the public in so complete a form as to warrant its being carried out on a scale of the first magnitude from the outset. Ericsson's Caloric Engine will form an exception. A ship is now building for its reception by Messrs. Perrine, Patterson, and Stack, measuring twenty-two hundred tons burden, and her engines, which are being constructed by Messrs. Hogg & Delamater, comprise four working cylinders, each of 168 inches in diameter. We have visited both the ship-yard and the engine manufactory, and have inspected with more than ordinary interest the work on which more than four hundred men are now busily engaged. The ship is quite a remarkable structure, both in point of form and strength. The engines being placed in the center of the vessel admit of a better form of midship section than in steamships. Of this the builders have availed themselves by giving such a rise to the floor that strength and easy lines for passing through the water are appropriately combined. The lines of the ship at the entrance are singularly fine; and yet, by a very judicious application of the "wave line," as it is technically called, the bow possesses all the fullness requisite for a good sea-boat. The run is alike peculiar for easy lines, combined with stability and requisite bearing. The strength of floor, which is built entirely solid from stern to stern, surpasses anything we have seen in this country, noted as it is for producing the best ships in the world. In order to give additional strength to the ample timbers, the entire frame is banded by a double series of diagonal braces, of flat bars of iron, let into the timbers at intervals of about three feet, each series being rivcted together at all the points of intersection. In addition to the ordinary central keelsons, there are six engine keelsons, bolted on the top of the floor timbers, for three-fourths of the length of the ship. On these keelsons the bed plates of the engines are secured by bolts passing through the floor timbers. These bed-plates extend over the entire area occupied by the engines, and present a continuation of iron flooring, not witnessed in any steamship. The security thus attained is further enhanced by dispensing entirely with the numerous holes through the bottom of the vessel, which in steamers are necessary, and have often brought that class of vessels to a sinking condition. The engines being arranged in the center of the vessel, the decks are not cut off as in steamers; and as the whole of the machinery is confined within a vertical trunk 76 feet long and 18 feet wide, ample space is left on each side of the ship for state-rooms along its entire length, with unbroken passages, fore and aft, on either side. The freight-deck also presents an unbroken area fore and aft, diminished only in width in the central part of the vessel. The coal being carried in the bottom, at each side of the engines, the fore and aft hold are clear for freight.—The central arrangement of the engines involves, of necessity, a *central* crank, and thus the spar-deck presents an uninterrupted area, on both sides, the ordinary objectionable crank hatches being dispensed with. The slow combustion peculiar to the caloric engine renders the huge smoke funnel unnecessary. A short pipe to carry off the gases produced by the combustion in the furnaces takes its place in the caloric ship. The absence of steam in every form is sufficiently important in producing a more pleasant atmosphere than in steamers, but far more remarkable is the fact that the quantity of air which will be drawn out of the ship by the action of the supply cylinders of the engines, will exceed *sixty tons in weight* every hour! Capt. Ericsson, in calling our attention to this fact, furnished us with a few figures that we feel certain our readers will need, as much as we did, to comprehend how so vast a ventillation is effected. Each supply piston presents an area of 102 superficial feet, with a stroke of six feet. 612 cubic feet of atmospheric air will therefore be drawn into the engine at each stroke; and when the engine makes fourteen strokes per minute, 8,568 cubic feet. But as there are four supply cylinders, they will, in this space of time, draw in 34,272 cubic feet; and in 60 minutes there will be thus circulated 2,056,320 cubic feet. The weight of atmospheric air is nearly 13¼ cubic feet to the pound; and thus it will be seen that 68 tons of air are drawn from the interior of the ship, through the engines, and passed off into the atmosphere, every hour. The effect of such an extraordinary system of ventillation, in purifying the atmosphere of the ship, is self-evident.

The simple construction of the caloric engine, and the small quantity of coal to be handled, will reduce the number of engineers and firemen, in the aggregate, to less than one-fourth the complement required for steamers. This great reduction in the number of men, whose duties are incompatible with strict cleanliness, will still further promote a purer state of atmosphere in caloric ships than in steamers. Again, as no smoke whatever is produced, when anthracite coal is employed, the masts and rigging of the caloric ship will be as clean as in sailing vessels. We examined the combustion of the sixty horse caloric engine most critically. No smoke could be detected from it, and we arrived at the conclusion, that with such a slow combustion and easy firing, smoke cannot possibly emanate from the anthracite consumed in the furnaces.—Europe has scarcely any of this fuel, and in a national point of view, therefore, the introduction of the caloric engine is important. We congratulate the commercial world that this invention is to be presented upon a scale and in a manner commensurate with its surpassing magnitude. The commercial part of this enterprise is conducted by Mr. John B. Kitching, a merchant of the city of New York, who has, for this purpose, associated with him a few gentlemen of wealth and high standing. It is fortunate that he possesses the practical intelligence which has enabled him to appreciate the advantages to be derived from the introduction of this new motive power. He at once concurred with Captain Ericsson, that its development in practice should so thoroughly test its utility and value, that no doubt could thereafter be entertained concerning either. So far as human scrutiny and foresight can penetrate, this invention promises to be the richest boon to commerce and civilization yet attained by the application to machinery of those natural forces created by Omnipotence for the benefit of our race. Upon the manner of its first introduction to the world, will, in a great degree depend the time within which it will be made generally available in practice. Mr. Kitching will be remembered as the man whose sound judgment and perfect self-reliance have so contributed to present the caloric engine to the public, that a second trial will not be required to warrant its universal adoption.

Cleveland and Wellsville Extension.

The engineer of this road has addressed to its president, Cyrus Prentiss, Esq., a brief communication embracing the principal engineering features of the extended line of this road to Wheeling. In his report he says:

The results of the survey show in a very satisfactory manner the entire practicability of the route and its general cheapness of construction.

The shortness of the time appropriated for the survey did not permit a minute examination of all the ground, but at points where any difficulty presented, care was taken to ascertain the controlling points, and sufficient data obtained to determine approximately the position of the line, and character of the work to be encountered.

An examination of any map of the state of Ohio, will show the general directness of the Ohio river, between the points designated in your instructions, and the line occupying the valley. The entire distance, affords the most favorable ground for the adjustment of a line of easy grades and light curvature enabling trains to move at the highest speed with ease and safety.

The measured distance of the line is 38 miles, the minimum radius of curvature may be safely assumed at no less than 2865 feet, with maximum grades in no case exceeding 15 feet per mile.

Where the line occupies the bottoms, which it would do for a large portion of the distance, composed as they are of sandy loam and excellent gravel, very suitable for ballasting, the graduation would be of the easiest character.

Upon some of the narrows where the river flows immediately at the base of the hills, some rock excavation will occur. The heaviest points of this character will be immediately below the mouth of Yellow creek, at Island creek, and at the Black Bone above the mouth of Willis creek, near Steubenville.

In each case, however, the work would be side cutting; at the latter place a heavy retaining wall would be necessary to prevent the road from slipping, and to counteract the abrading effect of the current on the embankment in seasons of high water. At some other points also it may be found expedient to construct similar protection, and an item has been introduced in the general estimate annexed, which is considered amply sufficient for that purpose.

The only important bridges will be those of Yellow creek, Cross creek and Shirt creek, where

spans of from 120 to 150 feet wide will be required.

The remaining streams of any magnitude will be easily passed by arch culverts, and open structures of short spans.

Stone in great abundance and of superior quality can be obtained within short distances along the line, either in detached masses or in quarries easily worked.

The estimates for graduation and masonry were made with reference to a road bed for a double track, with masonry and bridging of first class work.

The estimates for superstructure were based upon the actual average cost per mile of the superstructure, upon the Cleveland and Pittsburg road, using a rail of sixty lbs per yard, cast iron chairs of 20 lbs. each, ties 6 by 8 inches, 8½ feet long, two feet from centre to centre, and spikes ½ square by 6 inches long. The estimate for superstructure also covering ballasting, cattle guards, road and farm crossings.

Total estimated cost of graduation,, masonry, bridging and right of way from mouth of Yellow creek to Bridgeport, 38 miles, $343,000. Cost of superstructure per mile $7,518 00—38 miles is $285,684. Average cost per mile $16,544,31. All of which is respectfully submitted,

J. LINTON, Chief Engineer.

American Railroad Journal.

Saturday, July 24, 1852.

Canada.

Canada has always been an object of the most earnest solicitude, on the part of the British government, and, since the separation from her of the thirteen united colonies, which now compose the American Union, no portion of the empire has given more thought to her statesmen, or excited more interest among her people.

The French power on this continent at one time seemed likely to become permanent, and had it not been for the character and early history of the English colonists upon the Atlantic shores, in whom were implanted local attachments stronger than all political associations, it is easy to believe that the military superiority of the French might have given them the ultimate control of the continent.

The English settlements at Jamestown and Plymouth were private undertakings in contradistinction to Imperial suggestions, and were accidents of fortune rather than the premeditated designs of conquest and of empire.

With the keen instincts of military and geographical science, France took possession of the two great rivers of the continent, and extended her line of military possessions from the mouths of the Mississippi and the St. Lawrence, to the sources of both streams, enclosing the English possessions within the limits of that narrow belt of country which is confined to the Atlantic slope of Appalachian slide from the Gulf of Mexico to Sagadoch. The residue of the continent east of the Rocky Mountains, with the great Basin of the St. Lawrence and the Mississippi, was under the control of France.

Upon what simple accidents the fate of empire turns. The capture of Quebec by Wolfe in 1759, has been of more consequence to the world than the battles of Platea or of Waterloo. The loss of Canada, led France subsequently to cede to the United States Louisiana and the Mississippi valley.

France surrendered to England by the treaty of 1763, without reserve or qualification, a territory which is yet to become the home of a people more numerous than that of the greatest nation of Europe, a country of more resources, and yet to become more renowned than those possessions which at any one time the Roman eagles overshadowed.

The French population of Canada, of a different race and a hostile religion, had no sympathies with, and scarcely any knowledge of, their southern neighbors. Grown up with the feudal habits of the thirteenth century, in a wilderness by themselves, they refused to join the thirteen colonies in their revolt in 1774, and the stirring appeal of the "General Congress" of October 26, 1774, found no response in the French character. A mere chance shot, by which Montgomery was slain, in December, 1775, prevented the Canadas from falling at that time into the hands of the united colonies.

The history of Canada, since our Revolution, is a history of colonial administration. It is the history of a conflict of political opinions and personal animosities, such as no portion of the earth can parallel. The hostility of races, and of religious opinions, explains only a portion of their struggles, and the growth of the democratic idea in Canada has encountered the same resistance in the English mind at home, as that exhibited toward the progress of popular rights by the conservative party in England, under the guidance of such minds as Pitt and of Wellington.

The "Quebec act" of 1774, was a concession to the French, to guard against any disposition to fraternise with the disobedient colonies, and the Constitutional act of 1791, which separated the Province into Upper and Lower Canada, and gave legislative assemblies to each, failed to give satisfaction to the majority of the people of Lower Canada, from the perpetual conflict between the representatives of the people and the executive authorities of the Province.

Political agitation in Canada was checked during the war of 1812. Under the leadership of Louis Joseph Papineau, who, from his entrance into public life in 1809, at the age of 21, has exerted a controlling influence over the French population, a conflict between the people and the executive grew up, a majority of the assembly demanding the control of the supplies, after the pattern of the commons in England. The government of Canada was nominally modelled after that of the home government—an executive in the person of the governor, a legislative council appointed by the crown for life, and an assembly chosen by the people.

The theory of the government was one thing, and the practical working of it another. The legislative council and office holders, of English blood, held a complete negative in the popular branch, which was under French influence. The power was finally seized entirely by the council, who disposed of the revenues without regard to the votes of the assembly, and Lord Dalhousie, the governor of Canada in 1827, set aside the election of Papineau as speaker of the assembly.

An union of the colonies was attempted as early as 1822, and successfully resisted by the French party, which, in 1831, with Papineau and Morin for leaders, proposed as the means of harmonising their differences, an elective council. In the elections of 1834, an overwhelming popular vote of each Province was virtually given in favor of this proposition.

We do not propose to follow out the narrative of events which resulted in the popular outbreak in 1837, and the act of union of July 23, 1840, under which the Canadas are united.

The concessions to the popular party under Lord Sydenham and Sir Charles Bogot were stayed for awhile by the firm rule of Sir Metcalfe, from 1842 to 1845. In 1846, the principle of "responsible government" was conceded to all the British North American Provinces, or in other words the right to govern themselves.

There have been attempts to check the exercise of the legislative powers of the colonies, by despatches from the colonial office; as in the case of the protective duty on iron by Canada in 1848, and the Facility Bills of New Brunswick, in aid of the European railway in 1851; but the home government have finally yielded, at times in rather an ungracious manner, their assent to colonial legislation.

The enlarged canals of the St. Lawrence which were undertaken during the administration of Lord Sydenham in 1841, were aided by the imperial parliament, who gave the guarantee of the government to Canadian debentures, thereby furnishing the money at rates of interest paid in English consols. Under this states of things, the public mind of Canada became occupied with new ideas, and the spirit of public improvement grew rapidly into favor. The immense expenditures of money for public works from 1841 to 1845, stimulated every branch of industry throughout Canada, and no portion of the continent made more rapid progress during this period. But this growth and prosperity of Canada was temporary, and artificial. The natural sea coast of Canada was within the United States. Flour, and other agricultural products, could be carried from New York to Liverpool cheaper than from Montreal or Quebec, owing to the increased cost of freight and insurance from the St. Lawrence. The Canadian canals depended for their value as a means of bringing the produce of the west to a market, on the fact that protection was afforded by the English government to colonial produce. The possibility of a change in the commercial policy of England seemed not at that time to have entered men's minds. In 1844, an American gentleman proposed to the merchants of Montreal a railway to the nearest seaport on the Atlantic, from the foot of canal and lake navigation at Montreal. The United States Drawback Law of Mar. 3, 1845, allowing the transit of foreign goods to and from Canada through our own ports, was the measure that demonstrated to the Canadians, and especially to the merchants of Montreal, the insecurity of their position for retaining the carrying trade by the St. Lawrence route.

The immediate withdrawal of the trade of Upper Canada from the St. Lawrence route, and its seeking its destination by the way of New York city, aroused the public feeling of Montreal in favor of the Portland railroad, and the final abolition of the duties on grain, left no alternative to the lower St. Lawrence, but a surrender of their trade to New York hands, or the completion of her proposed railway to Portland.

The history of that enterprise is already known, and the completion of the entire line the coming year, will change the course of trade throughout the St. Lawrence valley.

We have glanced at certain points in the history of Canada, for the purpose of showing the character of the struggles through which her people have passed, and to account for the absence of that national sympathy which is essential to all true greatness. Canada has been, in truth, the theatre of the great struggle between feudality and prerogative on the one hand, and of popular rights on the other. With two parties as firmly hostile in all their bearings toward each other, as the two great political parties in this country, there are in Can-

ada, as with us at the present time, in fact no real differences of political sentiment.

The people of Canada, with their unrivalled advantages, under a system of government practically the freest of any on earth, are just entering upon a career of prosperity and of progress which, if wisely directed in its course, shall be without a parallel for success. A line of railway connecting Quebec and Montreal with each other and the ocean, crossing the St. Lawrence at the city of Montreal, will be extended on the north shore of that river, and of lakes Ontario and Erie, to Detroit, forming, in connection with her unrivalled canals, such veins of commerce as can no where else be found upon the continent, for easy grades, cheapness of construction, and prospective business advantages.

The people of the St. Lawrence valley partake as fully as ourselves of the geographical characteristics of their country, and the majestic movement of the waters of Niagara, is a type of their future history. The healthful climate of the northern shore of the valley of the lakes, will give to those who dwell upon it strength to gather in full fruition the rewards of the highest culture. A country greater in extent and natural resources than both France and the British Isles united, is soon to come into possession of those new agencies, which have made the last quarter of a century the heroic age of the world.

To this country the attention of British capitalists is now directed, and measures are in progress which will secure at a comparatively early day the completion of an unbroken line of railway from Quebec to Sandwich, opposite Detroit, in connection with their line of railway to the natural seaport of Canada at Portland.

To Railroad Contractors.

Attention is invited to the Advertisement of the Chicago and Mississippi railroad company in another column, for proposals for the grading masonry and bridging on 60 miles of that road, between Springfield and Bloomington. It will be seen that the work is to be done at once, and to be paid for in cash. It is also divided into small jobs for the benefit of small contractors.

Also, to the advertisement for proposals for the grading and masonry of 15 miles of the Belvidere Delaware railroad.

And to another, of the Central Ohio railroad, for proposals for the grading and masonry of 41 sections of that road.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Jeffersonville and Columbus Railroad.

This road has been so far completed that passengers can now leave Jeffersonville in the morning at 6 o'clock and reach Indianapolis the same day at 5 o'clock.

Kentucky.

Maysville and Big Sandy Railroad.—The Maysville Eagle of the 15th inst., states that, "nearly double the amount required by the charter to organize this company has been subscribed," and notice is given for a meeting of the stockholders on the 24th inst., to elect a board of directors.

Quick Run to Albany.

The new steamer *Francis Skiddy* left New York a few mornings since at five minutes past seven, and reached Albany at half past two. Thirty minutes were consumed in landing, so that her running time was only six hours and fifty five minutes.

Pennsylvania Railroad.

It is expected that the regular trains will commence running between Pittsburg and Greensburg about the 15th inst. This will leave a gap of only ten miles of railroad unfinished.

Stock and Money Market.

There is scarcely any change to notice in the market for either shares or securities. The same general features noticed in our last continue to rule in the operations at the Exchange—an abundance of money, and activity in the fancies at high rates. Good securities are firm, without disposition on the part of holders to realize. Monied men generally are ruralizing, which prevents activity in the bond market, and scarcely any new loans are making. As a result of this, we look for an accumulation of money to the credit of capitalists, which at the opening of the fall business will be seeking investment in good railroad securities.

The last arrival from Liverpool brings London dates to July 6th, with the following quotations for iron:

Iron rails firm at £6. Merchant bars £5 5s. per ton free on board at Cardiff or Newport. Glasgow pigs have advanced to 45s. 6d. per ton.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, JULY 24, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	107¼
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	118
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	118¼
Indiana 5's	94
Indiana 2½	54½
" Canal loan 6's	95½
" Canal preferred 5's	47
Alabama 5's	93
Illinois 6's, 1847	81
Illinois 6's—interest	52½
Kentucky 6's, 1871	108½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	106½
New York 6's, 1854-5	—
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	119½
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	106
New York 5's, 1866	—
New York 4½'s, 1858-'59-'64	101½
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	104
Ohio 6's, 1860	108
Ohio 6's, 1870	115
Ohio 6's, 1875	117½
Ohio 5's, 1865	103½
Ohio 7's, 1851	—
Pennsylvania 5's	98
Pennsylvania 6's, 1847,-'53	—
Pennsylvania 6's, 1879	—
Tennessee 5's	—
Tennessee 6's, 1880	107
Virginia 6's, 1886	109½

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	107
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	94½
Pittsburg 6's, 1869-1871	—
New York 7's, 1857	108
New York 5's, 1858-'60	101½
New York 5's, 1870-'75	105
New York 5's, 1890	106
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-90	104
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	107
Erie income 7's, 1855	100½
Erie convertible bonds 7's, 1871	99½
Hudson River 1st mort., 7's, 1869	108
Hudson River 2d mort., 7's, 1860	94
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	87½
Reading mortgage, 6's, 1860	92
Michigan Central, convertible, 8's, 1860	109
Michigan Southern, 7's, 1860	99½
Cleveland, Col. and Cin. 7's, 1859	109½
Cleveland and Pittsburg 7's, 1860	101½
Ohio and Pennsylvania 7's, 1865	102
Ohio Central 7's, 1861	—

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	July 22.	July 15.
Albany and Schenectady	110	109
Boston and Maine	107	106½
Boston and Lowell	108½	108
Boston and Worcester	103½	104
Boston and Providence	89½	89½
Baltimore and Ohio	82½	82
Baltimore and Susquehanna	29	—
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	125½	125
Eastern	98	198½
Erie	86½	87½
Fall River	—	—
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	72	71½
" preferred	110	111
Hartford and New Haven	—	—
Housatonic (preferred)	35	35
Hudson River	65	64
Little Miami	—	—
Long Island	19½	20½
Mad River	—	—
Madison and Indianapolis	112½	—
Michigan Central	112	113½
Michigan Southern	118	118½
New York and New Haven	114	113½
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53½	55½
Ogdensburgh	26½	—
Pennsylvania	46½	44½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	87½	88½
Rochester and Syracuse	123½	122½
Stonington	54	59
South Carolina	—	—
Syracuse and Utica	134½	133
Taunton Branch	115	115
Utica and Schenectady	133	137
Vermont Central	14½	15½
Vermont and Massachusetts	20	21
Virginia Central	—	—
Western	103½	104
Wilmington and Raleigh	57½	57½

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Lexington and Danville Railroad.

The board of directors elected upon the organization of the company in October last, submitted to the stockholders on the 4th of May their first report through their president James Barbour Esq.

On the 20th of October, Mr. Geo. C. Schaeffer, was appointed chief engineer who entered at once upon the discharge of his duties. The whole route from Lexington to Danville has been examined and found practicable, offering favorable grades for the cheap construction of an excellent road. The charter of this company is such that it may apply to any county through which the road may pass, to subscribe to the stock of the railroad in bonds bearing an interest of six per cent, an amount not exceeding two hundred thousand dollars, or for cash subscriptions to be raised by direct taxation, not exceeding 3 per cent of the taxable property of such county. It may also extend the road through the state of Kentucky to the state line in the direction of Nashville, Tenn., or any other point in that state which the company may select. It will be observed that these are extraordinary privileges, under favor of which there is no doubt of the immediate construction of the road from Lexington to Danville, and, also a strong probability of its extension through the state of Kentucky by the same company, to some point in Tennessee, when a connexion will be formed with all the southern, south-eastern and south-western lines

On the north, it will be remembered, that the city of Lexington is connected with all the principal cities by railroad, and there is wanting only about one hundred and eighty-five miles of road in Kentucky and Tennessee to connect with the Chattanooga, Selma, and other southern lines.

The Kentuckians now seem to be aware of this fact, and are apparently determined that such a responsibility shall rest upon them no longer unanswered. From Lexington to Danville is thirty-five miles. The stock for the construction of this road is nearly all subscribed, and the work will very soon be put under contract, and completed at an early day. The citizens on the line, from Danville to the state line and thence in Tennessee to McMinnville, have had meetings and county conventions, at which assurances were given of such subscriptions as will justify the Lexington and Danville company in putting the whole line under contract, if they should deem it their most feasible route. About this there seems, however, but little doubt, as the citizens on this line seem to have taken such initiative steps as were required by the directors of the Lexington and Danville railroad before they would feel justified in trying to raise the means necessary to construct the road and recognize it as a portion of their work, exercising the privileges of their charter. This portion of the line known as the proposed South-western railroad, from Danville to McMinville, Tenn., is one hundred and fifty miles. In order to show the nature of the country through which this road is to pass, and the probability of its being supported by local traffic, we will make some extracts from the report of the board of directors.

The whole north, and east, and west, *are brought to Lexington*, and *then* to *Danville*. Look at the map of the United States, and trace the line from Danville to Mobile, just west of the Cumberland mountains, and you will follow the track of the Southwestern railroad from Danville to McMinnville, and you find the shortest practicable line for a railroad from Cincinnati, Maysvile, Ohio, Indiana, the Lakes, and central Kentucky to Chattanooga, Mobile, Georgia, South Carolina, Alabama and Florida. If you would go from Cincinnati or any part of Ohio to Charleston, the Danville and McMinnville road is, by perhaps one hundred miles, the shortest road which will ever be constructed, unless it may be one through Knoxville, and that road will be an additional outlet to our road.

But little has been said of the geography of the state of Kentucky,—and the character of its surface as affecting the question of other roads being built parallel to our road, which might compete with it. This question will not be presented at length. Suffice it to say, that nature has fixed the geography to suit the interests at Lexington and Danville. It would be difficult to construct a railroad from Danville due east into Virginia.

In consequence of these facts, the Lexington and Danville railroad, not only becomes a link in the roads from the *North*, connecting at Lexington, and the roads from the *South* which may approach Danville, but it becomes a part of the *East* and *West* line, connecting, as it will, the northeast and southwest, and the northwest and southeast.

If a railway is constructed from Lexington in the direction of the mouth of Big Sandy, either by Maysville or a more direct line, it will always be 70 miles nearer from Nashville, to the east, by Danville, than by Louisville, because Danville is at least 10 miles nearer Nashville, and (by railroad) 60 miles nearer to Lexington than Louisville is. No shorter line can be found than the one here indicated. Whilst a direct road would be the best for Nashville, so far as an eastern connexion is concerned, yet, if she is content to meet Louisville at Bowlinggreen the line through Bowlinggreen by Danville is shorter, say 60 miles, than by Louisville, and, as has been previously remarked, our interests may be advanced by that combination of roads at Bowlinggreen, which will attract Clarksville and Memphis to that point, and for Clarksville, Memphis, Arkansas, and Texas, the shortest line will be through Danville and Lexington to tee eastern cities.

Lexington will, in a short time be the southern co-terminus of the Northern roads. A similar position, as to the country south of Kentucky river, which Lexington occupies to the north, invites, and we believe will most certainly secure, to Danville one, if not more, of the lines from the south rapidly converging to the centre of the Union. If there was no other consideration, the heavy expense which this company has undertaken to meet, in crossing Kentucky river, will forever prevent any other company from attempting to compete with this road.

But there are other views which present the prospects of our road in a favorable light,—we refer to the location of the Kentucky railroads,—their access to the wealth and productive capacity of the state,—their concentration upon Danville, as in the most direct line for reaching the southern markets,—the adaption of those productions to the markets of the south, and the absolute necessity of seeking and securing a market peculiar to our wants, and to which our produce may be sent under the greatest advantages.

The taxable property of the state of Kentucky, as listed for taxation, according to the Auditor's report for 1851, amounts to $317,082,604.

A line drawn from Louisville due south in the direction of Nashville, there would be 24 counties west of that line, whose tax list was valued at $52,653,502, and six counties directly south from Louisville on the line of the proposed road from Louisville to Nashville, valued at $13,697,315; or thirty coudties in western Kentucky valued, and taxed at $66,350,817, not directly interested in the railroads north of Danville, and embracing about one-fifth of the taxable property of the state, including most of the Green River, lower Cumberland, and Tennessee rivers; through which it is proposed to construct the Louisville and Nashville railroad, the Louisville and Memphis railroad, and the Henderson and Nashville railroad.

The railroad from Danville to Lexington, will connect with railroads from Louisville, Covington and Maysville, and those four railroads are accessible, *with convenience*, to four-fifths of the residue of the property of Kentucky. It is singular how exactly the railroads meeting at Lexington have direct access to the whole wealth of Kentucky. Those lines, to one acquainted with the geographical distribution of the wealth of this state, would seem as though they had been located, with a view precisely to furnish to the whole of the wealth of the state, the means of access to the east, west, north, and south; and all the connexions are so arranged and secured as to extend those lines north, east, south, and west, *indefinitely*. Nothing is lacking except the way to the south. When all the Kentucky roads mentioned are completed, there will be railroad connexion from Danville and its vicinity, to the north, the east, and the west. Maysville may go west, and Louisville can go east. All are shut out from the south.

The railroad from Danville to Covington and Maysville, will pass through eleven counties taxed at a value of $76,719,591. A single tier of counties east of that line are taxed at $35,072,905; a single tier of counties west of the same line are taxed at $33,259,700. And two counties between the Covington and Maysville roads, taxed at $6,480,491, making in all $151,532,691, or one half the wealth of the state of Kentucky lying on and tributary to the northern roads terminating at Danville and Lexington. Add to these facts, that when the southern and south-eastern roads are completed, the only outlet for all the above counties to a southern market will be over the Lexington and Danville road and its extensions, and also several other counties not included in the above estimate, but which will find this their nearest route and the sum of wealth which will be represented by this road will be increased to $231,532,691. In these estimates, of course, no reference is had to the amount which the value of all the above property will be enhanced by means of this road and its connections, and yet, according to the governing philosophy of railroads generally, it would be very large, and the lands being brought nearer to market, they will be more highly cultivated. Emigration and industry will be induced to flow in, and central Kentucky will be, not a whit behind the most enterprising and wealthy of the western states—Why? Merely because her railroads will develope her resources by putting her on a level with other states whose farmers have now better access to market for the fruits of their labors.

The report continues:

The productions of Central Kentucky are peculiarly adapted to a Southern market. Every county in Kentucky which produces hemp lies on, or adjoining the lines of railroad north of, and to be connected with Danville; so the forty thousand tons of hemp manufactured into bagging and rope, or the greater part of it, will be carried on this road when it is extended south. The counties tributary prepare for market probably 300,000 hogs, almost all the beef cattle *fattened* in the State, most of the mules and horses, a portion of the tobacco, and in fact the principal portion of the exports of the State, such as the South and Southeast need, and are purchasing now at exhorbitant prices, the result of the heavy cost and long delay incident to the present mode of transportation.

It is usual for railroad companies to publish estimates of the amount of business which they expect to do on their roads; in this instance that would be difficult, until it is settled whether the road is to be local or a through and National road. When the proposition was discussed before the people of Fayette and Boyle, it was confidently asserted, that even as a local road, its construction would be justified by the amount of business which would be offered Remember that between Danville and Chattanooga, or Knoxville, there is no navigable stream, except the Cumberland, and that is very indifferent and unreliable. For East Tennessee and Western Virginia, a large portion of the dry goods and groceries are hauled in waggons from

Louisville and through Danville. The section of country described is about one sixth part of the State of Kentucky in territory, wealth and population. They list for taxation over sixty millions of dollars. They export large quantities of hemp and tobacco,—perhaps 150,000 hogs, 10,000 fat cattle, as many mules, and as many horses, etc.. etc.—This road crosses the Kentucky river, and whilst the crossing of that stream will be a large addition to the cost of the road, yet the coal, the salt, the iron, and the lumber of the upper Kentucky, will amply remunerate the counties interested in our road, for bridging that stream. This road,—if located on one of the lines, and including the cliff of Kentucky,—will run through land, which, for 3 miles on each side of the railroad, would now sell, at public sale, at an average price of *fifty dollars per acre*. Looking to the prospects of a road to the South, the whole aspect of the business of the road changes. Whilst many of the productions around and South of Danville, will be taken North, it is confidently expected that the rich and productive counties of Northern Kentucky, will transport through this channel a great portion of their products to a Southern market and over our road. Indeed, such must one day be the course of trade from Northern and Central Kentucky.

It is not wise to anticipate too largely upon future and contingent benefits; but it does seem to us, that the probabilities of closing the gap from North to South, from the Southern terminus of our road, are sufficiently great, to justify estimating and hoping for the inestimable good to be derived therefrom.

For instance, look for one moment at the amount of business which would be thrown upon such a road. If it was properly located it would take off at least three-fourths of the bagging and rope manufactured in this State; this amounts to 30,000 tons—or one hundred tons freight of a single article for every working day in the year. Other products of Kentucky would flow to this line in similar proportions. It would open a new market to the manufacturers of our State and those immediately North of us.

It is true, that from Danville South the land is not equal to the best Kentucky soil; yet it is productive, and promises as much as the land on any line through the State. Upon either of the lines proposed South from Danville, there are products differing from one another, yet either of them will furnish the elements for a large local trade.

Applications have been made from more than one source for the privilege of applying for subscriptions of stock for the continuation of the road under our charter. The directory at a meeting, April 19, 1852, adopted the following order, which is submitted to the stockholders for their consideration:

Ordered, That in the opinion of this board, the Lexington and Danville railroad should be extended in the direction of Knoxville, McMinnville or Nashville, if an additional subscription can be obtained to the capital stock of this company sufficient to justify it in undertaking the extension in either of said directions, and the President of the company is authorised to take all necessary measures to obtain conditional subscriptions on each line; and the road to be located on whichever line said subscription shall be first secured.

Provided, That at the annual meeting of the stockholders, they shall approve of this order.

The stockholders at their meeting in June did ratify the above order, and it gives us great pleasure to know that at the great railroad convention at Russell Springs, July 3d, the people on the line of the proposed Southwestern railroad, in the direction of McMinnville, agreed to subscribe in sufficient sums to insure the building of a road on that route by this company, in response to a proposition on its part to undertake the construction of the same upon the *bona fide* subscription by counties and individuals, of the sum of one million dollars and the expenses of the survey. The following is the estimated cost of the Lexington and Danville railroad by Mr. Schaeffer.

An estimate is given on one line through from Lexington to Danville, and based on prices which are thought to be liberal. The calculations have been made for a roadbed 14 feet wide on embankments and in rock cuts, and 16 feet wide in earth cuts.

The result for grading, including bridges and culverts, (excepting, however, the Kentucky river bridge), is $248,698. This amount may be reduced in location, and also by encountering less rock in the ridges, in which item the estimates have counted on the largest possible quantities.

The estimates for superstructure are for a 56 lb. T rail, and for ballasting, laid with more pains and in larger quantities than usual.

Superstructure per mile:		
T rail 56 lbs. 88 tons at $50		$4.400
Chairs and spikes		600
Iron		$5,000
2,100 locust or cedar cross ties 30 cts.	$630	
2,000 cubic yards ballast, 50 cts	1,000	
Laying track	600	
Distributing materials	400	
		2,630
		$7,630

The whole cost will then be as follows:

Grading, etc., say	$250,000
Superstructure, etc., for 36¼ miles, including turnouts,	
Cross ties, ballast, etc	95 995
Iron	182,500
Kentucky river bridge	150,000
	$678,495

By slightly increasing the grades, the cost may be greatly reduced—on the other hand, to obtain still lower grades, an increase of expenditure must be encountered. The determination of these questions will depend entirely upon the prospective traffic of the line.

Thus, for from $30,000 to $50,000 less than the sum above named, a very excellent road may be built to accommodate a local trade, while for a great north and south through trade, at least as much should be added. A business of this kind is always most profitably carried on by a well built and well furnished road.

The same remarks will apply to the Kentucky river bridge, in which a variation of cost, nearly as great as that above named, may be made, as the work is intended either for a light or heavy traffic.

Respectfully submitted,

GEORGE C. SCHAEFFER,
Chief Engineer Lex. and Dan. R.R.

Danville, May 4, 1852.

To meet these expenditures, the company have the following resources:

Individual and corporation subscriptions.	$156,200
Jessamine county subscriptions	75,000
Fayette " "	200,000
Boyle " "	150,000
Probable additional cash subscriptions	40,000
	$621,000

Leaving $57,205 and the furnishing and equipment still to be provided for.

Since this report was submitted, proposals have been received, and it is not improbable that the whole road will be put under contract by the 15th of August, as will possibly also a portion of the extension. This latter, taking the route to McMinnville is said to be a more favorable grade even than the 35 miles between Lexington and Danville. According to the engineer's estimate, setting aside the cost of the bridge across the Kentucky, the cost of construction per mile would be about $14,680. At this rate, the 90 miles to the State line from Danville would cost $1,321,200. Now should the people of Kentucky on the line of the proposed extension, subscribe $1,000,000 of the stock, we see no reason why the Danville company should not order the surveys and cause the whole extension to be put under contract at an early day, relying upon additional subscriptions and the credit of the company to raise the funds for the completion and equipment of the whole route.

We believe the Kentucky spirit is now fairly aroused, and will not be quelled till this is done; and moreover that the Tennesseeans will meet them at the line from McMinnville. This done and the Selma, Winchester and McMinnville roads finished, will give a continuous line of railway from this city to Selma, passing through the heart of this State, Ohio, Kentucky, Tennessee and Alabama.

Emigration Westward.

A writer in a recent German journal has an article on America and emigration to this country—after alluding to the tendency which there has been for centuries for people in the east to pass towards the west. The speculations of this writer are curious, and we have thought them deserving of a translation:—

Since the discovery of America the inexplicable current of nations to the west, has begun again. Many millions have crossed the ocean, have established a new home in America, and have driven out the aboriginal inhabitants. Many thousands of European emigrants have fallen in this conquering march, but—now, we are making again this year the experiment. The emigration to the far west, to the enigmatical America has grown to a degree, which makes the future uncertain and alarming. We may affirm with truth that one-half of civilized Europe is pining with a longing for America.

Attempts have been made to explain the emigration of the various nations from purely external causes, and to account for the present prevailing emigration, in part by the unsettled social condition of Europe, partly from the excess of population partly from natural calamities, and particularly the political relations of the continent of Europe. These historical and natural causes co-operate with other circumstances undoubtedly, and have their effect, but the first and last reason still remains, an irresistible inclination of which those who are seized by it can give no account; an unconquerable longing for the west, like the instinct of the birds of passage, which teaches them at the approach of the rough season of the year, to go to the south west.

We have for this peculiar feature in the physical disposition of the human race no other explanation to give, but that it exists, and displays itself the more vigorously, the farther nations and individuals are removed from the highest point of cultivation of the age. It is only necessary to converse with persons of the lower classes to be convinced, that there is another power at work in their minds which attracts them to America, beside the often imaginary feeling of their oppressed condition. You tell them that they are changing a certainty for an uncertainty, and point to them the sad fate which awaits the unprovided emigrant in the American seaport, with ever so vivid colors, you preach to deaf ears, and soon arrive at the conviction, that there is nothing to be done with minds which seem to be under the influence of an almost demoniacal power. They bear within them a strong, unshaken faith in the fair, Great west country as powerful as that which formerly moved Christopher Columbus, and they feel as strongly as he did, that all dangers and difficulties are to be overcome with their inadequate means.

This tendency of the nations to the west explains why all attempts at colonization, which in contradiction to this law of nature, have been made from Europe to the east, have had but little success. Many Germans have emigrated to Russia, but very few have become acclimated there, and by far the greatest number of these would if possible have returned to their western homes. We have colonies in Russian Poland and on the Black sea, they vegetate but they never can attain to any independent strength. It will be said in reply to this that the fault here is in the political institutions of the empire of the Czar. It may be in some measure, but the political feeling formed also a constant element in the tendency of nations towards the west. It lies in the minds of man, awaiting an individual developement, as plants wait for light and air, and it looks for a favorable political atmosphere for its ef-

forts. How convincingly did Friederick List in his time point out the advantages of a German emigration to Hungary on the Danube, what great trouble was formerly taken to people the fertile plains of the Theiss and Marosch with German peasants, all in vain, while thousands go to the sources of the Ohio, and the shores of the Mississippi and Missouri, and prefer to put the ocean between them and their native land. There is also little emigration to the immeasurably fertile banks of the Ganges, but the English come after another law, rather as bearers of European civilization, to take possession of deserted places. The English are not colonists in India but masters of those countries, which by their ships of the line, their commerce and their soldiers they have brought under their dominion. To this mere physical and instinctive current of the nations stands directly opposed, the religious current, the political ideas, and the inducements to great catastrophes in the moral religious, and intellectual dominion, as though the guiding, reasoning, and moral principle in the history of man's being, and its preponderance over the historical elementary power, would manifest itself in opposition to these physical tendencies. History teaches us that almost all political disturbances and revolutions in the dominions of thought spread from the west towards the east. While in the west unconscious, destructive powers of nature prevail, the Nemesis of civilization has always taken its origin from the east.

Greece destroyed the empire of the Persians, Europe conquered Asia, to which the expedition to Troy of the Helenists was the prologue, and the romance of the crusades the epilogue. Rome brought Greece into bondage, and the power of Rome, the ruler of the world, was twice broken by Germany. The costly expeditions of German emperors to Italy, were nothing more than the consequence of the idea of a German dominion over Italy. The horsemen of the Huns were driven back by Henry I., and though the emperor Otto I. was at first driven back, yet the German element has since pressed conquering to the very borders of Turkey. The power of the Crescent which rose in the south-east, was in the first half of the present century broken by the powers of the west. The power of the German kings has extended, and driven the Sclavonians from the territories between the Elbe and the Weichsel.

What overpowering influence France has exercised over Germany, is still fresh in our memory. France has for a century governed Germany by its literature, its manners, its arts, its language, even its fashions. The emperor Napoleon put an end to the venerable and holy empire of the German people, and if he then had carried his eagles still farther, to the walls of the city of the Czars, he would have established the laws which move from the west to the east with irresistible power. As it was he only marched out and prepared the great catastrophe which he was not permitted to complete, the perspective of which may be seen in a distant future. The liberalism which sprung up on the soil of the July revolution of the year 1830, and the radicalism which rose from the seed of the 24th of February, 1848, both uniting with prophetic glance point to the present state of the world, and the mission of the American Free states, whose interest lies in civil freedom. As soon as external circumstances and politics become unfavorable to this tendency, the cry is raised that civil freedom has entirely left Europe, and can only reach the European continent in its feeble evening glimmer from the far off western land—and now it is not only radicalism, not merely revolution which points to the star spangled banner; no, diplomacy has begun to turn its thoughts in that direction, and to look at it with anxiety.

For the idea of a future reaction of the American sentiment on Europe and the possibility of a return of the North American Heraclides gains more and more consistency, since the Union has begun to interfere in the political affairs of Europe. And it may now be questioned, how far apprehensions of such event are well founded, and whether external circumstances promise that Europe also is to be subjected to a natural and historical law such as we have described, and whether America in reference to the mother country, must take upon herself the mission of the historical Nemesis.

County Bonds of Ohio.

H. V. POOR, Esq:

Dear Sir:—The new constitution of Ohio took effect on the first day of September 1851. The old constitution was silent upon the question of these obligations, and the right of issuing bonds to aid railroads was long exercised by counties unquestioned. In a case before the Supreme court, not involving the question in a direct form, one of the jupges (not now in office) expressed a doubt on the subject, which induced the case of the Cincinnati Wilmington and Zanesville railroad company, *vs.* Clinton county. The Supreme court elected under the new constitution with a full bench, after able argument decided unanimously in favor of the rights of counties under the new constitution to issue bonds. In delivering the opinion of the court the learned judge used the expression, "this subscription having been made prior to the adoption of the new constitution" has led some to conclude that had the subscription been subsequently made, the decision would have been different. The court intended only to decide the case *before* the court, and although the entire question was ably argued before, and considered by the court, no expression of opinion was made or intended by the court. Some members of the court are decidedly opposed to these subscriptions as a matter of policy, but on the bench they do not question their validity. All question as to bonds issued before the taking effect of the new constitution, is by all regarded as forever settled. There are now no bonds in market from Ohio, founded on later subscriptions.

The clause of the new coustitution, simply prohibits the General Assembly from passing laws "authorising these subscriptions," and expressly affirms all laws in force at its adoption. It is difficult to conjecture the grounds on which bonds issued on laws in force and so affirmed, should be considered of doubtful validity. If any such bonds shall be issued, the court will probably sustain them.

D.

Ohio, July, 1852.

Illinois.

Bloomington Extension Railroad.—Mr. O. H. Lee, chief engineer on the Bloomington extension of the Alton and Sangamon road, reached Bloomington on Friday week, having on that day completed his survey of an experimental line, between Bloomington and Springfield. The information which Mr. Lee furnishes to the Bloomington Intelligencer is, that paper says, in the highest degree satisfactory. Several lines have been run, on all of which, at a moderate expense, and on easy grades, a road can be constructed. He expresses very confidently the opinion, that the road will not only be built to Bloomington, but that it will be extended through to Chicago, at an early day.

Suspension Bridge!

STONE MASONRY!

PROPOSALS will be received on the 26th July, 1852, at the Office of the Niagara Falls and International Suspension Bridge Company, for the construction of the Abutments, Towers, Wings, and Approaches, containing 6,000 cubic yards of Masonry, more or less, of the new Railroad Suspension Bridge of 800 feet span, to be erected in place of the present temporary structure, over the Niagara river, one-and-a-half miles below the Falls.

Separate proposals for the Masonry on the East and West shore, including four Towers of 80 and 90 feet high, will be required. The work is under the charge of JOHN A. ROEBLING, Civil Engineer, whose plans and specifications may be examined at the said Office, on the Canada side, on the 23rd and 24th of next month.

DAVID SMITH, *Superintendent.*

Office, Suspension Bridge, June 28, 1852.

Notice to Contractors.

CHICAGO AND MISSISSIPPI RAILROAD.

SEALED PROPOSALS will be received at the office of the company in the city of Springfield, Illinois, until SATURDAY, August 14, for the GRADING, MASONRY, BRIDGING, and CROSS TIES of that division of this road which extends from Springfield to Bloomington, Illinois.

The distance is about sixty miles, and the route traverses the most elevated and healthy portion of the State.

The line is divided into sections of about two miles each, and the work is to be commenced without delay.

Payments for work and materials will be made in cash.

Profiles and plans may be seen and blank forms obtained at the office of the company in Springfield and Bloomington, Illinois, where any information will be furnished by the Engineer Department.

Satisfactory proof of responsibility will be required from those proposing for the work.

The subscriber will be in New York, at No. 68 Warren-st., up stairs, over Hudson River Railroad Office, until August 3; and will be prepared to exhibit profiles, plans, etc., and give information to such as prefer to offer proposals in this city.

New York, July 15, 1852.

OLIVER H. LEE,
Chief Engineer Chicago and Miss. Railroad.

To Contractors.

PROPOSALS will be received until the 24th of July next, inclusive, at the Engineer Offices of the North Western Virginia Railroad, in Parkersburgh, West Union and Clarksburgh, for the Graduation and Masonry of 50 or 60 sections (of about one mile each) of that road, embracing all the heaviest parts of the work, and containing a number of tunnels, deep cuttings and embankments, as well as a considerable share of Bridge and Culvert Masonry. The line extends from the Baltimore and Ohio Railroad at the mouth of Three Forks Creek, two miles east of Fetterman, to Parkersburgh on the Ohio river, and is about 104 miles in length.

Specifications will be ready at the offices named, and also at Fetterman, on and after the 5th of July proximo, and Engineers will be upon the line to afford information.

The country through which the road passes is healthy, well settled and cultivated, and abundant supplies may be had along the route and from either end of it, by means of the Baltimore and Ohio Railroad, the North Western Turnpike and other good roads, and by the Ohio river. The facilities for cheap execution of the work are unusually great. Hands must be abundant, as the Baltimore and Ohio Railroad is advancing rapidly to completion, and releasing a large amount of labor.

Bidders must bring the best testimonials, and will state what other work they may have on hand.

By order of the President and Directors.

BENJ. H. LATROBE,
Chief Engineer.

To Contractors.

CENTRAL OHIO RAILROAD.

PROPOSALS will be received at the office of the Central Ohio Railroad Company, in Zanesville, until the 15th day of August next, for the Graduation and Masonry of 41 Sections of the Road, extending from a point five miles east of Cambridge, to within about six miles of the Ohio River, near Wheeling, Virginia.

The work upon the greater portion of this Division is very heavy, including several Tunnels and a large proportion of Masonry.

Bids proposing to receive a per centage of payments in the Stock of the Road are desirable; though a favorable consideration will be given to proposals for entire cash payments.

Specifications may be obtained at the Engineers Office in Zanesville, and also in Cambridge and Wheeling, on and after the 21st inst.

ROBERT McLEOD,
Chief Engineer.

July 15th, 1852.

CAR, LOCOMOTIVE, AND TENDER SPRING MANUFACTORY.

PHILADELPHIA, *March* 1, 1852.

We beg leave to present the following Certificates to the consideration of **Railroad Companies and Car Builders,** for the quality of **CAR, LOCOMOTIVE, AND TENDER SPRINGS** manufactured by us.

At the same time we would inform Railroad Companies and Car Builders that we have extended our works, and will be happy to execute any orders for Steel Springs for Cars, Locomotives, or Tenders, of any design or pattern which they may see proper to intrust to us, at the lowest prices, and on terms which will prove satisfactory.

From our long experience as Spring manufacturers, we are enabled to supply Railroad Companies with **Spring Steel,** of superior quality, *converted from Swede Steel Iron.*

The iron being imported direct from Stockholm by ourselves, and Converted and Rolled under our supervision.

Yours respectfully,

JAMES JEFFRIES & SON,
REAR OF GIRARD HOUSE.

Philad'a, Feb. 27, 1852.

MESSRS. JAMES JEFFRIES & SON.

Gentlemen: In reply to your inquiries as to the character of the Springs furnished by you for Locomotive Engines and Tenders, I take pleasure in saying that I have found them, both in material and workmanship, superior to anything else of the kind that ever came under my notice. I have occasionally tried the Springs of other manufacturers, but in testing their elasticity and strength with the apparatus I have for that purpose, I have found none combining the requisites of a good spring, viz., lightness, elasticity, and durability, in so eminent a degree as yours.

I am using them exclusively under the Engines and Tenders of my make, and can safely recommend them to others.

Yours truly, M. W. BALDWIN.

—

Office, Penn'a Rail Road Co.
Philad'a, Feb. 26, 1852.

This is to certify, that James Jeffries & Son manufactured nearly all of the Steel Springs used on the Georgia Rail Road while I had charge of that work, and have also furnished those that have been used on the Pennsylvania Rail Road. The character of their work has always given entire satisfaction, and I cheerfully recommend their Springs to the patronage of Rail Road Companies and Car Builders.

J. EDGAR THOMSON,
Chief Engineer and President Penn'a Rail Road Co.

—

Office, Phil'a, Germantown & Norristown R. R. Co.
February 28, 1852.

This is to certify, that I have used the Steel Springs manufactured by Messrs. Jas. Jeffries and Son, for the Locomotives, Passenger, and Freight Cars of the above Road, during the last 12 years, and have always found them good and efficient Springs, giving general satisfaction. R. FRENCH.

—

Philadelphia, Feb. 23, 1852.

This is to certify, that we have used Car Springs made by James Jeffries & Son, for the period of twelve years, and find them a very superior article, so much so, that we shall always continue to use them. DUTILH, HUMPHREYS & CO.
Proprietors of Union Line of Trans. from Phila to Pittsburg

—

Philadelphia, Feb. 27, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: We have been using your Steel Springs under our Cars for a number of years, they have given entire satisfaction, and have proved themselves superior to any other that we have used. Their good qualities should commend them to any who have need of an article so difficult to obtain perfect. Yours truly, HARRIS & LEECH,
Proprietors of Leech's Trans. Line from Phil'a to Pittsburg.

—

Richmond, Jan. 6, 1852.

MESSRS. JEFFRIES & SON: It affords me pleasure to say, that after some six or seven years' trial of your Springs, I find them superior to any other Springs we have used on our road, and are so well satisfied with their merits as to continue the use of them I am, very respectfully yours,

THOMAS SHARP,
Superintendent R. P. & P. R. R.

—

Office, R. & P. R. R. Co.
Richmond, Va., Jan. 6, 1852.

TO MR. THOMAS JEFFRIES,

Dear Sir: I take pleasure in stating that the Springs made by the firm of which you are a member, and which I have been using for the last eight years on Locomotives and Tenders, and, also, on Passenger, Freight, and Coal Cars, have given the utmost satisfaction, and I consider them superior to any I have received from other establishments during the above period, and shall still continue to send you our orders for all we may want. Very respectfully yours,

THOMAS DODAMEAD,
Superintendent R. & P. R. R.

—

Superintendent's Office, C. R. R.
Savannah, Ga., Jan. 21, 1852.

This will certify, that Car and Locomotive Springs made by Messrs. James Jeffries & Son, of Philadelphia, have been in use on this road for a number of years, and have given entire satisfaction. W. M. WADLEY,
Superintendent.

Office, Petersburg R. R. Co.
Petersburg, Jan. 8, 1852.

The house of James Jeffries & Son, of Philadelphia, has made us a good many Car and Engine Springs, and I take great pleasure in stating that they have always turned out well, and I believe their work can not be surpassed by any in the country. H. D. BIRD,
President.

—

Office, Sup't T. & M. Power, So. Ca. R. R. Co.
Charleston, Jan. 21, 1852.

This is to certify, that the South Carolina Rail Road Company have for a number of years been using the Steel Springs manufactured by Messrs. J. Jeffries & Son, of Philadelphia, for their Locomotive Engines, and for both Passenger and Freight Cars, and I take pleasure in stating that they have given entire satisfaction, and recommend them to the patronage of all Rail Road Companies requiring such articles.

J. D. PETCH,
Sup't Trans. & Motive Power So. Ca. R. R. Co.

—

Philadelphia, Feb. 27, 1852.

This is to certify, that I have used Springs made by James Jeffries & Son for the period of five years, and consider them equal, if not superior to any others that I have had in use.

JOSEPH S. LEWIS,
Pennsylvania & Ohio Line.

—

Georgia Rail Road,
Augusta, Ga., Jan. 1, 1852

To whom it may concern.—We have used Springs manufactured by Messrs. James Jeffries and Son, for the Locomotives and Cars of our road for the last ten years, and have no hesitation in recommending them as having given general satisfaction

F. C. ARMS,
General Superintendent.

—

Macon & Western Rail Road,
Macon, Ga., Jan. 25, 1852.

MESSRS. J. JEFFRIES & SON,

Gentlemen: This Company has for several years purchased and used, under Cars and Engines, Steel Springs manufactured by you. We have also purchased from other manufacturers and made Springs ourselves.

Yours have given entire satisfaction, and have proved themselves equal, if not superior to any we have used. Their excellent qualities should commend them to all who have need of an article so difficult to obtain in perfection.

Yours, very respectfully, EMERSON FOOTE,
Superintendent.

—

Macon, Ga., January 24, 1852.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: In reply to your inquiries in reference to Steel Springs, I take pleasure in saying, that I have been in the way of observing Springs in use on Cars and Locomotives, on various Rail Roads, for seventeen years past, more particularly on the Central Rail Road of Georgia for eight years past, and during said seventeen years have been practically acquainted with your make of Springs, and I have no hesitation in saying, that your Springs with open work are the best Steel Springs I have ever used or seen in use.

Yours, respectfully, GEO. W. ADAMS,
Superintendent S. W. R. R. of Georgia.

—

Transpt. Office, W. & A. R. R.
Atlantic, Jan. 31, 1845.

MESSRS. JAMES JEFFRIES & SON,

Gentlemen: This road has used the Springs made by your firm since its first opening, under both Engine and Cars, and they have given entire satisfaction to all.

Very respectfully, WM. D. FULTON,
Superintendent.

—

Montgomery & West Point R. R. Co.
Montgomery, Ala., Feb. 23, 1852.

This may certify, that this Company have been for years using, both under their Engines and Cars, Springs from the manufactory of James Jeffries & Son, of Philadelphia, and are so well satisfied of their superiority that we can confidently recommend them to all companies in need of Springs.

SAMUEL G. JONES,
Engineer and Superintendent.

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26 1852. 6 w

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August	15th—At	Quitman, for line in Clarke County.
"	25th—At	Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September	5th—At	Macon, for line in Noxubee County.
"	15th—At	Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
"	25th—At	Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
"	30th—At	Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon.

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK-'IM IN," containg about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do, do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

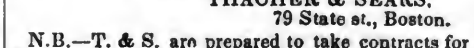
Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

To Contractors.



SEALED PROPOSALS will be received by the undersigned, at the Post Office, in Easton, Pennsylvania, until 7 o'clock A. M., of the 10th August, prox. for the Grading and Masonry of fifteen miles in length of the Belvidere Deleware Railroad, from Milford to Phillipsburg, opposite Easton.

The line will be ready for inspection, and profiles and specifications shown at the offices of the resident Engineers, in Milford and Phillipsburg, on and after the 3rd August.

Good references will be required of bidders unknown to the undersigned.

ASHBEL WELCH, Engineer B. D. R. R.
Lambertville, July 19th, 1852.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES, } Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES, } Late Davenport, Bridges & Co., Fitchburg, Mass.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

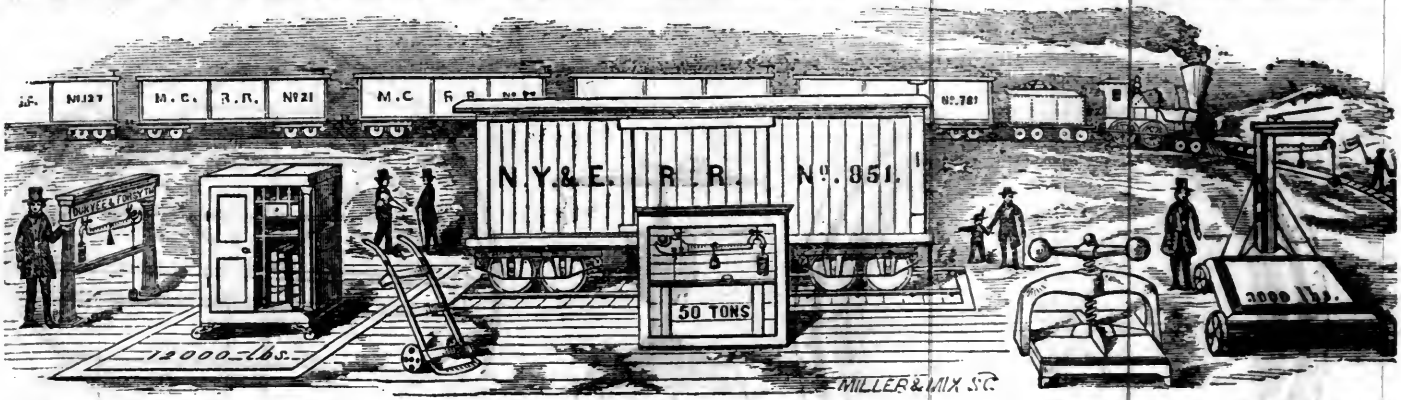
JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R.R. and Trans.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribere are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT CONVERTIBLE BONDS of the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

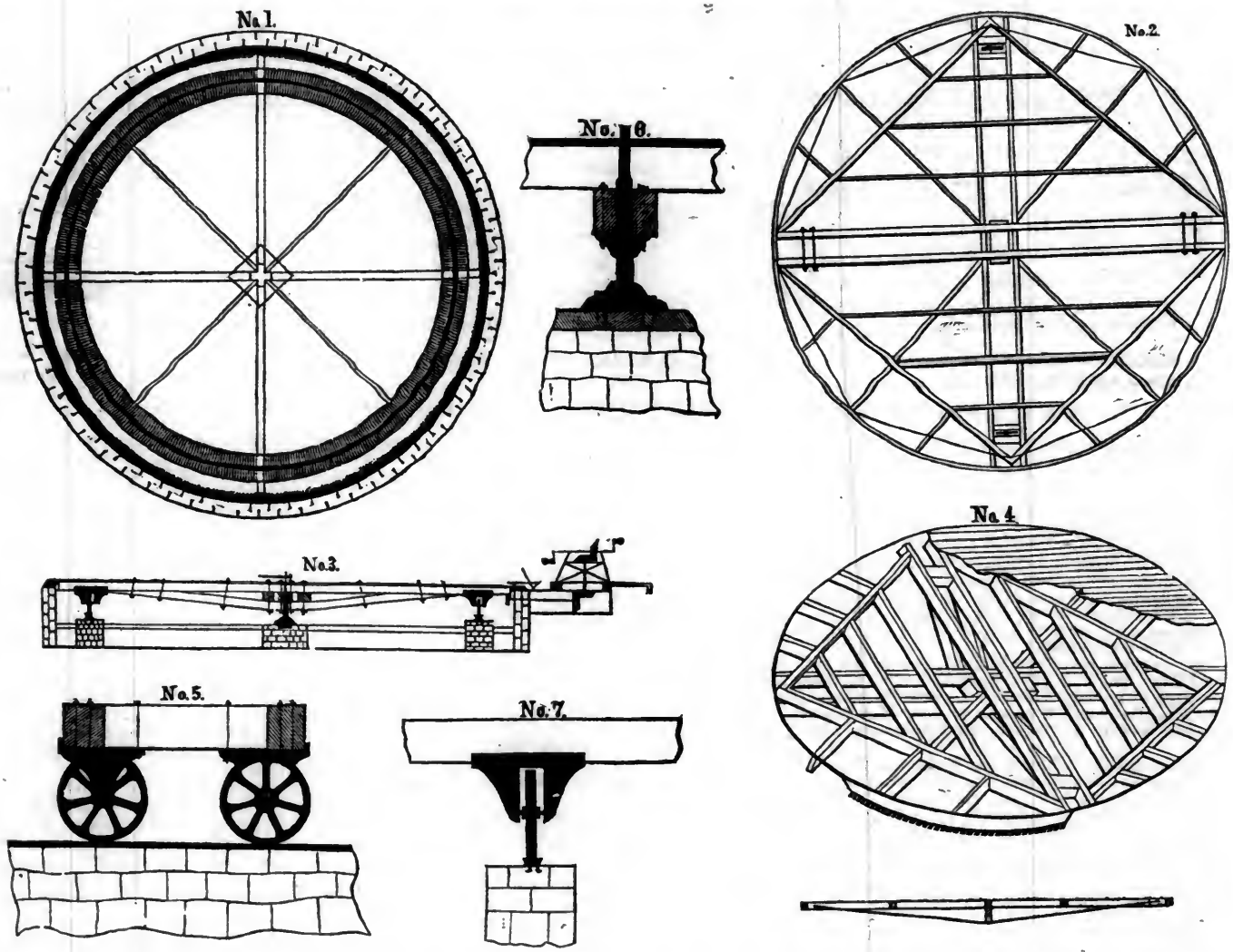
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No 31] SATURDAY, JULY 31, 1852. [WHOLE No. 850. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Hillsboro' and Cincinnati Railroad.....488, 481
New Orleans, Opelousas and Great Western Railroad.....488, 484
Dayton and Michigan Railroad.....485
Canadian Trade from 1814 to 1850.....486
Ohio and Mississippi Railroad.....486
Statistics of the Boston and Lowell Railroad...486
Eastern Railroad.....487
Ohio Central Railroad.....487
Dauphin Coal Company.....488
Stock and Money Market.....489
Susquehanna Railroad.....489
Manassas Gap Railroad.....489
Tennessee Valley Railroad.....490
Alabama and Tennessee Railroad.....491
Syracuse and Binghamton Railroad.....491
Hannibal and St. Joseph's Railroad.....491
Railroad from Lake Superior to the Pacific....492
Columbus, Piqua and Indiana Railroad.....492
Railroads in New York.....492
Androscoggin and Kenebec Railroad.....492
Michigan Southern Railroad.....492
North Carolina Railroad.....493

American Railroad Journal.

Saturday, July 31, 1852.

Hillsboro and Cincinnati Railroad.

Report of the preliminary survey of the route, by the Chief Engineer, to the Directors.

GENTLEMEN:—Agreeably to your instructions, I have now completed the preliminary surveys, for the establishment of the shortest and best line practicable, for the extension of your railroad eastward from Hillsborough, Highland county, Ohio, to Parkersburgh, Wood county, Virginia—there to connect—through the Northwestern Virginia railroad, with the Baltimore and Ohio railway, and thus to form the Ohio link, in the great railway chain, destined soon to unite St. Louis with Baltimore by a route, unrivalled for shortness, and unsurpassed in commercial and other advantages.

Upon the subject of these surveys I have now the honor to present the following

REPORT.

The reconnoissance made by the writer during the past winter, in company with two energetic members of your board, indicated that by pursuing the favorable valleys which offered themselves in an east and west direction, and developing the line along their sinuosities, a practicable and economical route, could readily be obtained for the extension of your railroad, from Hillsborough to Parkersburg.

But the great prolongation of the route which was found necessary, to take advantage of the lines of the easiest slope, though it favored the construction of some important branches, and the accumulation of trade, from the south, gave it nevertheless, a length which was considered objectionable, by the parties in interest with us.

To remove that objection, the present surveys were instituted, to establish a direct line across the state, notwithstanding the increased cost of graduation, which it was foreseen, would be necessary, in order to push the line directly upon Parkersburg in a course transverse to the entire drainage of southern Ohio, and to overcome the obstacles which might be expected in crossing the difficult country to be encountered—especially within the limits of the Ohio company's purchase.

For the sake of a more convenient reference, the present report, is divided into the following separate heads:

1. Preliminary observations.
2. Description of the preferred route.
3. Local position of this route, and its connexion with other lines.
4. Estimated cost of the line.
5. Of the coal trade to Cincinnati.
6. Of the general business and probable revenue of the road.
7. Concluding remarks.

Prior to entering upon the immediate subject matter of this report, the writer may be permitted to congratulate the directors, on having completed the western division of this important road from the town of Hillsborough to its junction with the Little Miama railroad at Loveland's, and thus secured a railroad connexion with the city of Cincinnati sixty miles long at present, but ultimately to be reduced to 55.

Upon this portion of the line the cars are now running with regularity, and with a degree of profit, that could not have been so soon anticipated. Though but a few weeks open, and with very imperfect arrangements for business, this road is now paying its expenses, and clearing six per cent, on the whole investment.

The commercial advantages that will flow to the city of Cincinnati, and to your own community, from the opening of this new and important avenue of business—sensibly felt as they already are—cannot, in their probable future influences, be too highly appreciated.

To have the locomotive engine this day, running regularly, sixty miles out of Cincinnati, eastward, upon the best and most direct route towards the coal and iron beds of Ohio, and towards a junction with the Baltimore line, is a solid triumph which nothing can shake.

The town of Hillsborough is within 51 miles (by our railroad survey) of the nearest open coal mine to the city of Cincinnati—more than one-half then of the whole distance to the coal beds, has by your exertions, been already spanned with a running railroad, and we have only now, to fill in this comparatively short stretch of railway, to place that city in connection with those inexhaustible beds of mineral fuel, toward which in seasons of necessity her longing eyes have been so often cast, and which if then accessible by a first class railway, would have carried comfort, and joy to many a gloomy fireside.

Upon the through line, between Baltimore and Cincinnati, the cars are now running regularly at both ends of this great route.

From Cincinnati eastward they run out to Hillsborough 60 miles, and from Baltimore westward they are now running to, and beyond the point of divergence of the Parkersburgh road, leaving a gap to be filled in by your exertions, and those of the Northwestern Virginia railroad company, of about 223 miles, 119 miles in Ohio, and 104 in Virginia—the heavy sections of the latter being already advertised for contract.

To complete this link, in such a through line cannot be a matter of any great difficulty, at the present day.

PRELIMINARY OBSERVATIONS.

The first efforts of our surveying parties were directed to a minute examination of the Summit ridge, dividing the waters of Paint creek, from the Scioto river, and of the various approaches leading up to it, from the main streams on both sides.

Our ability to leave Paint valley with a feasible railroad line, being entirely controlled by the elevation and position of this summit ridge, and its lateral drains, my chief assistant, N. F. Jones Esq., quartered himself there, with a small party, and devoted nearly two months, to a most thorough examination of that portion of the peninsula between Paint creek and the Scioto river, which appeared to be within range of our route—using in person—for the sake of exactness, the different instruments alternately.

These laborious investigations, while they clearly developed the practicability of crossing the summit, within the limits of grade and curvature adopted—at the same time, more than confirmed our previous opinions of its expensive character, and led us eventually to seek a route avoiding its difficulties, by turning the ridge itself, with a shorter line.

These examinations being completed, in the latter end of the month of March, the western party was filled up, and began to extend its surveys east of the Scioto; at the same time, a full party was started from Parkersburg, under the direction of Samuel Linton Esq., and operated westward.

A complete reconnoissance of the country having been previously made by the writer, it was determined to limit the gradients facing east, (or opposing the local business of Cincinnati) to 39.6 feet per mile—whilst the maximum grade facing west (or favoring that business) was fixed at 52.8 feet to the mile.

The minimum radii of curvature were ultimately established by trial on the ground, at 1432½ feet,

on grades of 10 feet per mile and under; and at 1910 feet, on grades over 10 feet per mile.

The maximum resistance to be overcome by a train moving towards Cincinnati upon this line, will therefore be represented by a 39.6 feet grade, upon a 1910 feet curve; and from Ciucinnati by a a 52.8 feet gradient, upon a similar horizontal sweep.

The considerations inducing the adoption of this system of curves and gradients, were few and simple.

A gradient of 52.8 feet per mile, upon curvatures of 1000 feet radius, having been adopted by B. H. Latrobe, Esq., the chief engineer, as the controlling resistance to govern the profile of the Northwestern Virginia railroad; and having been communicated to the writer, it became evident that these limits ought not to be exceeded by us in either direction, but improved upon, of course, if the ground admitted.

It being also manifest, that from the Ohio mineral region at all seasons, and occasionally from all the river counties, a heavy local trade would set in towards the city of Cincinnati—irrespective of the through business—there seemed to be a strong propriety in flattening the gradients to be encountered by the traffic of the road in going towards Cincinnati, in order to favor the local trade of that city, to the people of which we are already indebted for important aid, in the conduct of our enterprise.

The maxima of grade, and minima of curvature were therefore established as above recited, and for the reasons intimated.

Within these limits of grade and curvature, our surveys now enable us to say, that the whole country between Hillsborough and Parkersburg, may be successfully crossed by a railway line, not only entirely unobjectionable in its engineering characteristics, but in fact highly favorable, both for great speed and heavy traction.

Upon this system of gradients, the same maximum exertion of locomotive power will propel a train, through our line and its connexions, from the city of Cincinnati to the base of the Allegheny mountains, a distance of about 300 miles,—since no gradient exceeding 52.8 feet per mile, will be encountered within that distance, upon any of the lines.

While the local business going towards the city of Cincinnati, from any part of our route, or from the Ohio river, will have an advantage in the gradients of about 25 per cent.

The low gradients upon our line, to be overcome by the coal trains, in going towards Cincinnati, will enable the transportation of coal to that city, from the mineral region of Ohio, to be carried on with more advantage upon this road, than any other terminating there.

This is an important consideration, to which we shall have occasion to invite attention hereafter.

The reconnoissance, conducted in advance of the surveys, indicated that there was some intermediate points so fixed by the position of the leading valleys and the general features of the country as to become secondary termini.

These positions are three in number, viz: Piketon, Jackson, and Wilkesville, through or near which this line must pass.

These points, being fixed apparently by the nature of the ground to be traversed, simplified our surveying operations, and reduced them to the comparatively easy one, of tracing our line, as directly as practicable, between these points, and from the two outer ones to the main termini of the route.

The impracticability of railroad routes, in south Ohio, has been for years a favorite theme with certain persons in this state.

This inaccurate and even ridiculous idea, has been assiduously propagated, in almost every imaginable form of expression, by map, letter, and report, and has had such currency given to it, by parties whose public position ought to have made them more regardful of truth, that it has at last obtained some hold upon the public mind.

Fortunately for the people of southern Ohio, the results of the present surveys, will dispel forever, the imaginary cloud of impracticability, in which —as with a pall—a few designing men have sought to wrap this portion of the state; more with the object (as it now appears) of advancing adverse interests, than from any regard to the facts of the case, into which, indeed, they have never troubled themselves to inquire.

LOCAL POSITION OF THIS ROUTE, AND ITS CONNECTION WITH OTHER LINES.

This line, beginning at Cincinnati, runs through Hamilton county, along the borders of Clermont, Warren, and Clinton—centrally through Highland, Pike, and Jackson, across the lower township of Vinton, and diagonally in an E. N. E. direction across Meigs county, and through the south-eastern corner of Athens, and south-western corner of Washington counties, Ohio.

Going east from Hillsborough, this line connects at the town of Bainbridge, in a distance of 22½ miles, with Paint Valley, ever celebrated for its extraordinary fertility.

Near Piketon, it intersects the great Scioto Valley, and connects with the Ohio State canal.

At Jackson, 56 miles out from Hillsborough, 111 from Cincinnati, it joins with the Scioto and Hocking Valley railroad, a line destined soon to play an important part in the railroad system of this State. This road is now all graded from Portsmouth to Jackson, 44 miles, the iron is fast arriving, and the laying of the track has been begun—through it, when continued to Newark, and connected with the railroads now in operation beyond that point, Baltimore will have a direct and convenient connection with the entire railway system north of the Ohio—since the line above named crosses all the east and west thoroughfares, and through them has a complete suite of railway connexions in both directions.

Through this same extension of the S. and H. V. R. R., Baltimore will also have a connexion with Lake Erie, at Sandusky city, (on the shortest route to Detroit,) in a total distance of 630 miles—encumbered, however, with one break of gauge at Newark, and possibly another at Jackson.

By reference to the accompanying map, it will be observed that this route takes the longest southern sweep, through south Ohio, which any east and west railroad line can do, without too much loss of distance; and it does this with a loss by deflection from the air line of less than ten per cent

This extreme southern sweep across the State of Ohio, enables this line effectually to cut off all trade, or travel, coming from the south, and having either an eastern or western destination, for in both directions, it furnishes the shortest possible route, and therefore (all other things being equal) ought unquestionably to secure the business. It is through this line that Baltimore, Philadelphia, and New York, will find their shortest and best route for commercial intercourse with Kentucky, Tennessee, and the southwest.

The State of Ohio is soon to be furrowed in an east and west direction by a number of railroad thoroughfares. Thus upon the meridian of Columbus, going from south to north, we encounter no less than six thoroughfare lines—four directed upon Philadelphia, one upon New York, and one upon Baltimore, to wit:

1. Cincinnati, Hillsborough and Parkersburg railroad, [tributary to Baltimore.]
2. Cincinnati and Marietta, [tributary to Philadelphia.]
3. Wilmington, Circleville and Zanesville, [tributary to Philadelphia.]
4. Columbus, Newark and Steubenville, [tributary to Philadelphia.
5. Ohio and Pennsylvania, [tributary to Philadelphia.
6. Lake Shore, [tributary to New York.]

These being all parallel roads of a system, it is evident that while the four interior ones can only, [by any possibility,] draw and control the trade of their respective local belts of country, those which have the good fortune to run upon the flanks of the system, have besides their own peculiar local belts, all the outside country, from which to collect business.

This advantage attendant upon a flank line, will be recognized by all railroad men, and will enable the route now reported on [under proper management.] to command all the trade and travel from the south and southwest, which may be seeking an east and west thoroughfare.

An examination of the map, and a little consideration, will render this point clear to the apprehension of all.

The points of concentration upon the Ohio river for the business of Virginia, Kentucky, Tennessee, and the Southwest, so far as they are yet established by the railroad systems now in progress in those States, are: 1, Point Pleasant; 2, Maysville; 3, Covington, (opposite Cincinnati;) 4. Louisville.

From the first, Point Pleasant. By means of a branch which (under our charter) may be constructed from our line in Jackson county, through the important town of Gallipolis, the distance from Cincinnati to Richmond will be only 577 miles, [and from Cincinnati to Gallipolis 138 miles]—this branch intersecting the Scioto and Hocking Valley railroad, near Oakhill, will by the proposed continuation of that line to Newark, [about 80 miles,] give the city of Richmond access to Lake Erie, at Sandusky city, in a total distance of 668 miles, and at the same time a complete connection with the entire railroad system of the West, north of the Ohio river.

This position of things being recognized and appreciated by Charles B. Shaw, Esq., C. E., [the Engineer employed by the State of Virginia to extend the location of the Central Virginia railroad from Covington to the Ohio river]—that able officer has strongly recommended Point Pleasant as the Ohio terminus of the Virginia Central line of railroad.

From the second point of concentration, Maysville, a charter exists to Hillsborough, to which a railroad can doubtless be conducted in but little more than 40 miles, and thus bring the Kentucky and Tennessee trade upon our line at that point.

Again, if from Maysville, a railroad should be built towards the Big Sandy, and the Southwestern trade should take the Scioto and Hocking Valley railroad, at Portsmouth, it would fall in with our line at Jackson, 44 miles off, and would there find superior inducements to use it.

From the third and fourth points, Covington and Louisville, the business would finally concentrate itself in the city of Cincinnati, and nothing could prevent our obtaining a fair share of it at that point.

But it seems useless to pursue this subject further—let the Southern and Southwestern business come northward by what route it may, the first east and west thoroughfare it will meet with, will be the line now reported, and through this line it will surely find its most advantageous outfall in either direction.

The position of our route, as a part of the great through line, from Baltimore to St. Louis, is well shown upon the accompanying map, printed off (by permission) from the plate used by the Baltimore and Ohio railroad company, to illustrate their last annual report. (the twenty-fifth,) which indicates very clearly the position of our line as a part of the main thoroughfare from Baltimore to St. Louis.

The position of this line in regard to the geological, mineralogical, and agricultural resources, commanded by it, is so fully exhibited in the annexed report of Professor W. W. Mather, [formerly Chief Geologist of Ohio,] as to require no observations here, except to state that the writer's professional examination of this country, enables him to corroborate Professor Mather's remarks, so far at least as his information upon such subjects extends.

Coming from the highest geological authority in this State, the numerous facts cited in Professor Mather's report, will necessarily command the attention of the reader, and especial reference is invited to that portion of it concerning the "iron trade," of which in future time, the county of Jackson promises to become one of the chosen seats.

By means of the Pomeroy branch, our route will connect with the Ohio river at a good landing, 70 miles by water from Parkersburg—this will enable the river to be used temporarily as a part of the main through line, in case there should be any delay in comoleting the thirty miles of heavy work crossing the Shade river and Hockhocking countries.

The distance of the junction of the Pomeroy branch with the Ohio river, from Hillsborough, is 99 miles, and from the city of Cincinnati, 154.

The distance from Cincinnati to Baltimore by this route will be as follows:

Distances.	Miles.
Cincinnati to Parkersburg, [surveys made and 60 miles now running]	174
Parkersburg to Three Fork, [located, and in part advertised for contract]	104
Three Fork to Baltimore, [finished except the Knobly cut off, and now running]	269
Total Cincinnati to Baltimore (of which 223 miles only are unfinished between Hillsboro' and Three Fork)	547

Distances by this route.

From	To Baltimore.	To Philadelphia.	To New York.	To Richmond.
Cincinnati	547	645	732	577
St. Louis	877	975	1062	907

From this statement, and that following, it will be observed that the shortest railroad distance from St. Louis and Cincinnati—those great emporia of western commerce—to Philadelphia and New York, is through Baltimore.

The following table of distances by various routes from Cincinnati to Philadelphia and New York, will illustrate this more fully—and will be found to tell upon a railway, (the best means of transportation now known) as it formerly did upon the Cumberland road, the best of its day.

Distances by various railroad routes from the city of Cincinnati.

Via	To Philadelphia.	To New York.
Buffalo and Albany	—	590
Dunkirk	—	859
Ohio and Penn. railroad, Central Penn. etc	701	788
Columbus, Newark, Steubenville etc	667	754
Circleville, Zanesville, Hempfield railroad etc	646	733
Marietta, Wheeling, Hempfield, railroad, etc	658	745
Hillsborough, Parkersburg, and Baltimore	645	732

To Boston, or any places, north and east of New York, in the route to which, that city forms a point, the same advantage of distance will prevail, in favor of the Cincinnati, Hillsborough, Parkersburg, and Baltimore route.

The four great cities of the Atlantic seaboard, lie very nearly upon the same straight line—it is evident then, that a preference will naturally be given by commercial men, to a route like the Baltimore line—leading through all, without loss of distance to any.

To this consideration affecting the mere business man, add the attractions offered by the Capital of the United States, to every visiting citizen, and the strength of this route as a grand passenger line from West to East, can hardly be overrated.

ESTIMATE OF THE GRADING, BRIDGING, AND MASONRY.

Places.	Miles.	Dollars.	Average per mile. Dollars.
From Hillsborough to Bainbridge branch	13.50	174,643	12,940
From Bainbridge branch Piketon	21.70	330,050	15,200
From Piketon to Jackson	20.94	230,640	10,980
From Jackson to Wilkesville	17.90	234,679	13,110
From Wilkesville to Pomeroy branch	14.77	178,755	12,080
From Pomeroy branch to Parkersburg	30.23	761,854	25,200
Totals, main line exclusive of the branches and the Ohio river bridge	119.04	1,910,621	16,025
Add branches.			
Bainbridge branch	9.12	60,110	6.590
Pomeroy branch	10.10	63,458	6 345
Totals including main line and branches	138.26	2,034,190	14,712
Add,			
Ohio river bridge and approaches		320,810	
Totals of the main line, branches, and Ohio river bridge	138.26	2,355,000	17,033

To the total cost of grading and bridging, as estimated above	$2,355,000
We should add for contingencies 10 per cent	233,500
	$2,288,500
Add for the main track sidelings, complete, 152¼ miles at $8,000 per mile	1,220 000
* Total (finished with a single track and sidelings) ready for the rolling stock, from Hillsborough to Parkersburg, including both branches, and Ohio river bridge	$3,808,500

* Without the Bainbridge branch, $146,121 less.

The construction of this route should be carried on and completed in four successive stages, acting still upon the judicious policy already pursued by this company, of finishing the road in continuous sections, successively outwards from Cincinnati, and thus continually bring into railroad connexion with that city, new areas of country and business.

These four stages, indicating the points to which the line ought to be successively completed, and opened from Hillsborough; with the cost of reaching the same, exclusive only of the track and the rolling stock, is expressed in the following statement.

The average cost of grading and bridging the entire line and branches, (without contingencies,) but including the heavy crossing of the Ohio, is only $17,000 per mile.

STATEMENT OF THE COST OF GRADING, BRIDGING, AND MASONRY, DIVIDED INTO FOUR STAGES.

1. Hillsborough to Bainbridge, (22.62 miles,) including branch line ($10,378 per mile)	$234,753
2. Hillsborough to the coal region, at Jackson, including the Bainbridge branch, (65.26 miles, at $12,188 per mile)	795,443
3. Hillsborough to the Ohio river, at Pomeroy, including both branches, ($11,777 per mile, 108.3 miles)	1,272,336
Hillsborough to Parkersburg, including both branches, and the Ohio river bridge, as above, (138.26 miles at $17,033 per mile.)	2,355,000

[*Exclusive of contingencies*].

To take the trade of Paint valley, an outlay on the roadbed (clear of the track), of $235,000 is sufficient; and to put the city of Cincinnati in full communication with the mineral region, as well as with Paint valley, the bed of the road can be prepared for $800,000, clear of the track in both cases.

These appear to be but trifling sums to effect such considerable objects, but they will nevertheless be found sufficient for the purpose.

In comparing these estimates, it will be observed that the least costly part of the route is towards Hillsborough, while the most expensive is that near Parkersburg, (or beyond the Pomeroy branch) and this favors materially our proposed plan of operations, of building the road in successive stages, and gathering strength as we advance east.

OF THE COAL TRADE OF CINCINNATI.

The city of Cincinnati is now supplied with the important article of coal, for fuel, entirely by means of the Ohio river in seasons of flood.

The chief sources of this supply at present, are

1. *The Pittsburgh Coal Seam*—under various commercial names, but usually Youghiogany coal, in the Cincinnati market, and regarded as the first in quality, as it is in quantity.

2. *The Pomeroy Coal*.—This article, though an excellent coal, occupies the second place in the Cincinnati market, both in quantity and quality.

3. *Virginia Coal*—including the Cannel coal; only a small amount of this has yet reached the Cincinnati market, too inconsiderable, indeed, to influence it materially.

The coal of the Pittsburgh seam, drawn from its various sources upon the Allegheny, the Monongahela, the Youghiogany, and more recently from the immediate valley of the Ohio river, itself, is unquestionably the controlling coal of the Cincinnati market.

It is the one with which other coals must successfully compete, before they can occupy the fuel market of Cincinnati, to any considerable degree.

Up to this time, Cincinnati has received no supplies of coal by railroad, and the effect of steam transportation by land, in equalizing the price of this necessary of life, has not yet been felt in that city.

She has hitherto been dependent entirely upon the variable and dangerous navigation afforded by the Ohio river in flood, and rendered more uncertain still by the frail structure of the vessels (mere rectangular boxes) in which the bulk of this trade is conducted, and which are themselves sacrificed at the end of the voyage; added to the great depth of water required to float them safely, when committed to the current at the head of the Ohio.

As stated above, the nearest coal mine to the city of Cincinnati, now opened and worked, is that of Adam Overly, upon the Buckeye Fork of Salt creek, 106 miles, by our line, from that city; while in the vicinity of Jackson, according to Professor Mather, a large number of pits are now in operation.

The distance from Cincinnati to the centre of quantity of the Jackson Coal seam, estimated by Professor Mather to be capable of supplying that city for some centuries, with an article equal in quality, if not superior to Youghiogany coal, is 112 miles.

This then is about the railroad distance upon a route opposing no grade over 39·6 feet per mile, against this trade, which is to come in competition with the coal of the Pittsburgh seam, brought nearly 500 miles by water, on the Ohio river floods.

Can it advantageously do so?

To this question, we answer, affirmatively, for the following reasons:

A first class freight locomotive, comprising all the modern improvements, will draw over grades of 39·6 feet per mile, from 160 to 180 tons of coal, as her regular average load, contained in a train of 32 to 36 cars, properly constructed, say, 5000 bushels as an average load one day with another.

The fuel to propel the train would be the cheapest possible, since the Jackson coal furnishes a better article for locomotive use, and at less cost, than at any other point in this country, unless it may be in the Cumberland region, which coal does not, however, surpass it either in quality or cheapness.

Taking this economy of fuel into the account, and computing other things from known data, the writer has come to the conclusion, that upon a railroad, graded in short planes, of 39·6 feet per mile, only, opposing the trade, and curved horizontally upon the long radii we propose to use here, the transportation of Jackson coal in full loads, can be rendered profitable at a total charge of 11 mills per ton per mile, or four cents per bushel, from the town of Jackson to the city of Cincinnati, 111 miles.

Comparative Estimate of the Cost of Coal placed in Cincinnati.

From Jackson, Jackson county, Ohio, by the Cincinnati, Hillsborough and Parkersburg railroad:

Per bushel.	Cents.
Coal in the ground	·10
Dead work	·17
Digging	1·50
Hauling out of colliery	·10
Hauling on lateral roads or planes	·16
Repairs of drift cars	·08
Repairs of drift roads	·06
Expenses of the tip	·06
Oil, etc	·03
Total delivered in large cars on the main railroad	2·26
Haulage per railroad from Jackson to Cincinnati, (111 miles)	4·00
Profit of the collier	·50
Total, delivered in the city of Cincinnati	6·76

say 6¾ cents per bushel.

From Pittsburgh, Pennsylvania, by the Ohio river, in flood.

Per bushel.	Cents.
Cost delivered in boats as over	2·26
Cost of a pair of flat boats of 20,000 bushels capacity, with depreciation of equipment	$550
Sale of boats in Cincinnati	50
Loss	$500
Or loss on boats	2·50
Expenses of running 20,000 bushels	$300
Or per bushel	1·50
Profit of the collier	·50
Risks of the river (Often estimated at 10 per cent.)	·25
Total, delivered in the city of Cincinnati. say 7 cents per bushel.	7·01

The writer therefore concludes that by means of this line of railroad, assuming a sufficient profit for all concerned, the Jackson coal can be delivered on the upper plain of the city of Cincinnati, at a maximum rate of 6¾ cts. per bushel at the depot, while the only competing article in point of quality, the Youghiogany coal, cannot be delivered at the water's edge for less than 7 cts.

In arriving at this decisive conclusion, that the maximum price of prime Jackson coal, delivered at the most favorable point within the paved limits of the city of Cincinnati, will be a fraction less than the minimum rate of the Youghiogany coal, delivered at the water's edge—the writer is treating of a business with which he has been practically familiar for many years, both in the east and west, (especially the former), and in which he has, in fact, been recently engaged near Pittsburgh.

The advantage of receiving regular supplies of a superior coal in Cincinnati, at all seasons of the year, at the low rate of 6¾ cents per bushel—wholesale at the depot—will be duly appreciated by the citizens who have long been subject to the capricious action of a sliding scale, occasionally running up to 25 cents per bushel, when the necessities of the people were the greatest, and rarely, if ever, falling below 8 cents, under the most favorable circumstances.

To obtain regularity and cheapness in the price of this prime necessary of life, all that is requisite, is a good railway to the coal mines, and such it has been the effort of the writer and his employers, to make the one now offered to the public.

From the annexed report of Professor Mather, it appears that the much valued "Cannel coal" is to be found in abundance in Jackson county—its outcrop has been noticed by the writer, on Coal, and Bufford's Runs, and the reduced cost of transportation by our line of railway will bring this valuable mineral also into the Cincinnati market, at a very low price, probably not exceeding ten cents per bushel.

OF THE GENERAL BUSINESS, AND PROBABLE REVENUE OF THE ROAD.

It is customary, under this head of a railroad report, to display a mass of statistical information, gleaned from the County Auditors, or the Census Bureau of the United States, and then adopt a hypothesis of movement, which shall, apparently, cause the great mass of men and things, upon or near the line of the proposed route, to use it periodically at suppository rates and times, and thus contribute to the revenue of the road, a previously determined amount.

From all this hypothesis—with much ingenious argument—a preconceived result is drawn, which it is sufficient to say, is never unfavorable to the proposed road.

A similar course might be pursued here, with like results, but it has appeared to the writer unnecessary to burden this report with a body of statistics, which really affect the business of the route, only in proportion to the truth or fallacy of the hypothetical suppositions of the writer, of which, we have at last no further guaranty, than his mere individual opinion, weakened, indeed, by his evident bias.

The writer of this report has studied closely the resources of the country in which his surveys have been prosecuted, and the position of the route as a recognised portion of a great through line, and he offers the following estimate of the probable business and revenue of this road, with some confidence, for the critical consideration of the reader, not claiming for it a rigorous accuracy, but merely a strong probability, as judged of by one whose profession has long led him to closely view and weigh the sources of a country's prosperity.

Estimate of the Probable Business and Revenue of the Cincinnati, Hillsborough and Parkersburgh, Railway, annually.

(Average of the first five years after the completion and opening of the road.)

Mails and parcels	$30,000
Products of the forest	20,000
" agriculture	100,000
" mines	260,000
Through passengers	240,000
Way "	70,000
Through merchandise	150,000
Way "	60,000
Gross	930,000
Expenses at 50 per cent	465,000
Probable net revenue annually	$465,000

Or ten per cent upon $4,650,000—a sum greater than will be required to complete and stock the line in the most perfect manner.

When it is remembered, that with its branches and connections, this line offers the best route from Cincinnati to Richmond, Virginia—the shortest distance and most favorable grade of any railroad which can be built between Cincinnati and the coal and iron region of Ohio—the shortest and best railroad connection from that city, and from St. Louis, with the seacoast at Baltimore and the cities of Philadelphia and New York—that it is graded expressly to favor the local traffic towards Cincinnati, equally with the through business—added to the strong additional fact, that the portion of the road now open west of Hillsborough is already clearing 6 per cent on its cost beyond its expenses, though but a few weeks in use—it will be seen that we have powerful reasons for confidence in the above estimate of business and revenue.

CONCLUDING REMARKS.

The people of the country through which we pass are universally favorable to our enterprise, and will contribute to the extent of their ability in stock and rights of way, to promote its success.

The several counties also (we are assured) would contribute freely, if they could do so without infringing the Constitution of the State, and are prepared to do so, if that disability can in any manner be removed.

With the moderate degree of aid we have a right to expect from the people of the country traversed, the powerful interests which are already concentrating upon our route from both its termini, give every encouragement for the prosecution of this enterprise, and ought soon to enable us to accomplish it successfully.

Whenever it is completed, a glance at the map shows that it will evidently be among the most commanding lines in Ohio, and located upon one of the strongest routes in the State, cannot fail to be remunerative to its proprietors.

Formerly all the efforts of eastern enterprise, were bent upon extending railroads to the Ohio river, and that line of water once gained, it was supposed the trade of the west would be commanded.

The progress of the railroad system, however, and its remarkable extension north and west of that stream, has entirely changed the face of affairs, and overturned the original expectations of eastern railroad proprietors.

It is now discovered by eastern railroad men, that the Ohio river (in its present unimproved state) is but little better than a formidable obstacle, and that the trade of the west is only to be commanded—not by connecting with any stream of water, but by judiciously uniting through proper lines, with the grand railroad system of the western country, now in rapid progress of completion—reticulating the entire face of the land, with a net work, whose business meshes grasp the whole territory of the western States, and control their commerce at the people's doors.

It is this new phase, in the fortune of railroads, developed by the progress of events, which is destined to render lines like that now reported upon, of much greater consequence than would a few years since have been admitted by any one—the Ohio river having formerly been thought the only business avenue of consequence to the west.

In the conduct of these surveys, we have been materially aided by information derived from the people of the country, to whom our most grateful acknowledgements are due.

In concluding this report, it gives me great pleasure to express my hearty approbation of the energy, skill and good conduct manifested by my Principal Assistants, N. F. Jones, and Samuel Linton, Esqrs., who were handsomely supported in the execution of their duties by Messrs. Taylor, Humes, Nichols, and the other members of their respective parties, to all of whom I feel that my thanks are justly due.

The entire length of compass and level line, traced by all the parties, was 339 miles, or nearly triple the distance between the termini.

Respectfully submitted,

ELLWOOD MORRIS,
Chief Engineer.

Piketon, Pike Co., Ohio, June 28, 1852.

New Orleans, Opelousas and Great Western Railroad.

The following is the Address of the board of directors of the New Orleans, Opelousas and Great Western railroad to the property holders of the city of New Orleans.

ADDRESS.

FELLOW CITIZENS: In appealing to you for assistance in the construction of the New Orleans, Opelousas and Great Western railroad, the board of directors have thought it incumbent on them to present you some facts in relation to this grand enterprise, to which they most respectfully call your attention.

This company is permanently organized under a charter to construct a railroad from Algiers to Washington, in the Parish of St. Landry, via Thibodaux, Berwick's Bay, New Iberia, etc., a distance of about one hundred and sixty miles, by which all the rich section of our State, which is almost entirely cut off from access to this city during several months in the year, will be placed within a few hours proximity, at all times and at all seasons.

There is no portion of Louisiana which affords the same advantages for the development of those resources on which the inhabitants of this city depend for the necessary articles of food. By the construction of this work, our supplies of beef, mutton, poultry, the produce of the dairy, fruits, vegetables, etc., etc., would be considerably increased, and be sold at greatly reduced rates; the mechanic, the laboring man, in fact every housekeeper in the city would derive an immediate and certain benefit from the opening of this road.

In connection with this, it cannot be denied that one of the prominent causes which have retarded our growth *as a city*, is the high price or cost of living, and anything done towards ameliorating this heavy burden, and great drawback on our prosperity, will tend to augment our population and add to our resources. What we most want is a permanent population, actively and profitably employed. Situated as we are at present, we have to depend entirely on the precarious navigation of the rivers and bayous; all our energies are called into requisition during a few months in the year to meet its exigencies, after which we remain comparatively idle till the rivers rise the next season, and so on in succession; trade in all its branches, is thereby rendered precarious, and the enterprise of our merchants completely paralyzed.

The last two seasons navigation opened unusually late, and hundreds of thousands of dollars have been sunk by the loss of two months, when nearly all intercourse with the interior was suspended.—During this time, obligations were daily maturing, and had to be provided for at almost any sacrifice to maintain credit, and our citizens deprived of the benefits of our interior trade during the most important part of the year.

But, fellow citizens these views are comparatively of little importance in calculating the benefits

to flow to the property holders and citizens generally of New Orleans, from the construction of this road. *The entire trade of Texas is within your reach if we will stretch our arms to grasp it.* Our charter provides for an extension of this road into Texas, and with this view the road will be located, and constructed in such a manner as to accommodate the enormous amount of freight and travel which this route must necessarily command when completed into Texas and eventually connected with Arkansas and Missouri to St. Louis.

The superior sagacity and enterprise of our sister cities of Baltimore, Philadelphia, Charleston, Savannah, and Mobile, have already railroads in operation or in the course of construction extending to the Ohio, Tennessee and Mississippi, by which a large portion of the produce of these rich valleys has been taken from us. *But we are thus far without a rival on the west of the Mississippi* and the trade of a region of country large enough in extent to form an Empire, and capable of sustaining a population of several millions, is now open to us if we will take advantage of it *at once.* There is no time for delay, a few years more, and we will find to our cost that the favorable moment is gone, and that we have lost the trade of the West, as we have already done a portion of that east of the Mississippi. That enterprising people who are settling Texas with a rapidity almost unequalled in the annals of emigration, will soon command sufficient influence to undertake similar works themselves, and may be less inclined to join us.—*Now*, we know that, not only they are favorably disposed towards us, but are willing to contribute liberally, in land, or even build the road themselves, if we will meet them at the Sabine. And so, likewise, will Arkansas and St. Louis join us at the line between Louisiana and Arkansas.

This road will also tend to develope the resources of our own State, by inviting immigration, and bringing into immediate cultivation millions of acres of as fertile lands as can be found in any other State of the Union, thereby increasing her wealth and population, the benefits of which must accrue to the citizens of New Orleans, in the disposal of the rich products of the soil and the profits on the return supplies.

The private subscriptions now amount to nearly seven hundred and fifty thousand dollars—say four hundred and thirty-seven thousand dollars on the part of the city and Algiers, and about three hundred and ten thousand dollars from a portion of the parishes through which the road will be located.—The books were only open in the country parishes from four to twelve days, and were closed 1st May, preparatory to the organization of the company and election of the board of directors, but they have been again opened since 1st instant, and will so continue during four months, in the parishes of Jefferson, St. Charles, St. John the Baptist, St. James, Assumption, Lafourche Interior, Terrebonne, St. Mary, St. Martin, Lafayette, Vermillion, St. Landry, Orleans right bank, and at the office of the company in this city. Books will also be sent in a short time to the parishes beyond Opelousas, on the line of the road to Texas, and the connection with Arkansas. We confidently rely on large private subscriptions from all the parishes, in addition to those already received, and are assured that if deficient, a resort to taxation will be had and cheerfully acceded to.

The board of directors have been assiduously engaged since its organization in making the necessary arrangements, and can now frankly state, that in a short time the location of the road will be commenced, and its construction prosecuted with vigor. The road will be commenced at several points at once; one of these points will be from the Mississippi, about twenty-five miles above the city, (where the main line leaves the river, for the Lafourche,) to or near Thibodeaux, and thence to Berwick's Bay; and another from Washington to New Iberia, on the Teche.

By having these portions of the road under contract in advance, the planters of Opelousas, Attakapas, Terrebonne, and Lafourche Interior, will be thereby within a few hours of New Orleans, to connect by steamboat at the temporary terminus on the river. The company will thus be at once deriving more than sufficient revenue to defray current expenses, while the other sections are being completed. It is determined to place the whole route under contract, and construct it at the earliest possible moment.

The terminus of the road will be on the other side of the river, opposite the centre of the Third District, but each district of New Orleans, will be accommodated with a depot at such places as may be found most advantageous to its wants.

The board of directors of the New Orleans, Opelousas and Great Western railroad company, in recapitulating some few of the great advantages which the property holders of this city may derive from this undertaking, confidently rely on their good judgment in sustaining this truly *Louisiana road*, the remote results of which are almost incalculable to all classes of our population. New Orleans is pre-eminently a *commercial city*, and so long as our commerce thrives, so long will the owners of real estate derive an *income* from the capital invested in this species of property, which must increase or decrease with the growth or decline of the city. Population will always follow the laws of trade, and go where it derives the most profit from its labor; not so with your houses and lots; their fate is fixed, and here they must remain, be our prospects good or bad. Look for a moment at the benefits railroads have conferred on other cities, in the enhanced value of real estate, which has been brought about by the greater amount of commerce and traffic, these roads, (by opening new avenues,) never fail to produce, and, as a necessary consequence, tend to invite population and capital, which invariably follow in their train.

The value of the real estate of New Orleans is now about $75,000,000, on which we ask a contribution in stock subscription of two per cent., say $1,500,000, payable in six years, at the rate of one-third of one per cent. per annum. For this, you will receive certificates to an equal amount in the stock of the road. This can scarcely be called *taxation*, as we design giving you a fair equivalent; it is rather a temporary loan, reimbursable at a future period, with annual dividends thereon; and to those property holders of limited means, whose tax would be under fifty dollars per annum, we confidently assert, that more than that amount will be saved yearly to each one's family, by the cheapening of their daily marketings, to say nothing of their other advantages, in common with the large property holders, in the enhanced value of their estate.

It is admitted that property is already heavily burthened with taxation, and unless something be done, the evil must continue to exist. We can overcome this by opening new channels of commerce, thus adding to our resources, increasing our interior trade, attracting population by the extent, diversity and value of our products, and the diminished cost of the first necessaries of life. This will create at home a permanent population which will require houses and stores—a rapid increase in the value of real estate will follow, and *this course alone will produce a diminution in the rate of taxation.*—Traders and others can afford to pay higher rents when their business is proportionally profitable, and it is not saying too much, when we assert that the prosecution of the New Orleans, Opelousas and Great Western railroad along the Red River parishes, and its ultimate extension into Texas, Arkansas and St. Louis, may be compared, in its benefits to us, to the discovery of a *new Mississippi.*—The most sanguine could scarcely now calculate the extent and value of the commerce and travel on this road in ten years time, if we act immediately, and before any rival scheme shall have supplanted us on the way.

A new era is about to dawn on our State and city, if you will only aid in developing it. We have succeeded in making New Orleans *one city*,* it now remains for us to make it what nature intended it for, *a great one.* The present Constitution of the State, which has so effectually and unfortunately tied us down, will soon be replaced by a new one, no doubt more in accordance with the spirit of the age, in which all fatal restrictions will be removed. Capital will then flow to us for safe and profitable investment, and with the projected railroad improvements, will be placed beyond the reach of contingency, *a career of real prosperity, founded on the solid accumulation of wealth*, which will soon teach the most sceptical that we have not miscalculated the benefits of these great works of internal improvement.

Aid us, then, fellow citizens, in forwarding this undertaking—your prosperity is now at stake, and the decision is in your own hands—second the efforts of those enterprising friends in the city and country who have so liberally contributed by subscription, and who will devote their time to the completion of this noble enterprise. If you refuse the desired aid, such adverse action must tend to depress still further the value of your property, and by convincing the world that we are not disposed to better our condition, will sink us still lower in credit and reputation.

M. O. H. NORTON,
June 18, 1852. *President, pro. tem.*

On the 21st June, the question of subscribing for $1,500,000 to the capital stock of the above company by the city of New Orleans, was submitted to a vote of the property holders in accordance with law, and decided in the affirmative by a large majority; the vote having stood, 2,936 for the subscription, to 490 against it. This insures the completion of the road to Texas, from which point it is contemplated to traverse that State and ultimately be extended to the Pacific.

* New Orleans was formerly divided into three Municipalities, each having its own Council and corporation officers, but only one Mayor for the whole city.

This system of government was tried for sixteen years, and found to be productive of much sectional jealousy between the different Municipalities, besides defective in many other respects.

By an act of the Legislature, at its last session, approved on the 23d of February, 1852, the three Municipalities were consolidated, and, subsequently, Lafayette was annexed to, and now forms part of the city of New Orleans.

Dayton and Michigan Railroad.

The corps of engineers under Mr. Pomeroy, lately employed on the upper line of the Dayton and Michigan railway, have completed a survey of the line from Sidney, north to Toledo, and to the Michigan State line.

The following is the table of distances found by this survey, and returned to the Dayton and Michigan railway office in this place, and also the distance from Dayton to Sidney, according to previous surveys:

Dayton to Troy	19 miles.
Troy to Sidney	17
Sidney to Wapakanetta	20
Wapakaneta to Lima	13
Lima to Gilboa	22
Gilboa to Perrysburgh	38
Perrysburgh to Toledo	8
Making from Dayton to Toledo	137 miles.
Toledo to Michigan State line	6
Dayton to Michigan State line	143 miles.

Add to the 137 miles, the distance from Dayton to Toledo, 60 miles, the distance from Dayton to Cincinnati, we have a total of 197 miles between Cincinnati and Toledo, by the way of the Dayton and Michigan railway.

This upon examination will be found to be by far the shortest line of railway between the Ohio and Lake Erie.

It is 21 miles shorter line than by the way of Cincinnati and Dayton, and Mad River and Lake Erie roads, which connect the Ohio at Cincinnati, and Lake Erie at Sandusky, and 57 miles shorter than the road between Cincinnati and Cleveland. This road, as before stated, has no competitor in shortness of line, ease of grade and cheapness of construction, and it is beyond a possibility that any future road can hereafter spring up that can compete with it in these particulars. The country through which the recent surveys north from Sidney have been made, presents almost a surface grade the whole way, and when it is fully developed, will be found to be one of the richest and most productive districts in the west.

The corps of engineers, on their return n w, are engaged in making surveys of a line from Perrysburgh by the way of Findly, in Hancock county, direct to Sidney. So much of this line as yet has been passed over is found to be highly favorable. Powerful influences will be brought to bear to secure the location of the road upon this latter line, but the future alone will test with how much success. The road, let either line be adopted, will be speedily located, and as speedily built.—*Troy, O., Times.*

Abstract of the Returns of Canadian Trade from 1844 to 1850.

In an article in the last number of the Journal we spoke of the commercial prospects of Canada in view of her railway movements. It may be interesting, in connection therewith, to give the following statistics of trade of Canada from 1844 to 1850:

EXPORTS BY SEA FROM 1844 TO 1850 INCLUSIVE.

Date.	Timber. Feet.	Timber. Pieces.	Flour barrels.	Wheat bushels.	Ashes barrels.	Barley.	Pease.	Ships.	Tons.	Total New York freight rates on flour.	Total value of exports by sea.	Average price of wheat at Montreal.
1844.....	.....	415,467	982,183	35,743	63,735	130,350	1,439	500,777	4s. 6d.	1s. 8d.	2,211,080	3,130,953	5s. 4d.
1845.....	3,529,274	442,228	296,252	30,916	27,626	220,912	1,699	698,389	4s. 8½d.	2s. 0½d.	2,777,648	3,332,650	5s. 8d.
1846.....	2,468,067	555,602	534,757	26,011	6,257	216,339	1,699	623,791	5s. 2d.	2s. 6½d.	2,524,795	3,054,891	5s. 3d.
1847.....	3,399,529	651,030	628,001	19,243	23,012	119,252	1,444	542,505	5s. 4d.	2s. 0d.	2,680,382	2,860,357	6s. 5½d.
1848.....	2,846,891	383,593	238,051	18,282	3,600	88,365	1,350	404,247	4s. 2d.	as low as 7½d.	1,749,167	2,107,264	5s. 7d.
1849.....	2,901,271	321,790	72,289	25,896	1,321	118,951	1,328	302,513	3s. 6d.	but averaged 1s. to 2s. 6d.	1,471,518	1,712,743	4s. 5½d.
1850.....	2,821,363	289,678	81,951	55,630	3,489	292,229	1,341	485,905	3s. 0½d.	from	1,673,059	2,486,137	4s. 9d.

EXPORTS TO UNITED STATES.

Date.	White pine feet.	Sawn lumber feet.	Flour.	Wheat.	Ashes.	Barley.	Pease.	Oats.	Total value of imports by sea.
1848.....	685,330	58,140,027	277,044	297,011	7,718	11,155	27,561	43,224	Amount.
1849.....	939,782	102,788,908	168,635	998,980	11,332	26,060	72,183	4,864	£1,119,642
1850.....	1,869,160	121,366,940	369,761	1,213,078	21,700	63,025	36,672	657,839	1,242,855
									1,648,715

IMPORTS FROM U. S.

The following is an abstract of the Trade of the Port of Montreal, showing the ships and tonnage employed, and the relative value of the Imports, distinguishing foreign goods from goods of British produce and manufacture, during the year ending 5th January, 1851.

(The additions will not be found exact, as shillings and pence are omitted.)

Countries from which ves'ls enter'd.	Vessels. No	Tons.	Value of imports, £ sterl'g. British.	Foreign.	Total.
Gt. Britain..	90	32,383	1,145,063	71,276	1,216 340
B. N. A. Col.	98	8,750	.....	48,863	48,883
France.....	2	510	.....	13,573	13,573
U. States*..	108	9,401	.....	142,725	142.725
Spain.....	4	638	.....	3,272	3,172
Portugal....	4	472	.....	6,738	6,738
Antwerp.....	...	...	.....	34	34
Germany.....	...	...	.....	30	30
Foreign W. Indies....	12	2,001	.....	13,883	13,883
Sicily.....	1	371	.....	1,591	1,591
Hamburgh .	1	243	.....	2 860	2,860
S. America.	1	100	.....	308	308
China	1	143	.....	5,380	5,380
	322	55,002	1,145,063	310,559	1,455,622
Same for 1850.					
Gt. Britain..	117	42,793	1,408,339	103,780	1,512,120
B. N. A. Col.	89	7,764	.....	53.005	53,005
France	4	984	.....	28,795	28,795
U. States....	124	16,276	.....	222,199	222,199
Foreign W. Indies	21	2,706	.....	35 953	35,953
Sicily.....	1	127	.....	806	806
China	1	356	.....	14,526	14 526
Spain.....	2	227	.....	4.069	4,069
Portugal....	2	253	.....	7 986	7 986
Antwerp....	4	766	.....	14,564	14,564
Holland.....	1	212	.....	4,292	4,292
British West Indies.....	.	...	.....	478	478
	366	72,564	1,408,339	490,508	1,898,848

* The Imports from the United States, inland, by land carriage, are included.

Abstract of the trade of the Port of Montreal, showing the ships and tonnage employed, and the value of the exports, distinguishing foreign goods from goods of British production and manufacture, during the year ending 31st Dec., 1851.

Countries for which vessels cleared.	Vessels. No.	Tons.	Value of exports in stg. British	foreign.	Total.
Great Britain..	101	34,968	335,624	3,268	338,892
B. N. A. Col...	47	20,442	79,543	7,865	87,409
United States...	56	8,320	54,927	2,078	57,005
Porto Cabello..	1	212	1,558	.....	1,658
Quebec, in ballast.....	4	621	.....	.....	.....
	309	64,663	471,654	13,112	484,866
Same for 1850.					
Great Britain....	75	27,591	25,526	4.085	254,612
B. N. A. Colonies.	116	14,063	89,460	2,538	91,998
United States....	154	14,121	24,657	37,109	61,767
Oporto.....	1	108	124	.....	124
Quebec.....	1	184	Ballast	.....	...
	347	56,067	364,768	43,734	408,502

Ohio and Mississippi Railroad.

We notice that all the matters of difficulty in regard to this road have been settled, by negotiations between the City Council and the committee of the directors. The most important stipulation is, that the road from Illinoistown to Vincennes shall be completed in three years, and sooner, if funds are provided. Messrs. L. Sanger & Co., who have sub-let the whole of this part of the contract, will commence operations without a moment's unnecessary delay.

Massachusetts Railroad Statistics.

Boston and Lowell Railroad.—Incorporated in 1830, opened throughout, June, 1835. Length, 26 miles. Length of double track, 26 miles. Cost, Jan. 1, 1852, $1,945,600.

The following table exhibits the operations of the road, during the last ten years: its cost, and the market price of the stock, at the beginning of each year. The item of "Interest is deducted from the receipts and expenses:—*Boston Courier.*

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842....	$1,834,900	$595 per sh.	$278,310	$131,013	$147,297	8 per cent.
1843....	1,978,300	595	277,315	109,367	167,948	8 "
1844....	1,863,700	640	316,999	165,257	151,652	8 "
1845....	1,902,500	580	356,067	175,042	181,025	8 "
1846....	1,932,600	575	384,102	207,987	176,115	8 "
1847....	1,940,400	572	448,555	249,225	199 330	8 "
1848....	1,956,700	550	461,339	266,516	191,823	8 "
1849....	2,013,700	550	416,488	260,904	155,584	8 "
1850....	*1,945,600	556	406,471	256,508	149,913	8 "
1851....	1,945,600	570	409,153	267,035	142,118	8 "
			$3,754,659	$2,088,854	$1,665,805	Av. 8 pr ct.

* A re-valuation of the property of the road causes the difference between this amount and cost in 1849.

Great Railroad Bridge.

We have recently seen a wonderful work. The N. Y. and Buffalo railroad company are constructing a bridge across the Genesee river at Portage, which, when completed, will be one of the grandest specimens of art in this country. It is thrown across the deep and narrow gorge about half a mile below the village of Portage, and just above the Falls. The gorge at this place is about 500 feet wide, although the eastern bank is somewhat sloping, which makes the top of the bridge about 800 feet long. It is to be 224 feet high. A little below is a fall in the river of 75 feet, and half a mile further down is another of 110 feet, and a mile and a half further, another of 90 feet, not counting the rapids between. So that the bridge rises more than 500 feet above the bed of the river two miles below. This bridge was projected by Col. Seymour, the chief engineer, and is altogether peculiar in its architecture. The bed of the river at this place is slate rock, the strata being perfectly level. On this bed are constructed several stone piers of solid masonry, 81 feet long, 30 feet high, 12 feet thick, and about 40 feet apart. On these piers stand massive pyramids of timber 190 feet high, braced and locked together in every possible manner, the base corresponding to the size of the pier, the top converging to about 25 feet, and furnishing ample room on the bridge for a double track of the broad gauge of the Erie railroad. On the top of these tresles or pyramids, is built the great frame work supporting the rails, 25 feet wide, 14 feet high, and 800 feet long, the timbers being interlocked and woven together and bolted in the most substantial manner. The whole structure will require about 1,500,000 feet of timber, and 50 tons of iron bolts, and will cost $120,000. It is well worth a visit from New York city to see this wonderful piece of workmanship. It is already attracting a multitude of visitors, gazing with wondering eyes at those lofty cones lifting their proud heads higher than the top of Bunker Hill Monument. And those who visit

it in August or September may see the locomotive with its train of cars darting across this fearful chasm, adding another triumph to human invention. —*N. Y. Farmer and Mechanic.*

Massachusetts.

Eastern Railroad.—The annual meeting of the Eastern railroad company was held at the City Hall. in Newburyport, on Monday, the 12th inst. The stockholders confirmed their former votes and the action of the directors, in changing the line of the road so as to avoid the Ferry in entering Boston, and authorized the work which was commenced last Saturday, to be prosecuted with all practicable and convenient speed. The Boston terminus will be in the immediate vicinity of the Boston and Maine depot. The stockholders also confirmed the purchase of the South Reading branch.

The construction and equipment account of the road remains the same as in the two previous years, the cost of the track and stations being $2,778,769, and the equipment $341,622. The property account of the road has been increased during the past year from $495,040, to $1,021,805. This increase has been caused mainly by the payment of $260,844 towards the South Reading railroad, $32,842 towards the Saugus Branch railroad, and $193,627 towards the purchase of real estate in Boston.

The receipts for the past two years have been as follows:

	1851.	1852.
Passengers	372,167 75	374,797 67
Freight	60,005 15	69,974 00
Mails	8,324 00	8,324 00
Expresses	7,386 28	7,561 18
Miscellaneous	6,560 38	6,067 94
	454,452 56	466,725 19
Expenses	195,392 83	215,374 45
Balance	259,053 72	251,350 74

All the renewals of track, the repairs of bridges, fences and equipments, have been charged to the income of the road. For the renewals of equipment, four passenger cars, and forty-four freight cars, have been added, at a cost of $20,872. The new ferry boat has been completed at a cost of $5,054, and one hundred tons of iron bought for the track.

The expenses on equipment have been increased by the unusual severity of the last winter, so also has the expenditure of fuel.

The Essex road has been leased for ten years at an interest of 5 per cent on $350,000, and it is believed the income of the road will be increased to a sum that will more than equal the interest on this amount.

During the past year the directors have caused insurance against loss by fire, to the amount of $220,000, to be effected on property at Boston and along the line of the road. The premium for which, amounting to $2,190, has been charged to the current expenses of the road, and increasing them by this amount.

On the road, bridges and equipment, large outlays have been required, and the expenses considerably increased. These are now in good condition to perform the increased business of the road.

It is with feelings of gratification that the directors can allude to the fact, that during the past year, there have been carried over the road *one million four thousand nine hundred and ninety-one passengers*, without the slightest injury to any one.

The number of passengers carried in 1851, was 993,156, tons freight 61,962. The number of passenfiers carried the past year was 1,004,991, and tons freight 81,027.

The expense per mile run, the past year, was 69.3 cts; number of cords of wood used 10,616; do per mile run 3.40; number of gallons oil used 4,743.

The repairs of engine per mile run, was 7.3 cts.; cars do. do. 5 4 cents. The cost pet mile of road for maintaining track, fences and bridges, was $376 47.

Number of miles run by trains during the year was 311,9 4.

The report closes with a tribute to David A. Neal, the former president of the road, to whose good management the directors say may in a great measure be attributed the past and present value of the property of the stockholders, and to his foresight and sagacity, the permanent basis on which it rests.

The following board of directors was chosen viz:—

Albert Thorndike, Beverly; D. A. Neal, Salem; Isaiah Breed, Lynn; B. T. Reed, Boston; Ichabod Goodwin, Portsmouth; Samuel Hooper, Boston; Micajah Lunt, Newburyport.

Ohio Central Railroad.

The citizens of Baltimore have had a meeting to take into consideration the propriety and policy of aiding the completion of the Ohio central railroad, from Zanesville to Wheeling, where it will connect with the Baltimore and Ohio railroad, thereby giving Baltimore a direct communication by railroad with central Ohio, Indiana, Illinois, and Michigan. The meeting was called by the board of trade, and addressed by Col. J. H. Sullivan, president of the Ohio central railroad, after which resolutions were adopted, books for subscription ordered opened, and a committee appointed to take charge of the same.

The Baltimore American has the following report of the remarks of Col. Sullivan, and the subsequent action of the meeting.

Mr. S. commenced his remarks by stating that the connection of the Baltimore and Ohio railroad with the public works of Central Ohio was an object of the greatest importance to the people of Baltimore, inasmuch as they would thereby, in a short time, become connected with the works throughout the entire state, and also with those of the states of Indiana and Illinois, and indeed with the entire country of the Mississippi valley. The Ohio central railroad would give this connection—that company which he had the honor to represent, claim their work to be the extension of the right arm of the Baltimore and Ohio railroad. It was chartered in 1847, and was now finished from Columbus to Zanesville, via Newark, but it had always been and was still the wish and intention of the company to continue it from Zanesville to Wheeling, there to connect with the Baltimore and Ohio railroad.

The line from Newark to Zanesville has been in operation six months, and thus far has been eminently successful, there being carried over it an average of 200 passengers daily, with a proportionate amount of freight. Thirty-one miles of the new road from Zanesville to Wheeling were already under contract, and the remainder was ready to be let out to contractors at the present time, and would probably have been under contract ere now, but for some conflicting interests between the citizens of Wheeling and the stockholders in the counties along the route in Ohio. The citizens of Wheeling, did not wish the road to strike the valley of the Ohio at any point south of their city, whereas the stockholders wished to tap the valley four miles below Wheeling, so as to form a nearer connection with the Baltimore and Ohio road than could be done by going straight to Wheelling. The authorities of Wheeling concluded that this connection, south of their city, would be injurious to their interests, and they withheld their subscription of $250,000, because that route was selected.

The superior advantages of the southern route had induced the locating commiltee to forego the promised aid from Wheeling and choose that route in anticipation of receiving assistance from other sources.—Mr. S. then proceeded to point out the advantages of this lower route, one of which was the saving of distance in passing from Columbus to any point east of Wheeling on the Baltimore and Ohio road, and as the connexion with this road was their principal aim, this advantage had a preponderating influence on the company. Mr. S. next read a letter from a member of the Pennsylvania railroad company, offering aid, in the way of a loan, if the Ohio Central company would continue their work from Zanesville to Steubenville, on the Ohio river, instead of Wheeling, so as to afford the Pennsylvania company a connection with the works of central Ohio. The letter held out several other inducements besides the loan, but Mr. S. said the Ohio company had refused to accept the proposition, and replied that it had been and was still their intention to connect with the Baltimore and Ohio road.

He next cited the many speedy advantages which Baltimore would derive by the completion of the Ohio central road, from its present terminus at Zanesvile to the Ohio river, and its connection there with the Baltimore and Ohio road. Continuous railroad connections would be formed with Cleveland, Sandusky and Toledo, on Lake Erie, with the principal towns in Michigan, with Chicago, on lake Michigan with all the important towns of northern Ohio and Indiana; and on the south of the road, with Cincinnati, Louisville, and several other large towns of Ohio, Indiana, and Illinois; and in a few years the connection would be extended further west, until the produce of the whole of that country would be made to flow through this channel to Baltimore city.

He also read a collection of statistical matter, to show the vast amount of produce which is annually sent to market, from the country with which this road would connect our city, and urged upon the meeting to have this 78 miles of railroad—extending from Zanesville to Wheeling—completed as early as possible. The probability of New York and Philadelphia taking advantage of the inactivity of Baltimore, and by building roads to connect their own works with those of Ohio, deprive Baltimore of the advantages of Western co-operation in constructing those connecting links, was alluded to, and the citizens of Baltimore warned of its existence.

After Mr. S. had concluded his remarks, the following resolutions, offered by Thomas C. Jenkins, Esq., were unanimously adopted:

Resolved, That the thanks of this meeting are due, and heartily accorded to J. H. Sullivan, Esq., president of the Central Ohio railroad company, for the very able, interesting and satisfactory exposition which he has just submitted in reference to the agricultural, manufacturing and other resources of the state of Ohio, and its capabilities for their largely increased developement through the instrumentality of the works of internal improvement already finished and in progress towards completion.

Resolved, That in the opinion of this meeting the Central Ohio railroad, from its position and connections, is a work that cannot fail to be highly promotive of the trading and other business interests of Baltimore. Taking up, as it does, the line of transportation at the very point at which the Baltimore and Ohio railroad has its terminus on the Ohio river, it virtually becomes a prolongation of the Baltimore road through central Ohio; and with its numerous connecting lines running northwardly, westwardly and southwardly, it will open direct and rapid inter-communications with the great Mississippi valley, teeming with an industrious, thriving population, and blessed with a fertility of soil not to be surpassed. At Zanesville, the Central Ohio road will connect with the Cincinnati, Wilmington and Zanesville railroad, upon the air-line route to Cincinnati. At Newark it conects with the Newark, Mansfield and Sandusky road, resting its northern terminus upon the lakes—holding through that line easy relations to the trade and travel of the northwest. At Columbus it joins in the same depot with the Columbus and Cleveland road, furnishing the second outlet to the lakes, and at the same point with the Columbus and Xenia road, leading, with its double direction towards Cincinnati and towards Indianapolis and St Louis. —At Columbus it will also connect with the Columbus, Piqua and Indiana road, furnishing a second line in the direction of Indianapolis and St. Louis. At Zanesville it also intersects the steam navigation of the Muskingum river, and at Newark it unites with the great Ohio canal.

Resolved, That the Central Ohio railroad and Baltimore and Ohio railroad are reciprocally important to each other, and therefore, in order to secure the early completion of the former, that subscriptions be recommended to the stock of the same on the part of the citizens of Baltimore.

A book for subscriptions to the stock of the Cen-

tral Ohio railroad company was then opened, and four or five gentlemen subscribed for about $4,000. —On motion, a committee of three, consisting of Wm. Bose, James George, and George Bartlett Esqrs., was appointed to take charge of a paper for subscriptions: when the meeting adjourned.

American Railroad Journal.

Saturday, July 31, 1852.

New Orleans Opelousas and Great Western Railroad.

We give this week the address of this company to the property holders of New Orleans, issued for the purpose of securing their favorable action upon the question of appropriating $1,500,000 in aid of the above road. We have on hand other documents relating to the business capacities of the route, etc., which we shall give in our next issue.

The above is one of the two great lines of improvement by which the city of New Orleans proposes to connect herself with the interior, and recover a trade which has been seriously undermined, and which she has been in imminent danger of losing, and with it her position as one of the great leading commercial cities of the United States. Trusting to the strength of this position, she has remained indifferent to the efforts that rival cities have been making to seize the trade which appropriately belongs to her, and has entirely neglected the construction of those *artificial* avenues, for which, the *natural* water courses upon which she has relied, are found to be no match in a contest for the trade of a particular section. Though much has been lost by supineness on one hand, and by the superior activity of rival interests on the other all her avenues of greatness still remain, and New Orleans is now making ample amends for past delay, by the greatness and comprehensiveness of the system of internal improvement which she has marked out, and the spirit and liberality with which she has contributed to its accomplishment. In addition to liberal private subscriptions, the city in its corporate capacity, has voted $3,500,000 to the road referred to which sum is to be raised by a direct tax upon the real estate in the city.

The influence which the recently developed feeling in favor of railroads has exerted upon the value of property in the city of New Orleans, and upon the public mind of the entire state, is certainly very remarkable. This feeling of the imperative necessity of taking some efficient steps to maintain the interests, and to restore confidence on the part of the people, in their ability to compete successfully with other sections of the country for similar objects, has become so strong as to override all other questions. From a vicious system of political organization, by which the city was subdivided into a number of independent municipalities, all unity of purpose and action was lost. The municipalities had failed to meet their obligations. The credit of the city was at a very low ebb; all kinds of property were declining in value, and despair of any change for the better, was fast seizing the minds of its citizens. It was seen that the only way by which the former position of the city could be regained, and by which she could start anew in a career of success, would be to consolidate the whole city into one body, and to refund her public debt, to place all her interest under one head, and to secure unity and harmony of action where difference of purpose, and discord prevailed. All this has been accomplished through the influence of her railroad projects. The change as far as the city is concerned has been magical. Its credit has been completely restored, and the recent issue of bonds, to refund her outstanding debt, has been disposed of at a premium. Confidence has taken the place of doubt and distrust. The value of all kinds of property has rapidly advanced. The credit of the city is now available in aid of all her projects designed to promote her advantage, and more than all, a feeling that a new destiny is opened to her, has become the conviction of all her citizens, and this feeling is a full pledge that the results anticipated will be realized.

The same conviction which has wrought such a change in the public mind of the *city*, is producing the same results as far as the State is concerned. It has secured a change of her Constitution, by which an antiquated instrument, which fettered the energies of her people, has been made to give way to one more in harmony with their wants and with the spirit of the times. The feeling in favor of railroads has produced a most happy and fortunate state of things throughout the whole State, and has given the public mind an impulse in a right direction which cannot fail to secure the most favorable results. It has accomplished a work which nothing else could.

The Opelousas road is the great arm which is to be thrown out to secure to the city her western connections. By it, she proposes to command the trade of the western portion of the State, and eventually that of Texas; and to make it in time, the trunk of a great line extending across the continent to the Pacific coast. It is also proposed to make it the base of a great line of railroad, connecting New Orleans and St. Louis, on the western bank of the Mississippi. Local objects, however, are now the moving principle in its construction, though its general direction will fit it to become the trunk of the extensions referred to.

We learn that the construction of this road is to be commenced forthwith. The route is a favorable one, and the prospect of a lucrative local traffic very flattering. The great unanimity with which the city of New Orleans voted $1,500,000 in aid of the project, is the best evidence of its soundness. When completed, it will put a new aspect upon the affairs of the western portion of the State, as well as of New Orleans,

Dauphin Coal Company.

We are assured that we did injustice to this company in a recent article in our paper upon American securities. We spoke of it as a speculative project without intrinsic merit, and discouraged any attempt to negotiate its securities abroad. We now are informed that *no* attempt has been made to sell its securities in England, but that the recent loan of $1,000,000 was taken by our capitalists, for *investment*, after a most careful investigation into the merits of the concern; that although a speculative character had been given to it, by previous parties, who had grossly mismanaged its affairs, the property of the company is exceedingly valuable, embracing an immense extent of coal and wood lands, abounding in the most superior kinds of coal and wood; and that proper management alone is wanting to render this one of the most profitable enterprizes of the day. An entire change has now been made in the management of the company, which have now been placed in the hands of competent men, whose success in other matters is a full pledge of their suitable management in this. Those at the head of affairs have everything to lose, and nothing to gain, by any other, than the best management of their property. We are happy to make this correction, and we hope soon to see another outlet from the coal fields of Pennsylvania opened to tide water. All such enterprizes are public blessings, as they supply an additional quantity, and keep down the price of an indispensable article, in domestic economy.

Hillsborough and Cincinnati Railroad.

We give in our present number, the report of the survey of this route, by Ellwood Morris, Esq., Chief Engineer of the company, to which we invite particular attention. The report is drawn up with most marked ability, and shows a thorough acquaintance, on the part of the writer, with the topography, resources, course of trade, and the necessity and uses of railroads in southern Ohio—a hitherto comparatively unexplored field in railroad enterprises. While the attention of capitalists has been taken up with projects lying in the northern portion of the State, Mr. Morris has demonstrated southern Ohio to be an equally attractive field. We do not hesitate to say, that his report alone, from the distinct and conclusive manner in which he has presented the subject, is calculated to secure the confidence of capitalists to the proposed road. It covers the whole ground, and impresses the reader with the same conviction felt by the writer.

While the Hillsborough and Cincinnati railroad is a project of very general interest, it is particularly patronised by the city of Baltimore, as a direct extension *west*, of her line of railroad. The belief which is now generally entertained on the part of that city, that she can bring herself into intimate business relations with the western States, and, by virtue of the proximity of her position, secure a large trade now drawn off by other cities, lies at the foundation of the vast efforts she has made to carry forward that stupendous work, the Baltimore and Ohio railroad. To realize the objects to be effected by this road, the Northwestern, (Virginia), and the Hillsborough and Cincinnati roads, are equally necessary; and equally certain of her support, as soon as the main trunk shall be completed. We are assured, and have no doubt, that as soon as the Baltimore and Ohio road is completed to Wheeling, the whole available force of Baltimore will be turned to the above named lines, and that their construction will be urged forward with the least possible delay. When this is effected, Baltimore expects to place herself *en route*, of the great line of travel between the east and west, and to derive all the advantages which must result from such a position.

Such are the objects, the pursuit of which is the life and soul of the great plans now engrossing the attention of that city. Whatever may be the result, as far as the realization of these objects are concerned, they are certain to secure the construction of a great line of railroad, extending in almost a direct course from Baltimore, west, to St. Louis. That it must become a route of national importance, and which will fully repay all the sacrifices its projectors are called upon to make, cannot be doubted. Although rival cities, by similar works, may continue to maintain their present relative positions, yet, all things considered, the city of Baltimore has displayed greater enterprise and perseverance than any of such rivals, in striking for the trade of our great interior, and she certainly deserves, as she will reap, a rich reward.

Virginia.

Manassas Gap Railroad.—This road was opened for traffic to Salem a distance of some 50 miles from Alexandria, on the 22d instant.

Susquehanna Railroad.

The Baltimore Patriot states that the application of the Susquehanna railroad company for a special injunction to restrain the Sunbury and Erie railroad company from occupying and using for the purpose of building their road the route between Sunbury and Bridgeport, has been decided by the Supreme court of Pennsylvania, in session at Sunbury, in favor of the Susquehanna company, and the application granted. A supplement to the charter of the Sunbury and Erie company gave to that company a right to extend their road from Sunbury to Bridgeport, provided that the Susquehana company, within a period of twelve months after the passage of the supplement, had not commenced their road. Without waiting however, for the expiration of the limited time, and in the face of the fact that the other company were energetically preparing to build the road, the Sunbury and Erie company took possession of the route and placed their engineers at work. Hence the application for the injunction which has terminated so successfully to the Susquehanna company.

Cotton Packing.

This article for packing the cylinders of steam engines, it will be observed, is advertised by Messrs. J. M. Hall & Co., in to-day's Journal Of its merits, we know nothing, practically, but, it is said by those who ought to know, to be far superior to hemp in point of smoothness and durability, besides being much cheaper. If this be true, there is no harm in giving it a trial.

Tennessee.

Louisville and Nashville Railroad.—Hardin Co., Kentucky, has voted $300,000 to the Louisville and Nashville railroad.

Connecticut.

New London and New Haven Railroad.—This road has been completed, and is in operation.—We see it stated, that the Stonington boats will touch at New London for the future.

Chesapeake and Ohio Canal.

The Cumberland Journal of the 19th says: "the water is now in the canal throughout its whole length, and it is expected that boats laden with coal will leave here on Monday next for Georgetown and Alexandria.

Stock and Money Market.

The stock market is dull, and inactive, with a great abundance of money. The present dullness is owing more to the particular season of the year, than to other causes. There is a general pause in all kinds of business. Foreign orders are light for the same reason of the small domestic demand. There is but little demand for securities just bro't out, and we would advise parties to postpone their offerings till the more active season commences. The prospects ahead appear flattering, and we see no reason to doubt an active fall business, with fair prices of all *legitimate* securities that will be brought into the market. Sales that are now made are forced, and are not well sustained. With good prospects for the future, it is unwise to force the market, which will take all offering, after a little delay.

The fancy market has receded considerably since our last. All sound securities are firmly held Railroads, almost universally, are doing a remarkably good business. The average increase of receipts on most lines are 25 per cent over those of last year. This tends to create, and sustain the confidence already felt in these projects.

The iron market continues to rule high; we do not believe, however, that present prices can be long sustained.

Norwich and Worcester Railroad.—The receipts of the company for the year ending May 31, 1852 were..... $263,686 07
For the year ending May 31, 1851.... 267,700 88

Decrease in the year last past.... $4,014 81
Receipts for the past six months..... 117,420 89
The receipts for the corresponding six months, ending May 31, 1851, were. 123,784 19

Showing a decrease of..... $6,363 30

The dividend just declared, exceeds the net earnings, $16,420, and is made up in part by the surplus fund on hand of $10,151, and by future anticipated earnings.

We believe the above road to be the only one in the whole country, the receipts of which have diminished during the past year.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, JULY 31, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	108
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	118
U. S. 6's, 1868	118
U. S. 6's, 1868—coupon	118¼
Indiana 5's	94½
Indiana 2½	54½
" Canal loan 6's	95½
" Canal preferred 5's	46½
Alabama 5's	93
Illinois 6's, 1847	82½
Illinois 6's—interest	52½
Kentucky 6's, 1871	106½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	107½
New York 6's, 1854-5	—
New York 6's, 18 0-'61-'62	116¼
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110¼
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	106
New York 5's, 1866	—
New York 4½'s, 1858-'59 '64	101¼
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	104½
Ohio 6's, 1860	99½
Ohio 6's, 1870	108¼
Ohio 6's, 1875	114
Ohio 5's, 1865	116½
Ohio 7's, 1851	105½
Pennsylvania 5's	—
Pennsylvania 6's, 1847,-'53	97½
Pennsylvania 6's, 1879	99½
Tennessee 5's	—
Tennessee 6's, 1880	107
Virginia 6's, 1886	110

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	107
Cincinnati 6's	100
St. Louis	95½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	108½
New York 5's, 1858-'60	103
New York 5's, 1870-'75	105
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	107½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	112
Erie 2d mortgage, 7's, 1859	107
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	99
Hudson River 1st mort., 7's, 1869	105½
Hudson River 2d mort., 7's, 1860	94½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	87½
Reading mortgage, 6's, 1860	91½
Michigan Central, convertible, 8's, 1860	109½
Michigan Southern, 7's, 1860	99½
Cleveland, Col. and Cin. 7's, 1859	109½
Cleveland and Pittsburg 7's, 1860	101½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	—

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	July 22.	July 29.
Albany and Schenectady	110	106
Boston and Maine	107	106½
Boston and Lowell	108½	108
Boston and Worcester	103½	103½
Boston and Providence	89½	89½
Baltimore and Ohio	82½	82½
Baltimore and Susquehanna	29	29½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	125½	126½
Eastern	98	197
Erie	86½	85½
Fall River	—	—
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	72	70½
" preferred	110	110
Hartford and New Haven	—	—
Housatonic (preferred)	35	35
Hudson River	65	65½
Little Miami	—	—
Long Island	19½	20½
Mad River	—	—
Madison and Indianapolis	112½	—
Michigan Central	112	113½
Michigan Southern	118	116
New York and New Haven	114	114
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53½	53½
Ogdensburgh	26½	25½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	87½	88½
Rochester and Syracuse	123½	117½
Stonington	54	55½
South Carolina	—	—
Syracuse and Utica	134½	134
Taunton Branch	115	115
Utica and Schenectady	133	133
Vermont Central	14½	14½
Vermont and Massachusetts	20	20
Virginia Central	—	—
Western	103½	104½
Wilmington and Raleigh	57½	57½

Ohio.

Cleveland Painesville and Ashtabula Railway.—The Cleveland Herald says the Cleveland, Painesville and Ashtabula railway is now opened beyond Ashtabula, and soon will be to Conneaut. The bridge at Ashtabula is completed, and the work on the bridges beyond is progressing well. Seven-eights of the grading from Conneaut to Erie is done, and the last link between Cleveland and New York will be finished and the cars running through by the first to the midble of November next.

The completion of this important road will relieve travelers of all dread of winter staging between the west and east, as well as open a heavy winter freight business.

For the American Railroad Journal.

The Tennessee Valley Railroad.

This railroad was delivered over, on the 1st day of June, to the Memphis and Charleston railroad company; and will henceforward be incorporated with, and become a link in that road. And as it will be merged and known by its own corporate name and style no more, this would seem to be a very proper occasion to present a summary history of the work, from the inception thereof, to its amalgamation or mergence with the road referred to.

The Tennessee valley railroad, connecting with the Tennessee river at the Tuscumbia landing, below the great "Muscle Shoals," and at Decatur, above said shoals, 45 miles in length, was originally chartered in two separate sections. "The Tuscumbia railway company" was incorporated by an act of the legislature of Alabama at the session of 1829 and '30; and the "Tuscumbia, Courtland and Decatur railroad company" was incorporated by the legislature at the session of 1831 and '32.

The completion of the first half—from Tuscumbia landing, to the town of Tuscumbia—was celebrated on the 12th day of June 1832; the remainder, from Tuscumbia to Decatur, was completed, and opened for business on the 15th day of December 1834.

The profile of the road is undulating, with 25 feet per mile as a maximum of gradients; the alignment is very direct, and the curvatures between Tuscumbia and Decatur, are on a minimum radius of 1512 feet.

The superstructure, was of the same character with the railroads built in the United States, contemporaneously with it, viz: the Baltimore and Ohio, Baltimore and Susquehanna, the Charleston and Hambnrg, etc.

After a very short experience in the use and working of the road, it was discovered that the superstructure, and particularly the iron, was entirely too light and flimsy. The same deficiency was observed at the same time by our cotemporaries, in regard to their roads, but they at once applied the means to remedy the defect, by replacing the light iron with heavy rails, and the light and flimsy wooden structure, with a more weighty and durable one, and thus making their roads good, and profitable concerns. Unfortunately for the prosperity of our work, we were unable to do likewise, for want of the means wherewith to accomplish it. For, owing to a fatal error of the company, in the very beginning of its career, its finances became embarrassed, soon after the road had been opened for business

The cause of which embarrassment was simply this. At the outset, the company organized, and commenced the work, with a subscription to their stock, entirely inadequate for the purpose; but the credit of the company being good, and money in abundance to be had on loan, from banks and capitalists, the corporation did not even call in, only a small proportion of the stock subscribed, and prosecuted the work and carried it through, almost entirely on borrowed money. Every thing seemed to progress *swimingly* thus far. But in 1837 came the revulsion in money matters, and the banks, and creditors of the company made pressing calls for the money due them; the very cause, and the reasons however, which actuated the creditors in calling for, and demanding their dues, deprived the company of the power to raise the means, wherewith to discharge its indebtedness.

The pressure being unusual, permanent loans were out of the question; further subscriptions for stock could not be obtained at such a time—and even the stock originally subscribed, could not be collected; and the result was, first, the prostration of the credit of the corporation, and finally its total failure.

Afterwards, for a series of years, the railroad works, and property of the company, were matters of tedious litigation amongst the creditors—the road, with its machinery, being leased out in the mean time, and worked (as was natural) to its own destruction—when finally, the whole property was brought to a sale, under a decree from the United States district court, in September 1847.

A new charter, under the name and style of the "Tennessee Valley railroad company," was obtained from the legislature of 1847 & '48—approved February 10th 1848—an organization under which, was had within the year 1848.

But owing principally to the project of the Memphis and Charleston railroad company, which was revived the following year, there was very little done towards the refitting and improvement of the old road, and it was worked in its dilapidated condition. In the early part of 1851 however, an agreement was entered into, between the Memphis and Charleston railroad company, and the Tennessee valley railroad company, by, and under which the latter was to become a link in the great road, and was to be relaid with heavy iron, and refitted in its machinery etc., as soon as the company should be prepared to commence the work. And now, in compliance with such arrangement, the Memphis and Charleston company have taken possession of the road, as first above stated, and have commenced relaying the track at the Tuscumbia landing, with a T rail weighing 59 lbs to the yard, lineal, upon heavy oak sleepers, 2½ feet apart from centre to centre.

The iron for the whole length of the road, about 4,000 tons, is either here (at the Tuscumbia Landing) or in transitu from New Orleans; and the expectation and promise is, that the whole 45 miles will be completed, with the needful motive power and machinery, by the first day of November next, at farthest.

It is particularly worthy of remark, in reference to the subject in hand, that the amalgamation, and merging of this railroad with the Memphis and Charleston road, is simply a consummation of the designs and objects of the original projectors, over twenty years ago. For while it was the immediate object and purpose of the work to overcome the obstructions in the Tennessee river, interposed by the great "Muscle Shoals," it was at the same time the ultimate and fondly entertained design, of forming a railroad connection between the Atlantic at Charleston, and the Mississippi river at Memphis. In the year 1834, Col. S. H. Long, U. S. Topographical Engineer, under orders from the Topographical Bureau at Washington, made a reconnoissance of a route from Augusta, Ga., to Memphis, Tenn.; pursuing the most direct route, as far as feasibility of ground would permit, to Decatur, in Alabama, and adopting the Tuscumbia, Courtland and Decatur railroad, from Decatur to Tuscumbia, as a link in the Atlantic and Mississippi railroad. Hence the nearest and most feasible line from Tuscumbia to Lagrange, in Tennessee; and thence by the route of the Memphis and Lagrange railroad (which had been surveyed) to Memphis.

Col. Long made a very lucid and able report on his reconnoissance, dated Philadelphia, February 10th, 1835, to the Topographical Bureau at Washington, published by Congress.—See Doc. No. 177, House of Rep., (War Depart.,) 23d Congress, 2nd session.

The route of the Memphis and Charleston railroad, as now defined and located, occupies the identical ground between Tuscumbia, Ala., and Lagrange, Tenn., designated in Col. Long's report upon the reconnoissance above mentioned,—the Memphis and Lagrange road having been adopted as a link; so that the Memphis and Charleston railroad—between Decatur, Ala., and Memphis—of 1852, is identical with the route of the Atlantic and Mississippi railroad of 1834.

For detailed information, and notices of the work mentioned—the Tuscumbia, Courtland and Decatur railroad—we refer to the pages of the American Railroad Journal, viz: vol. i., p. 307; vol. ii., pp. 225, 466, 467, 468, 481 and 482; vol. iii., pp. 97, 276, 290, 291, 356 and 610; vol. iv., pp. 4 and 17; vol. v., pp. 714, 715, 737, 738, 739, 817, 818, 819, 820 and 821.

There are several very interesting facts and results, to be noted in the history of the work under consideration.

First, the inception of this project was the very *germ*, or original *idea*, of connecting the Atlantic seaboard with the Mississippi river, by continuous railroad communication; and it was the first proposition of the kind by some years—other and contemporaneous projects were aiming to connect the Atlantic with the Mississippi valley, by the same means—as the Baltimore and Ohio railroad, the Charleston and Cincinnati railroad, etc.—but none of these were intended to extend to the "Father of Waters."

Second, this was the first, and emphatically the *pioneer* railroad, west of the Appalachian Mountains. But, as is too often the case, the projector opens the way, at great sacrifice of money and labor, for the prudent successor, who is to enjoy the fruits of the enterprise—even so has it been in this. Yet, in this instance, the few of the original projectors now surviving, have reasons for self gratulation—seeing the object for which they toiled so hard, and made so many sacrifices, is about to be crowned with entire success.

And whatever such an idea might weigh with some, there are those who derive more heartfelt satisfaction, from a consciousness of having contributed to, and been instrumental in, the accomplishment of so important a project, than they could possibly enjoy from the most successful result of an enterprise simply connected with gain.

In conclusion, we derive this salutary lessen from the history of the enterprise here attempted to be delineated, viz: that a single fault, committed at an early stage, in the conducting of a project, may prove very disastrous to the concern. Had the Tuscumbia, Courtland and Decatur railroad company, solicited the subscription of an ample amount of stock (which they could have obtained) at the beginning, and built the work with money derived from the calls on stock, instead of borrowed money, the career of the company would have been entirely different—it would have been eminently successful in all points.

Very respectfully, etc., D.

Tuscumbia, Ala., June, 1852.

Indiana.

Lafayette and the New Albany Railroad.—The citizens of Lafayette, Ind., have given the New Albany railroad the free right of way through their city, and also subscribed $50,000 to the stock of the road.

Alabama and Tennessee Railroad.

We published last week an elaborate report of the Alabama and Tennessee railroad. It is a valuable document, not only as giving a full view of the objects, condition, resources and prospects of the above road, but as presenting a large amount of information applicable to a *class* of Southern projects.

The roads that have been *completed* in the South are among our most successful projects. In the Southern States the *completion* of a road is necessary to its full success. The connections contemplated must be made, or partial failure is the result. This is owing to the want of large towns and a dense population in the interior, to supply a large *local* traffic. In the North, on the contrary, the successive links, extending from village to village, pay as fast as they are opened. So that a road may prove a tolerable investment long before the original plan is realized.

The above facts furnish an explanation of the failure of Southern railroad projects in 1836 and '7. Before the numerous extensive lines in that section, in progress at the time referred to, were completed, the commercial revulsions that followed, put an end to their further prosecution. Those that were partially completed could not be worked at a profit, and they were gradually abandoned. So that in a few years, in some of the Southern States, such as Alabama, Mississippi, Tennessee, and Louisiana, for example, hardly a road was found in operation, of all the numerous projects once in progress.

The greater wealth, and more dense population of Georgia, on the other hand, enabled that State to complete her railroad schemes within a reasonable time after their inception. They immediately went into profitable employment, and have ever ranked among our best managed, and most successful roads; showing, that while railroads are equally adapted to the wants of the South, and find equally remunerating employment as at the north, the original ideas must be carried out to ensure complete success.

The recent movements at the South commences under better auspices, and conditions, that promises full success. Time has located the great commercial depots in that section of the country, and has marked out the routes of commerce and travel. In the projects of 1836, these were assumed, and, as experience has shown, often erroneously so. New guides, and new lights have arisen; and with the lapse of time, the population, and means of the people have been vastly augmented. The experience of other sections of the country has now become available to those commencing works of public improvement, and all the condition of success, once wanting, now exist in the South. Railroads are not now commenced in that quarter until ample provisions are made "for ways and means," so that with ordinary foresight and management, failure is beyond contingency.

As far as their business prospects are concerned, Southern roads, those we mean that run at right angles to the parallels of *latitude*, have in some respects a decided advantage over those of the North, which generally have an eastern or western direction. Roads following the same parallel of latitude, traverse a country abounding in identical productions. Were the entire population therefore, upon such parallel, devoted to *agriculture*, no commerce could exist between them, as the surplus productions of each, would be the same in kind, and all would wish to purchase, what none had to sell.—When we come to roads following the lines of *longitude*, a different rule prevails. With every successive degree, the *kind* of products change, so that although the whole population on such a line of road may be engaged in agriculture, there may exist an active traffic in the exchange of the products of each belt of country traversed. In the present age, the whole aggregate productions of society are necessary to meet the wants of each individual. A road therefore, extending from the Gulf of *Mexico* to the Lakes, by traversing nearly every variety of climate, becomes the channel of distribution of all the varied productions upon its route; the cotton, rice, sugar, and tobacco, of the South, and the grains, fruits, provisions, and domestic animals of the North. Railroads running north and south therefore, may be said to occupy the *natural*, and those running in an opposite direction, the artificial, routes of commerce.

The Alabama and Tennessee possesses all the advantage to be derived from occupying a *natural* route of commerce. It is a part of a great line extending from one extreme of the country to the other. As a *local* work, it traverses a section with very different productions; the southern portion of it abounding in cotton, and the northern portions of it in wheat, corn, good grazing lands, and vast mineral resources. Upon its route all the elements of a vast commerce already exist. All that is wanting, is a suitable channel for their interchange. This will be supplied by the above road, which certainly bids fair to become one of the most lucrative roads of the South, and of the whole country.

We are happy to state that the Alabama and Tennessee railroad have secured abundant means for its construction, and that the work will be pushed forward with all practicable dispatch to its completion.

Syracuse and Binghamton Railroad

The letting of contracts for the further prosecution of this road is now going on in this city. The competition has been very brisk and lively, there being some hundred and thirty or forty contractor's names before the directors attached to bids for the undertaking of the work. We congratulate the friends of the road upon this signal manifestation on the part of so shrewd and sagacious a body of men as the railroad contractors of the United States of their confidence in the enterprize, and believe, that in spite of the industrious and formidable attempts that have been made to shake the public confidence in it, that it will triumph in the result of a complete and successful consummation, vindicating everything and more than everything that its most ardent friends have ever claimed for it.

We have in press the report of the very intelligent and efficient Engineer of the company, W. B. Gilbert, Esq., and we shall take early occasion to furnish the facts and figures upon which we base our very favorable opinion of the value of this undertaking as a matter of the highest local interest and importance to the citizens of Syracuse, and in fact to our whole immediate vicinity. We have sometimes suspected that the immense advantages of this railroad communication to this city had been somehow or rather overlooked, when we have regarded the very moderate contributions which have been made for its prosecution by our community. We have been apprehensive that the jealousy of competition may have had something to do with the narrow and confined opinions and judgments that have too often been broached in regard to it, and that an organization of prejudices and adverse influences might be at work to counteract all the efforts that sagacity was conceiving and energy executing in regard to it. It certainly has been a fight from the start for the friends of the Syracuse and Binghamton railroad, and their conquest over mind and opinion has been almost as dearly purchased as their ascendency over the difficulties that presented themselves to be overcome in matter.

We did not propose anything beyond an allusion when we took our pen in hand, reserving to ourselves the opportunity for a fuller expression of opinion after we should have examined the report. Till then we shall adjourn what we have further to say upon the subject.—*Syracuse Star.*

From a later number of the same paper, we learn that the work of construction has been allotted to the following parties, viz: 1st division to O'Keefe & Boyle, of Massachusetts and Connecticut; 2nd division to Miller, Brintnall, Chase & Co., of Syracuse; and the 3d division to James & Charles Collins, of Brooklyn, all of whom are good and substantial men.

The stockholders, and inhabitants of Syracuse, Homer, Courtland and Binghamton, and, in fact, throughout the whole line, says the Star, should give Judge Stevens, the President of the road, great credit for his untiring energy in accomplisheng this great result. The duties of the office could not have been placed in better hands. We have been acquainted with the president for a number of years, and know whatever is placed in his hands to do, will be well and energetically done.

The road should be speedily built, for the interests of the various branches of business carried on along the line of the road demand it. Syracuseans especially, should be very prompt in forwarding its completion, and getting its stock all taken. The road will be, when built, a benefit to every inhabitant of Syracuse who uses the article of fuel, because it directly connects with the inexhaustible coal fields of Pennsylvania, which article can be afforded much cheaper than wood is at this time.

The gentlemen who have taken the contracts for building the road, take 25 per cent of the capital stock. This fact shows conclusively that it is a safe and judicious investment.

We have long regarded the above road as one of the most important, and as promising to become one of our best paying, projects. It will traverse a country of remarkable fertility, without railroad accommodations. It will have no rival for its appropriate local business which must yield a lucrative traffic. Its through business, from the transportation of coal alone, must be equal to the capacity of a single track road. The demand for fuel for the salt works at Syracuse, now so far exceeds the supply, as to seriously interfere with the production of salt, and consequently with the growth of that city. From the difficulty in getting *coal*, *wood* is now almost exclusively used at the Salt works. An equivalent amount of coal, can be furnished at one half the cost of wood; and in addition to this, the supply of the latter is unlimited.—With the Syracuse and Binghamton railroad, we see no reason why the population of Syracuse should not be doubled in a very few years.

This road too will become a very important avenue for coal to Lake Ontario, as a direct railroad will be opened to this Lake in connection with the Oswego and Syracuse railroad. In a few years more, and the whole steam fleet of this Lake must be supplied with their motive power from the Pennsylvania mines.

The Syracuse and Binghamton railroad starts under good auspices, with every prospect of speedy construction, and success, after it shall be completed. We expect to see a proper appreciation of the *merits* of this project, carry its stock and securities up to a high figure.

Missouri.

Hannibal and St. Joseph Railroad.—The Hannibal Journal says in reference to this road: From a conversation with Col. Stewart, we feel authorized to inform the public that our railroad will be commenced next fall at both ends, and pushed through rapidly, so as to insure its completion in three or at most four years.

Letter from Hon. Jas. D. Doty, M. C., from Wisconsin.

HOUSE OF REPRESENTATIVES,
Washington, July 22d, 1852.

EDITOR OF RAILROAD JOURNAL:

Dear Sir— Several routes for railroads to the Pacific have been proposed, and undoubtedly one will be selected through the southern part of the United States; but for northern trade and interests there are none so favorable, in my judgment, as the one from the head of Lake Superior, to and along latitude 49, to Pugets Sound.

From Lake Superior to the Rocky Mountains, which is about one thousand miles, the face of the country is level, and the streams easily crossed. The route would touch the small branches of the Mississippi, Red river, the Missouri, Saskatchawan and Columbia, which give an abundant supply of timber and water for the use of the road and for agricultural settlements. The country is entirely healthy, and generally fit for cultivation.

The pass through the mountains, I am informed, is not difficult, having long been used by the traders of the Hudson's Bay company. A few years ago, Sir George Simpson, with a party mounted upon twenty horses, passed upon this track from Lake Superior to the Pacific.

The Lakes and River St. Lawrence form a water communication to the heart of this continent from the Atlantic; it is proposed to extend and complete this communication by this road to the Pacific.

It will at once be perceived that this is the shortest line of road to be constructed to reach the Pacific ocean; and that the road which is now being constructed from Chicago, through Wisconsin, to the head of Lake Superior, will soon complete the lines from New York and Boston running west, and is in fact a continuation of the European road from Halifax. Beside, the Great Lakes and River St. Lawrence may be navigated at least six months in the year, which would be of great value to the road. Daily steamboats, and a very large number of other vessels, continue to run to the ports on Lake Michigan, although there are now two railroads in operation leading east from Chicago.

This route is of first importance to the Northern States, to British America, and to England. It would become immediately the highway of nations; it would give to England the most speedy communication she can have with her East India possessions; and the largest share of the trade between Europe and China would pass over it. From Puget's Sound to Shanghae the distance is 500 miles shorter than it is from Astoria or California.

Two modes may be suggested for the construction of this road. First, by the united means of the English and American governments, under the provisions of a treaty; and, secondly, by the United States, from the proceeds of the sale of the lands in the vicinity of the road, after sections of it are constructed.

My engagements do not permit me at this time to enter into a more detailed statement of my views on this measure, or of the information I possess in regard to it. I should be glad to fix it upon your attention as I deem it—the most important national highway across the continent; for I am sure you would very soon succeed in enlisting the public in its favor, when the necessary provision would be made for the examination of the country, and the survey of the route.

With much respect, I am truly yours,

JAMES DUANE DOTY.

Columbus Piqua and Indiana Railroad Company.

We learn that the shipping bills for 2000 of the 4500 tons of rails purchased last December by the company for this road have been received. The whole of the iron will arrive at Cleveland on or before the 1st of September next, which will be carried to Columbus as fast as unloaded, and laid upon the road bed of the 1st division nearly prepared for the superstructure, between Columbus and Urbana of 46 miles in length.

The first of the ten locomotives made by Souther of Boston, and contracted for by the company last fall, has been delivered into the hands of its agents The balance of them will be ready for the company by the 1st of August next and each month thereafter.

The earth work and masonry on the middle and western divisions, constituting 56 miles, are in a state of rapid progression under a heavy force. The bridging for the entire line, of (Hows) patent, is under contract to Messrs. Thatcher, Burt and Co., and the framing for the streams of the Whetstone, Scioto and Big Darby on the eastern division is now going on. The ties for the eastern division are upon the line, and contracts for the delivery of the balance to furnish the other divisions have been made.

Passenger, freight and baggage cars necessary to furnish the eastern divisions are now constructing and will be ready for the opening of the road this fall. Contracts for the full equipment for the first years business have been entered into on favorable terms.

We congratulate the company and the public upon the state of advancement of this important work which now bids fair to attain an early completion.

No company in the west we are confident has a line which clusters upon and about it more of those elements of success which will at once, and for all time, constitute it a prominent and profitable road, than this; and from the present ample means of the company, there is nothiug to prevent the construction of this road on a scale equal to the best railways in the west, and in all respects commensurate with its position as a link in the great thoroughfare connecting the cities of the Atlantic seaboard with the valley of the great west.—*Piqua Register.*

Ohio.

Mansfield and Sandusky City Railroad.—Earnings of this road in June, 1852, of which $8,450·78 was from passengers..... $40,213 61
Earnings same month of 1851..... 23,435 63

Increase over June, 1851..... $16,777 98

We are informed that its receipts in June, '52, at Sandusky of four kinds of produce only, were as follows:

Wheat, bushels	249,604
Flour, barrels	10,995
Butter, lbs.	75,414
Wool, lbs	206,000

Such an amount of business proves the management of the road to be in good hands.

In regard to its prospects for the coming year we hear encouraging accounts. There is now on the line of the road to come forward this season about six hundred thousand pounds more of wool. Of wheat, if we may judge of the future from anything of the past, and if the price of this staple production of our State shall bear a reasonable relation to the expectations of our independent and intelligent farmers, we may calculate there will not be less than two millions of bushels brought over the road to this terminus in the next twelve months.

This, with its large daily receipts of other articles, and its increasing passenger receipts, should quite satisfy those interested in its earnings.

New York.

Syracuse and Utica Railroad.—At a meeting of the stockholders of the above company held at the office in Syracuse, Monday, May 7th, the following gentlemen were elected directors: John Wilkinson, Charles Stebbins, Oliver Teall, David Wager, Holmes Hutchinson, James Hooker, Hamilton White, Samuel French, John Stryker, Joel Rathbone, E. W. Leavenworth, James Watson Williams, and Joseph Battell. At a meeting of the directors, John Wilkinson Esq., was reelected president, Charles Stebbins, vice president, and V. W. Smith secretary.

Syracuse and Oswego Railroad.—At a meeting of the stockholders of the above road, held at their office in Syracuse, Monday, May 7th, the following gentlemen were elected directors: Holmes Hutchinson, T. T. Davis, Allen Munroe, Wm. L. Pardee, Luther Wright, Joel Turrill, F. T. Carrington, E. B. Wicks, John Wilkinson, A. Munson, T. S. Faxton, R. H. King, S. Doolittle. Holmes Hutchinson was reelected president.

Utica and Schenectady Railroad.—At an election for directors of this company, held on the 7th inst., the following persons were elected directors for the ensuing year: Erastus Corning, Nicholas Devereux, Nathaniel S. Benton, Alonzo C, Paige, John Townsend, James Hooker, Thomas W. Olcott, Marcus T. Reynolds, J. Phillips Phœnix, E. T. T. Martin, Livingston Spraker, John Ellis, Eleazer F. Backus.

Watertown and Rome Railroad.—At an election of directors, held at the office of the company in Watertown, on Monday, the following gentlemen were elected, viz: Wm. C Pierrepont, C. V. Brainard, N. M. Woodruff, Robert B. Doxtater, Samuel Buckley, William Lord, Smith Barlett, Clarke Rice, Horace Dunbar, Calvert Comstock, Philip Dater, J. C. Cooper, Willis Phelps.

Maine.

Androscoggin and Kenebec Railroad.—Hon. Samuel P. Benson, of Winthrop, Me., has been unanimously elected president of the Androscoggin and Kenebec railroad.

New Hampshire.

Eastern Railroad.—Directors for the coming year—Ichabod Goodwin, Portsmouth; Daniel. P. Brown, of do; Stephen A. Chase, Salem; Isiah Breed, Lynn; Benj T. Reed, Boston.

Michigan.

Michigan Southern Railroad.—John B. Jervis, Geo. Bliss, of Springfield; Charles Butler, E. R. Litchfield, Edwin C. Litchfield, Hugh White, John Stryker, Wm. L. Marcy, and John S. Barry, were elected directors of the Michigan southern railroad company, at the last meeting of the stockholders. John B. Jervis was elected president.

Ohio.

The Eaton and Hamilton Railway was put under full operation last Thursday, with two trains daily. Although so recently laid, (the Hamilton Intelligencer says) it has the smoothest track we ever passed over, and the time made is superior to that on any road in Ohio. Mr. Woods, president of the road, deserves great credit for the indomitable energy with which he has pushed the road through, and he has been ably seconded by the engineers.

Massachusetts.

Essex Railroad.—Directors—David Pingree, Eben Sutton, of Danvers, Nathaniel B. Mansfield, Nathaniel Weston, John B. Silsbee, Joseph N. Sanderson, of Lynn; Henry G. Gray, of Marblehead.

North Carolina.

North Carolina Railroad.—The board of directors of this company met in this city on Tuesday last, and had not adjourned up to the moment of our going to press. None of their proceedings have as yet transpired; but it is generally understood that a depot is to be located in or very near this city—though at what point is not known. In our next we shall probably be able to give a full and definite account of the transactions of the board.

The stockholders of the company convened in the Commons Hall in this city, on Thursday last – the Hon. Calvin Graves presiding, and Messrs. Charles Phillips, of Orange, and Alfred Williams, of Raleigh, acting as secretaries. There are a large number of stockholders in attendance—evincing thereby a lively interest in the concerns of the company. The entire amount of stock represented by persons and proxy, is 7000 shares.

From the report of the president we learn that operations on the road are in a state of rapid progress, with the promise of as speedy a completion as could have been anticipated. The expenditures for work thus far done amount to the sum of $291,561 04. The force at present employed upon different divisions of the work consist of 1,425 men, 403 boys, 560 carts, 50 wagons, 785 horses and mules, and 44 oxen.

The old directors were almost unanimously re-elected, and the proceedings of the meeting, generally, thus far, have been most harmoneously and auspiciously characterised.

Gov. Morehead was subsequently re-elected President of the road by the directory.—*Raleigh Reg.*

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Directors,

GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,

31st July. 1m

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Notice to Contractors.

CHICAGO AND MISSISSIPPI RAILROAD.

SEALED PROPOSALS will be received at the office of the company in the city of Springfield, Illinois, until SATURDAY, August 14, for the GRADING, MASONRY, BRIDGING, and CROSS TIES of that division of this road which extends from Springfield to Bloomington, Illinois.

The distance is about sixty miles, and the route traverses the most elevated and healthy portion of the State.

The line is divided into sections of about two miles each, and the work is to be commenced without delay.

Payments for work and materials will be made in cash.

Profiles and plans may be seen and blank forms obtained at the office of the company in Springfield and Bloomington, Illinois, where any information will be furnished by the Engineer Department.

Satisfactory proof of responsibility will be required from those proposing for the work.

The subscriber will be in New York, at No. 68 Warren-st., up stairs, over Hudson River Railroad Office, until August 3; and will be prepared to exhibit profiles, plans, etc., and give information to such as prefer to offer proposals in this city.

New York, July 15, 1852.

OLIVER H. LEE,
Chief Engineer Chicago and Miss. Railroad.

To Contractors.

CENTRAL OHIO RAILROAD.

PROPOSALS will be received at the office of the Central Ohio Railroad Company, in Zanesville, until the 15th day of August next, for the Graduation and Masonry of 41 Sections of the Road, extending from a point five miles east of Cambridge, to within about six miles of the Ohio River, near Wheeling, Virginia.

The work upon the greater portion of this Division is very heavy, including several Tunnels and a large proportion of Masonry.

Bids proposing to receive a per centage of payments in the Stock of the Road, are desirable; though a favorable consideration will be given to proposals for entire cash payments.

Specifications may be obtained at the Engineers Office in Zanesville, and also in Cambridge and Wheeling, on and after the 21st inst.

ROBERT McLEOD,
Chief Engineer.

July 15th, 1852.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.

Norwich, June 26, 1852. 6 w

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

By virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon.

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

Also—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3102 and 3103, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK 'IM IN," containg about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, follo 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1941, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do, do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN, Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG, Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

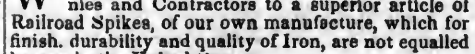
Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

To Contractors.



SEALED PROPOSALS will be received by the undersigned, at the Post Office, in Easton, Pennsylvania, until 7 o'clock A. M., of the 10th August, prox. for the Grading and Masonry of fifteen miles in length of the Belvidere Deleware Railroad, from Milford to Phillipsburg, opposite Easton.

The line will be ready for inspection, and profiles and specifications shown at the offices of the resident Engineers, in Milford and Phillipsburg, on and after the 3rd August.

Good references will be required of bidders unknown to the undersigned.

ASHBEL WELCH, Engineer B. D. R. R.
Lambertville, July 19th, 1852.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,
JAWS, BOXES, AND CASTINGS FITTED.
WROUGHT NUTS, BOLTS AND WASHERS,
ENGINE AND CAR SCREW BOLTS, all SIZES,
COACH LAG AND TELEGRAPH SCREWS,
LOCOMOTIVE ENGINE LANTERNS,
From the BEST Manufacturers and at their Prices.
CAR, HAND and SIGNAL LANTERNS.
COTTON DUCK, FOR CAR COVERING,
of any required width to 124 inches.
ENAMELED HEAD LININGS,
The best article made in this country.
PLUSH, and CURLED HAIR.
HAND CARS AND BAGGAGE BARROWS.
PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.
BRASS and IRON WOOD SCREWS.
BRASS AND SILVER PLATED TRIMMINGS
For Windows and Seats.
VARNISH, COACH JAPAN, AND GLUE,
Paints, Varnish and Glue Brushes.
SILVER PLATED AND WHITE METAL LETTERS.
ENGINE and SIGNAL BELLS.
ANTI-FRICTION, OR BABBITT METAL.
PORTABLE FORGES & JACK SCREWS.
HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.
CONDUCTOR'S BADGES AND BAGGAGE CHECKS.
Iron Bronzed and Brass Hat Hooks.
VENTILATORS AND WHITE METAL RINGS,
And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.
ALFRED BRIDGES. { Late Davenport, Bridges & Co., Fitchburg, Mass.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

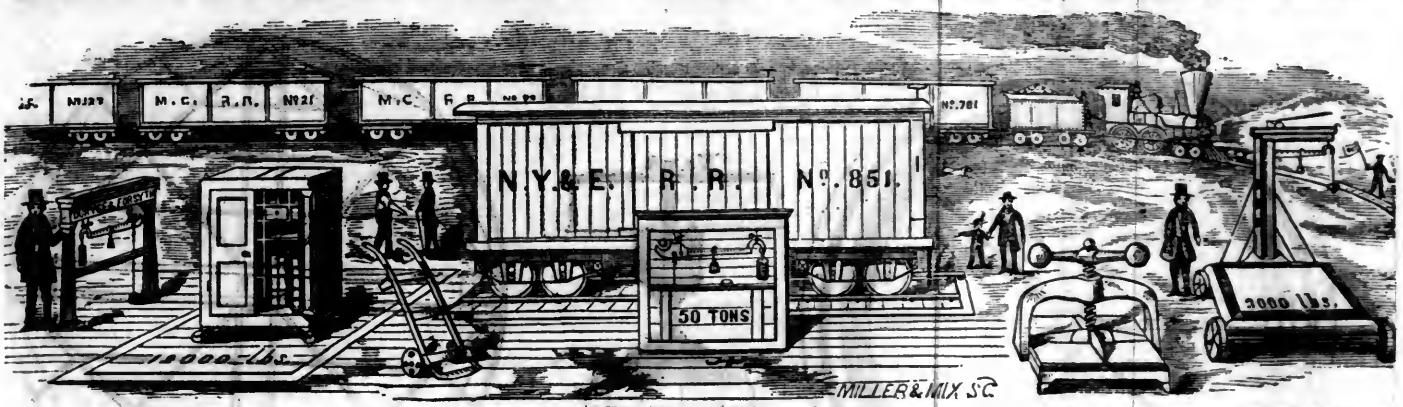
JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R.R. and Trans.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE,

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT CONVERTIBLE BONDS of the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Loganspot, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

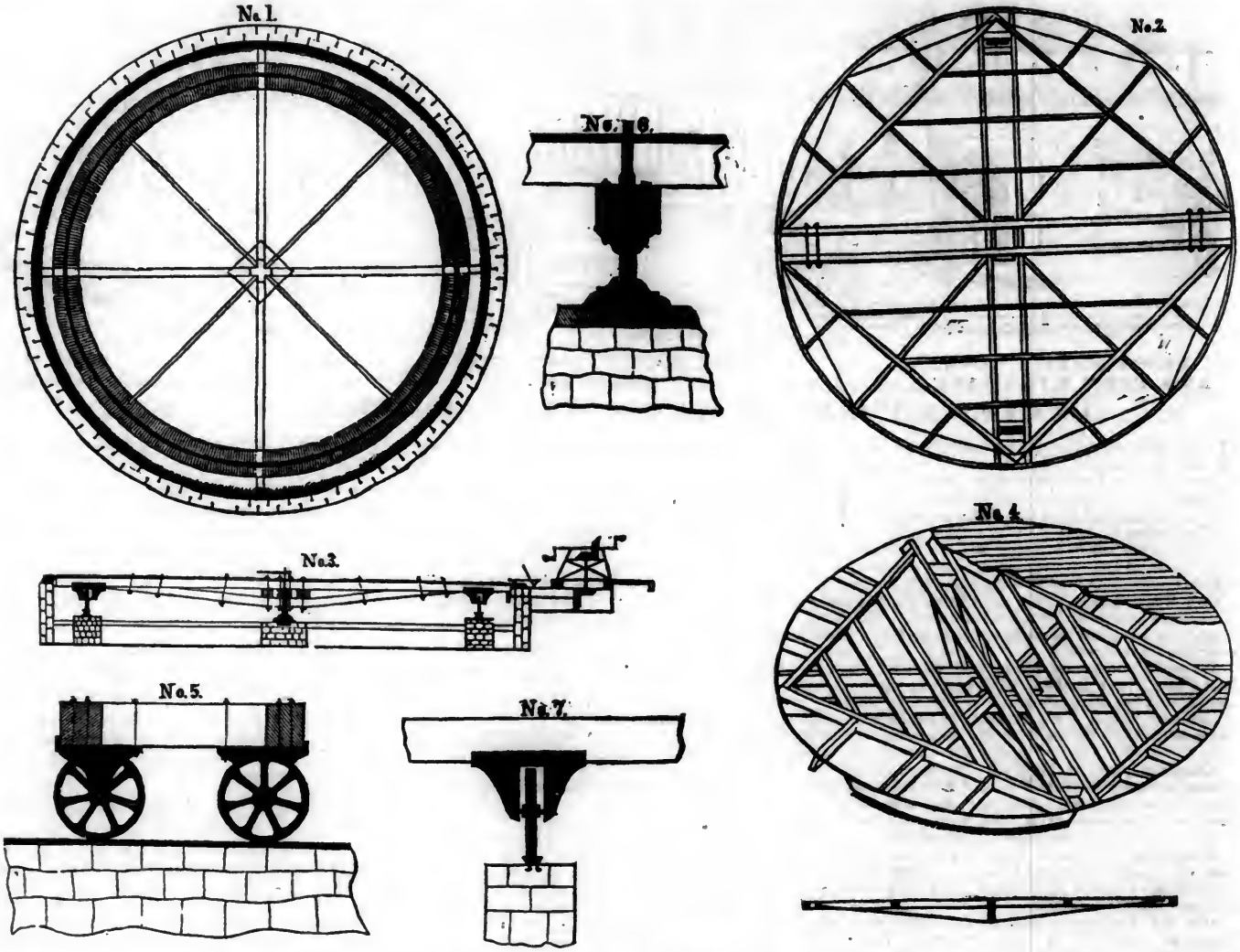
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Monireal, the only link before wanting to connect New York with Montreal by a continuous rail road, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JNE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y. or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Mat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 32] SATURDAY, AUGUST 7, 1852. [WHOLE No. 851, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

California, by D. K. Minor.....497
Wabash and Erie Canal.....498
St. Louis and New Orleans Railroad.....498
Brunswick and Florida Railroad.....499
Atlantic and St. Lawrence Railroad.....504, 500
New Orleans and Opelousas Railroad.....501
Railroads in the South.....502
Population of the Canadas.....503
Cincinnati and Chicago Railroad.....503
Western and Atlantic Railroad.....503
Penobscot and Kennebec Railroad.....504
Nashville and Cincinnati Railroad.....504
D. K. Minor, Esq.....504
Ontario, Simcoe and Huron Railroad.....504
Stock and Money Market.....505
American Railroad Securities.....506
Maysville and Big Sandy Railroad.....507
Massachusetts Railroad Statistics.....507
Ohio and Pennsylvania Railroad.....507
Connecticut and Passumpsic Railroad.....507
Chesapeake and Ohio Canal.....508
Southern Railroad.....508
Aurora and Cnicago Railroad.....508

American Railroad Journal.

Saturday, August 7, 1852.

Railroads, Locomotives, Quartz Mining, H. V. POOR, ESQ:

Dear Sir—I have to ask the favor of a column in the Journal, to apologise for the *non*-fulfilment of a promise made by me when I took leave of it and its readers on the 3d of February, 1849. Then, as I thought, on the eve of my departure for California, I promised, and intended, to send you occasionally the result of my observations for the Journal; that I might not be entirely forgotten by those whose kindness and friendship I can never forget; but protracted delays here, severe illness on the voyage, which was continued nearly two months after my arrival in California, together with an entire change in my mode of living—deprived, as I was, of books and newspapers, and that kind of interconse which naturally leads men to habits of thinking and writing, and being, withall, a little inclined to indolence—these influences combined have caused me to omit to fulfil, *not to forget*, my promise; and it is to apologise for this *omission*, and to renew, in some measure, my intercourse with those of your readers, who were in times gone by, also my patrons, that I now ask of you this indulgence. In the hope that you, and they, may consider the apology ample, I will now greet you, *one* and *all*, with my cordial good wishes; and I can truly say that I anticipate *many* pleasant meetings, with old associates in the "good cause," during my residence in the Atlantic States, which will probably continue for three or four months yet; and during which period I hope to visit, and pass over, several of the principal railroads in the country. But, as I am unacquainted with the residence, and as it will be impossible for me to visit all of those friends that I could wish again to shake by the hand, I will take the liberty here to say that I shall be exceedingly gratified by the receipt of letters from them, and to hear of their health and prosperity.

Three years have produced many changes—some of them sad and painful to witness, others highly pleasing and satisfactory. The rapid extension of, and the greatly improved style of building in, this city, during the last three years, strikes those very forcibly who have been absent during that period; and they naturally look for the prominent causes which have produced such astonishing results. *What are they?* I ask *you*, Sir, who are a close observer, what is it that has given such an astonishing impetus to the growth of this city? Shall I anticipate your answer by saying that, in my opinion, to *Railroads*, *Locomotives* and the *Gold Mines* of *California*, more than to any and *all* other causes combined, are the people of this city indebted for the present condition of things? At all events such are my conclusions, and therefore I am led to ask myself the question, *can this wonderful ratio of progression be sustained?*—and to the people of New York this is a very important question—I therefore repeat it, can the people of New York sustain the present rate of extension, embellishment, and the consequent increased extravagance and expenses of living? Doubtless there will be, as there always are, in every community, and especially in every large city, many who both trade and *live* beyond their means, and they will therefore ultimately fail, but as a community, the progress of this city is *onward*—ONWARD, with a rapidity unparalleled by any city on the globe—with *one* exception—and that exception is SAN FRANCISCO.

The extension and improvement of the railroads of the United States, during the past three years, have been, even to *me*, truly astonishing; but the next three years will add a much larger number of miles of new road than the past, and also give double tracks to many of those now in use with only one. It is indeed gratifying to those, who recollect the early difficulties, and prejudices to be overcome, when an attempt was to be made to construct even a short road, to see with what readiness and rapidity, comparatively long roads are now undertaken and completed; and it is really amusing to refer back to the first volume of the Railroad Journal, and read the reports of the engineers of that day, as it gives us an insight into the condition and *prospects* of the railroad system at that period; and, with your permission, I will quote one or two paragraphs by way of illustration, and contrast with the present time—and also that we may compare the *future* with the present.

At page 195, vol I.—or March 24th, 1832—you will find the following extract from the report of the Liverpool and Manchester railroad company:

"The directors have now to report the result of six months' operations, from the 1st of January to the 30th of June last. During that period the company's business, both in merchandise and passengers, has been gradually and steadily on the increase.—The tonnage of merchandise conveyed between Liverpool and Manchester for the six months, amounts to..... 35,865 tons.
Between Liverpool and the Bolton junction..... 6,829 "

42,692 "

Coals, principally from the Hayton Colleries, a distance of five miles from Liverpool..... 2,889
Number of passengers booked at the company's offices.....188,726

The gross receipts on this traffic are as follows:

On passengers	£13,600 7 5
On merchandise	21,875 0 1
On coal	218 6 2
	£65,693 13 8"

This road had then been in successful operation over eighteen months—will you, Sir, do me the favor to quote the amount of their business and receipts for the corresponding period of 1851? One other extract in relation to our American roads, and then I will proceed *westward*.

In the Journal of 14th April, of the same year, I find the followitg statement in a report made by Col. J. M. Fessenden, to the directors of the Boston and Worcester railroad—then in *contemplation*.

At page 242 he says:

The total length of the proposed railroad by the above route is 43 1-4 miles, the total ascents and

deseents 653 125 feet, the average rate of ascent from Boston to Worcester is 12,82 feet per mile, the effect of gravity upon this inclination is 5.44 lbs. per ton; from Worcester to Boston the average ascent is 2.28 feet per mile, and the effect of gravity 0.97 lbs. Hence the average power required to move one ton to Worcester is 13.80 lbs., and to Boston 4.86 lbs., the greatest power required either way is 20.05 lbs., per ton, by varying the velocity with the power necessary to move upon the different inclinations of the road, a locomotive engine weighing 4 1-2 tons may draw at a rate averaging

6 miles per hour 36 tons.
15 miles " " 15 "
20 miles " " 10 "

and a horse may draw at

6 miles per hour 3 1-2 tons.
10 miles " " 2 "

From these extracts, written about *twenty-one* years ago, in relation to two of the most thoroughly business roads in the world, we can readily understand the estimate in which railroads were then held. The history of the *past* progress of the system is written legibly upon the plains, and *under* the mountains, and *in the rocks* of the nations of the earth, in lines of *iron* too permanently to be obliterated until civilization gives place to barbarism, or all nature shall be convulsed to its centre—but the *future* of the system is yet to be seen, yet to be realised, and yet to be *appreciated.*

It was the generally received opinion, even twenty-one years ago, that *two* and *two* made *four*, and that *four* and *four* made *eight*—and I am not aware that there has been any material change in that opinion up to the present time, nor do I apprehend any change in that theory until after the year 1875. Of course we have ample opportunity to extend and increase railroads during that period; and as certainly as two and two make four, we shall do so, in a ratio compared with the past, in proportion to our present experience in their construction, our resources, and knowledge of their advantages.

We are now talking about a railroad from the Mississippi to the Pacific—and another through Mexico—in addition to the *Panama, Nicaragua and Tehuantepec* routes—and they will be built too; and, though I *regret exceedingly* to say so, yet I must—they will all be within *our own territory* before 1875.

The American people are so fond of *territory*, so anxious for more land—even though it be nearly all mountains and rocks—that they are willing to fight for it—then *pay* for it—and then take the *people* with it, which, in my opinion is the hardest part of the bargain; and they will never rest easy until they shall have fixed their boundary at the Isthmus of *Panama!* Will they *then* be content? or will they still continue their travels South? *Undoubtedly* they will require *more land!*

But how, it may be asked, are these railroads to be built? I will tell you. The gold from the Placers and from the *Quartz veins* of California will ensure the construction of at least a thousand miles of railroad annually for 25 years to come; and when those Quartz veins shall have been worked for 25 years, there will, in my opinion, scarcely have been a commencement made in the development of their riches.

Perhaps your readers, at least some of them, may desire proofs of assertions so bold, possibly they may think them reckless—if so, I will, with your permission, give you at an early day another article on "*Quartz Mining*" in California.

With great respect,
I am truly yours,
D. K. MINOR.

Howard Hotel, New York.

Wabash and Erie Canal.

The Circular of the Trustees of this work, dated July 1st, 1852, presents the following statement of the operations of the board for the six months previous to the above date.

Cash in treasury 1st Dec., 1851.....		$170,540 42
Received from tolls and water rents..		73 972 15
Sale of lands, etc.....		123,338 83
		$367,902 40

The disbursements for the same period have been as follows, viz:

Superintendence and repairs of canal.	$50 831 91	
Construction account...	141,330 21	
General expenses and interest	37,020 97	
		229,183 09
Leaving a balance in treasury of....		$138,719 21

The Trustees state that the canal has been in good navigable order since its opening. In May last the rates of toll were reduced 33 per cent on an average, but with this reduction, the amount received for tolls in June, 1852, was greater than for the corresponding month the past year.

PROGRESS OF THE WORK.

The canal (the Trustees say) was opened to Maysville on the 20th of June last, 308 miles from the State line, and 392 from Toledo.

The Petersburgh division, it is expected, will be finished and open for navigation in all the month of September, thus extending the navigation, before the close of navigation the present year to a point below Petersburgh, [325 miles from the State line, and 409 miles from Toledo,] and up to the Evansville division. The work on this last division has been prosecuted by the contractors with energy and without interruption, until the latter part of the month of June. On the 24th or 25th of that month, the cholera made its appearance on sections 24 and 31 of that division, and some forty-five deaths occurred among the laborers in the space of a few days. This caused a dispersion of the force, and will operate to delay somewhat the completion. If we have no more cholera and the residue of the season should be favorable for work, we have no doubt that the contractors will be able to meet the terms of the contract substantially, and finish that division by the early part of the ensuing winter. All that the trustees hope for, under the circumstances, is the completion of the work within the present year, and so as to open it for business, throughout its entire length, early in the spring of 1853.

At the date of the last report, work to the amount of $247,651 had been done on this division, since then there has been work done, including the estimate for the present month, of $180,615, leaving less than $140,000 work to be done to finish it. Bonds to the amount of $170,000, in sums of $5,000 each, have been issued to the contractors on account of this work, since the last report. The resident engineer, W. J. Ball, Esq., in regard to the work on this division, in his report of May 14th says:

"Although the effective force on the Evansville division has not been materially increased since last fall, the fear of falling behind, together with the constant effort to increase the force during the winter, has prevented a reduction, and the work has advanced more steadily under adverse circumstances than was anticipated. As sections have been completed the principal contractors have made arrangements to transfer the liberated forces to the other sections, where they were needed; a system which could not ordinarily be adopted when the work was let out by the trustees in small, independent contracts. It is due to Messrs Forrer, Sturges and Hosmer to say, that they have used every favorable means to advance the work. When the sub-contractsrs' prices have been too low, liberal advances have been made, amounting in the aggregate to about $20,000, and by their constant care, and personal attention, the work has been prosecuted as rapidly as could under the circumstances be expected. It gives me now great pleasure to report that there is a fair prospect of the near completion of the work by winter, and a certainty of the opening of navigation in the spring of 1853.

"The final estimates of quantities on the Evansville division, have not yet been completed, nor has the earth been entirely removed from the rock so that the exact amount could be ascertained, I therefore cannot now state accurately, what the final cost of this division may be, but I am satisfied, from the comparisons already made, that the entire cost, including the enlargements in Evansville etc., together with the bridges, will not much, if any, exceed the sum reported last fall, viz; $561,341.59."

St. Louis and New Orleans Railroad.

The project of a railroad from St. Louis to New Orleans, on the west side of the Mississippi river, is attracting a good deal of attention in both of the above cities. Upon the west bank of the river, a continuous line of road is practicable between St. Louis, and Algiers, opposite New Orleans. One great object of the road is to develop the vast region west of the Mississippi river, and to secure to the places named a trade which shall not be subject to the competition of eastern cities. We copy from the St. Louis Times the following notice of this road, and of a recent article upon it, in the Western Journal, from the hand of Dr. King of St. Louis.

When all the lines of railroad now projected from the Mississippi towards the east have been completed, the centralism towards New York will be so powerful as seriously to affect the growth of our western cities; they must become mere tributaries and agencies of those mighty centres of accumulation, production and distribution, situated within a few hours of each other on the Atlantic border. In addition to these, there is a system of railroads coming up from the south, and tending towards the same great centres. When the lines of road from New Orleans to Chicago, all *east* of the Mississippi, and looking to New York, Baltimore, etc., are completed, the draft on the west side of the Mississippi in the same direction will be as powerful and as irresistible as the gulf stream. What is to counteract this immense central tendency, which must be injurious to the commercial as well as the social and political interests of the south and west? We can conceive of nothing better calculated to resist those influences and to preserve the natural relations of the country, than the contemplated railroad from this city through the south of the State to Memphis, in Tennessee, or Helena, Arkansas.—Dr. King, in his article in the Western Journal, describes this route as practicable in the highest degree. The increased value of the immense resources of the country through which it passes would more than pay for it. The swamp lands recently acquired by the State would doubtless be granted for the purposes of such a road, as it must pass through the midst of them. The distance by an air line between the two cities is six hundred and five miles. The difference between the level of St. Louis and the gulf is about four hundred and twenty feet. The ground proposed to be passed over is admirably adopted for a railroad. Beginning on the margin of the river the road runs down that margin through Carondelet—crosses the Des Peres—a narrow stream that can be easily bridged. The Merrimec is the first stream of importance; it is about two hundred yards wide, and furnishes an abundance of limestone for abutments and other structures for bridging the stream. Having crossed the Merrimec, the line continues on the margin of the Mississippi until it reaches Grand Glaize creek—then up the valley of that creek to the dividing ridge that separates it from the Platin—then up the Platin valley to the main ridge which divides the waters of the Mississippi from those of Big river. Big river is a tributary of the Merrimec. By a careful exploration there can be no doubt that a good way across this ridge may be found for a railroad. The culminating point would not be more than three hundred and fifty or four hundred feet above the starting point at St. Louis. The descent from the ridge is not sufficient towards the south. Descending into the valley of Big river, the line follows up that stream to the mouth of Flat, up that to its source, thence across to the head wa-

ters of the St. Francois, and thence by the Iron Mountain and Pilot Knob, Arcadia, etc., nearly in a straight line, till it strikes the St. Francois again, in Madison county. There are very few streams to be crossed in this line—Big river being the largest, some twenty or thirty yards wide—and all capable of being bridged with facility. Another line which has some advantages passes through the valley and village of Farmington.

From the point at which the valley of St. Francois reaches the swamps or low lands, to Helena—a distance of about one hundred and eighty miles—there is a ridge of elevated ground rising entirely above the swamps, and dividing them into two portions. This ridge runs in an almost directly straight line, north and south, and broken through only in two places, by streams throughout its entire length.

A better line for a road for the same distance, and the same great object is not to be found in the whole country. We say nothing of the numerous mineral resources to be developed by such a road. Why should not this road be surveyed and undertaken immediately? A company was incorporated by the last Legislature. The directors are James Harrison, Bernard Pratte, Felix Valle, Andrew Christy, John O'Fallon, Hudson E. Bridge, Samuel Gaty, William Palm, James H. Lucas, Henry W. Crow, James A. Bryan, Charles Rankin and Wm. M. McPherson. These gentlemen are among our most wealthy, sagacious and enterprising citizens. The above views, given by us, cannot fail to strike their attention and open a field of reflection in their own minds far beyond anything we could suggest. We hope to see them turning their attention seriously to this matter. They should at least organize their company, have surveys and explorations made, and direct public attention to the subject.

Georgia.

Brunswick and Florida Railroad Company.—The Brunswick and Florida railroad company, organized under a liberal charter from the State Legislature of Georgia, granted for the purpose of making a railroad from Brunswick to the Chatahoochee river, on the Florida line, have completed contracts with Messrs. Robert Collins and Elam Alexander, of Macon, for building the entire line of the Eastern division of their road, for $13,000 per mile. This division extends from the port of Brunswick, one hundred and thirty miles west, to Thomasville, Georgia, with a branch from near Troupville, northwest, 58 miles, to Albany, on Flint river, and the contract amounts, in all, to rather less than $2,500,000, including iron and some equipment: the whole to be completed and delivered over in good running condition in 1854. The company have engaged to deliver the rails at Brunswick, to these contractors, for not over $45 per ton, for a rail weighing 60 lbs. to the yard, also the spikes, chairs, etc. With the exception of the iron rails, spikes, chairs and equipment, which the company will require to purchase and charge to the contractors, these gentlemen receive all their payment for the entire work from the Georgia subscribers to the company's stock. This Georgia subscription is made up by the wealthy planters along the line, and already is ample in amount to pay for all the land, land damages, fencing, bridging, grading and track laying. The contractors are men of wealth, energy and respectability, and are well known and esteemed in the South, where they have already built many railroads; and so well satisfied are they with the ability and promptness of these subscribing planters, that they have covenanted to take upon themselves the collection of these subscriptions, without expense to the company, and thus to put the whole eastern portion of the road in running condition, from the collections they will make in Georgia, on the company finding them the iron.—A part of this agreement is to the effect, that the iron shall be ready for laying as soon as a twenty-mile section of the grading is complete, so that the contractors may have the benefit of using the road for transporting over it their ties, etc., to the next section.

To enable the company to furnish this iron at once, the stockholders, at their last meeting, gave to the directors power and instructions to mortgage the whole Eastern division of their road and the Albany branch, to cover an issue of 7 per cent. bonds, to an amount not exceeding $1,200,000, and to make the best disposition they could of the bonds, in exchange for the iron.

This exchange the directors are now desirous of making, and for the information of parties with whom they may negotiate, they beg leave to submit the following statement respecting the work:

The Brunswick and Florida railroad will extend from Brunswick, the best seaport in the South, through the finest cotton-growing region in America, in a direct line towards Pensacola, Florida.—The Eastern division of their road ends at Thomasville, Thomas county, Georgia. This is one of the richest counties in the State. The lands are as fertile as any in the valley of the Mississippi, and are fast settling by the wealthy planters from the comparatively barren seaboard further north.

The climate is healthy. As soon as the road reaches Thomasville, it will have touched a point where it will not only be in easy communication with the Gulf, over the Tallahassee and St. Marks railroad, but it will have extended forwarding facilities heretofore unknown, to planters who now produce over 200,000 bales of cotton per annum.—They will cheerfully pay to the railroad, $2 per bale freight to Brunswick; indeed, the heaviest of these planters are subscribers to the stock of the company, and have themselves agreed to this tariff of freight, though, when complete, the company can easily afford to transport the articles for one-half of that rate. The production of this staple is fast increasing through all southern and western Georgia. In the district about the Eastern terminus of this section of the railroad, are situated the largest rice plantations of the Union. This grain is consumed largely along the line of the road, and vast quantities are shipped around Florida to all the Gulf regions, and for consumption everywhere up the Mississippi valley. In the vicinity of the Santilla river, some 28 miles west of Brunswick, there is also an immense growth of the best pine lumber and ship timber, and the northern builders are making extensive preparations to cut and forward the same over this road, for shipment at Brunswick.

The lowest calculations that can be made of the receipts of this Eastern section of the road, even in the most unfavorable seasons, and without calculating upon the future growth of the trade, may be set down as follows:

200,000 bales cotton, per annum, at $2		$400,000
Lumber, 25,000,000 feet, at $3, or even at $2		50,000
Rice and merchandize from Brunswick, 25,000 tons, at $5 per ton		125,000
Passengers, mails and express		125,000
		$700,000
The Engineer, Emerson Foote, Esq., calculates the maximum expenses at 33¼ per cent., and he has had great experience as an engineer and chief superintendent in working the Georgia railroads, even estimating it at 50 per cent.		$300,000
It leaves an annual profit of		$400,000
To be applied to interest on $1,200,000 bonds, at 7 per cent	$84,000	
Sinking fund for redemption of do., at one per cent	12,000	
Fund for replacing rails and road-bed	50,000	
Six per cent. dividend on $1,400,000 capital stock	84,000	
		$230,000
Surplus		$170,000

This is an estimate founded on the mere local traffic of the district. But this road is the commencement of a GREAT LINE, which, when it reaches Pensacola, will, in great measure, supersede the passage around the long peninsula of Florida.

The distance saved by this railroad, to all the outward and inward commerce of the States bordering on the Gulf of Mexico, will be over 1,100 miles for each passage to and from Europe, and the northern seaboard; and the insurance against sea risks will be lessened one-half.

About 400 miles of railroad will connect the Mississippi and the Atlantic, by adopting this route.—The grades will nowhere exceed 30 feet to the mile, and the course will be almost entirely straight. At a freight of 3 cents per ton per mile, a 500 lb. bag of cotton can be carried from New Orleans to the

Shipping port of Brunswick, for		$3 00
Freight from Brunswick to Liverpool, ¼d. per lb		5 60
Insurance on $50, at 1¼ per cent		0 30
Making, by this route, the cost of taking a bale from New Orleans to Liverpool		$8 63
While, from New Orleans, around Florida, to Liverpool, the freight ranges from ¼d. to 1¼d. per lb. If we call the freight and Mississippi river and port charges ¾d. per lb., it will be on a 500 lb. bale	$8 75	
Insurance, ranges from 2 to 3 per ct.; if we call it 2 per cent on $50	1 00	
		9 75
Difference in favor of the Brunswick route, per bale		1 12
From Mobile to Brunswick, 300 miles, at same rates, is	$2 25	
Freight from Brunswick to Liverpool ¼d. per lb	5 00	
Insurance, do., $50, 1¼ per cent	0 63	
		7 88
While around Florida the expenses are as from New Orleans		9 75
Difference in favor of the Brunswick route, per bale		$1 87

Besides the gain in time by this mode of forwarding.

The advantages in shipping to the northern States, by this route are equally great.

On the produce and consumption of a large part of the States of Georgia, Alabama, Mississippi and Florida, the saving to the inhabitants which will grow out of the opening of this railroad will by far exceed the foregoing estimate, as these districts are situated nearer to the line of the railroad than they are to the cities named above.

The amount of cotton alone shipped from the Gulf ports exceeds 1,500,000 bales per annum. The saving in interest, insurance and freight, on such portion of this produce as will avail itself of this railroad communication, will be immense; and the vast shipments of sugar, tobacco, lead, pork, etc., that are now made from New Orleans, and the return cargoes of lumber, rice and merchandise, will to a large extent, seek an opportunity of effecting a similar saving by adopting this channel.

The prosperity of a line of railroads from the Atlantic to the Mississippi, will not depend upon their carrying the more bulky portion of the productions that are brought down that river. The articles that comprise more value, in a smaller space, will exceed in quantity the power of more than one railroad to transport.

The proprietary companies of the Carolina and Georgia railroads have been aware of the great advantages which would be sure to accrue to the producers and dealers in the different articles composing this vast and increasing traffic, from the opening out to them of railroad channels of communication between the Atlantic and the Gulf of Mexico; and they have exerted themselves to share in these advantages, by extending branches of their roads southwest, to some point or points on the southern and western coasts of Florida and Alabama. Owing to the distance of their Atlantic ports from this quarter, the size of the rivers their roads would have to pass, and the somewhat circuitous nature of the routes they would be compelled to adopt, none of them have yet been able to approach nearer than 200 miles of the Gulf. When they shall have reached the Gulf, they will find traffic enough for all.

But none of them can compete with the Brunswick and Florida line. A glance at the map will show that this is the shortest and straightest road that can be made from the Atlantic to the Gulf ports and to the Mississippi. Its grades and curves are of the most favorable character. Its eastern terminus is a salubrious town, situated on a bluff some fifteen feet above the tide water, on an excellent harbor, which, not being at the outlet of any river, is never choked up by the process which is

continually operating to close up most of our southern ports. The largest ships can at all times enter the harbor of Brunswick, and lie close up to the wharves, so that the freight and insurance from and to this point will be as low as to any port on the seaboard.

The distance from the northern commercial towns to Tehuantepec, will be shortened about as much as that to and from Europe, by passing over this railroad, and the whole of our Mexican travel and trade will be constrained to adopt the same channel.

The directors are now prepared to contract for the delivery at Brunswick, Florida, of the following quantities of railroad iron, of approved patterns of 54 to 60 pounds to the yard. Each cargo to be accompanied by the quantities of railroad spikes and wrought iron chairs, requisite for laying the rails of the said shipments, viz:

1,000 tons of rails to be delivered in Brunswick, from the 15th December, to the 10th January, 1853; 1,000 to be delivered in Brunswick, from the 1st to the 30th January, 1853; and 1,000 tons in each month after January, 1853, until the whole quantity necessary for 188 miles of road and 10 miles of siding, be delivered.

Payment to be made in the bonds of the road, bearing semi-annual interest at the rate of 7 per cent per annum, and secured by the first and only mortgage on the whole 188 miles of road, from Brunswick to Thomasville and Albany.

For the board of directors,

SOLOMON FOOT,

President Brunswick and Florida R. R.

Atlantic and St. Lawrence Railroad.

Annual report of the Directors to the Stockholders for the year ending July 1, 1852.

The section of road from Bethel to Gorham, N. H. was not completed at the date of our last annual report, but so far completed as to be opened for business, on the 23d of July last, prior to the annual meeting. The distance from Portland to Gorham, N. H., is 91 miles.

Another section of road from Gorham to the Station house at Northumberland, about 31 miles, was so far completed as to be opened for business on the 12th of July current, making 122 miles from Portland.

The grading of the residue of the line is nearly finished for the main track to the bridge, to be constructed across the Connecticut river, thirteen miles from the station house at Northumberland, with the exception of a heavy cut, which will delay the track laying till August. The abutments for the bridge over the Connecticut river are mostly finished, and the central pier is commenced, so that the bridge will be constructed by the time the rails are laid to it.

From Connecticut river to the proposed junction at Island Pond with the Canada road, 14¼ miles, the work of grading is in such progress, that the track will not be delayed on this portion of the line. We confidentiy anticipate the completion of the whole of our main track to the western terminus of our road, at the common junction, in November next, with such side tracks or turn-outs as may be necessary for opening and operating the whole of our road.

The distance from Portland to the junction and connection with the Canada road, as agreed upon between the two companies, is 149 miles.

Although the track is laid and the road is opened to Northumberland, no part of the road contracted for by Messrs. Wood & Black is entirely completed and accepted by the directors. Of that part of the road within the State of Maine, a portion of the land damages are unpaid, fences, farm and road crossings to be provided, and some portions of the road-bed and turn outs or side tracks to be finished. This will probably be completed and tendered for acceptance the ensuing fall.

In New Hampshire, the land damages are all paid, and the whole work is in progress to final completion.

The location of the line in Vermont, has been changed from the East Nulhegan, to the West or main Nulhegan steam route. This location increases the length of the joint road, twelve miles, but reduces the grades, and is through a much better country; and the unsettled portion of the line is all susceptible of cultivation.

The committee of our directors, appointed to meet the committee of the Canadian road, to agree upon and determine the route and point of common junction of the two roads, were in favor of the Connecticut river line, and urged its adoption. All the passes over the highlands were thoroughly examined and surveyed, as well the route by Derby line and Stanstead.

The route by the west Nulhegan stream, although never contemplated by either party, when the articles of agreement between the two companies of April 17, A. D. 1846, were entered into, if not expressly excluded by that compact, was deemed by the committee of the Canadian road, the best and most favorable for them. In consideration of this, they proposed to fix the common point of junction at Island Pond, in Vermont, about sixteen miles from the boundary line, and to construct, maintain and operate forever, under our charter, the portion of road between the proposed point of junction and the boundary.

This proposition was agreed to on our part, and contracts have subsequently been formally entered into between the two companies to carry this agreement into effect. We recommend, that the stockholders ratify and confirm by vote, the respective contracts, entered into between the companies, and also a contract made with Hon. George Moffatt, William Molson and John Torrance, Esquires, of Montreal, for determining the route and point of junction in Vermont, and authorising the St. Lawrence and Atlantic railroad company to build and operate the road, between the common junction at Island Pond and the boundary, etc.

After the agreement between the committees of the respective boards of the two companies was entered into, and prior to the contracts before stated, the directors of the St. Lawrence and At. R. R. company, through their president, requested that this corporation should guaranty their bonds for £100,000 currency, to facilitate the raising of that amount of money for constructing the sixteen miles of road in Vermont, between the proposed junction and the boundary line. This proposition was agreed to by your directors and forms a part of the contract, submitted for your ratification.

An Act of the Legislature of Vermont was obtained at their last session, granting the right to vacate the location, made in that State under the charter, and extending the time for making a new location, until the first of August next. The directors recommend your acceptance of that Act.

TLe bonds of the company, secured by second mortgage, have been disposed of to stockholders and others, at fifteen per cent. discount, to the amount of three hundred seventeeen thousand four hundred dollars. We request your assent to and approval of the sale of the company's bonds at the discount named.

The bonds of the company could not be negotiated, even at this rate of discount, so as to furnish means to prosecute the work. The directors, therefore, made an application to the city of Portland for an additional loan of five hundred thousand dollars of their bonds, secured by an equal amount of the mortgage bonds of the company as collateral.

This loan was obtained, and the means thus provided, without sacrifice, to finish the road. We shall not have the funds for furnishing the necessary equipment of the road; we have, however, made contracts for locomotives and cars on such terms of credit, as will relieve us from the trouble of a floating debt.

To prevent embarrassment to the treasury, no further interest dividends on the capital stock should be paid out either in money or notes, until the net earnings shall warrant the payment of dividends.

In order, however, to place the stock, subscribed and paid for, on an equality with future issues of stock, an interest account with shareholders should be made up to the time of completing the joint enterprise, and the opening of the whole road from Portland to Montreal, and an interest dividend then declared, payable in such way, as the exigency of our affairs, and sound policy may then render expedient.

This course will do justice to the present stockholders, and prevent that depreciation of the value of their stock, which must result from borrowing money to pay cash dividends, or, what is equally objectionable, paying dividends by issuing notes therefor.

The time, as definitely fixed as it can be, for connecting the roads of the two companies, is the first of July, 1853. Unless unforeseen impediments and obstacles should prevent, the opening of the roads from Portland to Montreal may be confidently relied on by that time. The work on the Canada side of the line is progressing with great rapidity.

The track will be laid and their road opened for business to Sherbrooke, in the course of the month of August, leaving thirty miles, between Sherbrooke and the boundary line, to be completed. The track will probably be laid to Compton before winter, leaving but a small amount to be laid in the spring.

The road between the junction at Island Pond and the boundary line, in Vermont, is all under contract, and the work of grading in progress.—This will all be graded and ready for the rails before next spring, and a portion of the rails may be laid the ensuing fall.

Our road was opened to Gorham, N. H., on the 23d of July last, in time for only a portion of the pleasure travel to the White Mountains for that season. We did not expect a great increase of income at once from this portion of our road.

When this route becomes more known, and the facility of accesss by it to the White Mountains is more generally understood, we have no doubt it will command a fair share of the pleasure travel to the Mountain, which is now large and yearly increasing.

This section of our line must depend mainly upon this source, and with a view to create and provide for this business, the directors have authorised the erection of a large and commodious station house for a public house, at Gorham, N. H., and such further necessary incidental expenditures as were necessary. Without these expenditures, the road could not derive any income from this travel.

The result thus far demonstrates the propriety of this outlay. Inasmuch as the road, between Portland and Boston would, almost equally with us, participate in the benefits of the White Mountain travel, we were assured by the managers of those roads, that they would pay their just proportion of the expenditure, required to provide accommodations and facilities for the summer Mountain travel. The assurances thus given will doubtless be met as soon as the aggregate of expenditure is made up and presented.

The expenses of operating the road, above south Paris, were unusually large during the past winter, owing to the great depth of snow, and uncommon severity of the weather. No provision could be made to protect the track from the drifting in of snow, until experience should determine the exposed points. One half mile of high close fence properly placed, will hereafter, probably, secure this part of the road from any obstructions by snow that cannot be easily cleared by the snow plough. During the past winter, the obstructions by drifts were confined to an aggregate extent of about two thousand feet, and they were greater than usual, even in that region. This trouble may be easily remedied, and we have no apprehension that the business of the road may not be prosecuted during the winter, with as little expense and as much regularity, as on other roads in New England. Even last winter, the trains were run regularly with but two exceptions, and then the delays were much less than on some other roads. The result of our experience thus far, on the portion of road in the mountain region, apparently the most liable to interruptions from snow, of any part of our whole line, has been, on the whole, very satisfactory.

With the exceptions mentioned, the trains have been run during the past year with great regularity, and without serious accidents. No passenger is known to have received the slightest injury. The road-bed has not been injured by frost or flood, so as to require unusual repairs. The breaking down of the wharf in Portland, loaded with iron, and the destruction of fifteen hundred cords of wood by fire on the line of the road were the principal losses incurred during the year. These amounted to about six thousand dollars besides the cost of raising the iron from the dock.

The whole amount expended and charged in the general construction account is $4,242,823 24.

This aggregate includes the amount of $2,826,175 38, expended prior to July 1, 1851, according to the last annual report of the treasurer.

The receipts into the treasury from assessments on shares to July 1st, and credited to capital stock amounted to $1,327,291 24

Received from the sale of the city of Portland bonds 1,796,000 00

Received from the sale of bonds of the company, including those issued to Wood and Black under their contract 915,500 00

The whole number of shares of the capital stock of the company now standing on the books, is 13,556, making $1,355,600 00

Collected on the above 1,327,291 24

Balance due on stock 28,308 76

Almost the whole amount of this sum may be relied on as available means.

The gross earnings of the road, including mail pay and rents, for the year, are $184,059 71.

Net income of the road for the year, $87,825 46.

During the year ending June 30th, the number of miles run by the passenger trains is 118,792

Miles run by freight trains 78,807

" " " gravel and wood trains 8,056

Total of miles run 205,655

Average of receipts per mile run ..... 89·499 cts.

Expenses per mile run ..... 46·794

Cost of repairs of locomotives per mile run ..... 03·476

" " oil for locomotives per mile run. 01·349

" " " locomotives and trains... 01·061

" " wood per mile run ..... 07·631

The exhibit of business is less favorable than we could have desired, but it is not discouraging. The additional distance of our road, which we have operated for the past year, is the least productive of our whole line and was the most expensive to clear of snow during the last winter. We are still confident in the opinion heretofore expressed to you, that within one year from the completion of the road to the junction, in Vermont, the net earnings of its way business will pay the interest on the debt of the corporation.

Our expenses for the past year include the loss by fire of fifteen hundred cords of wood, amounting to at least three thousand dollars.

A further increase of expenses has been incurred in running a special freight train for the connecting business with the Androscoggin and Kenebec railroad, while the receipts from their business have been very much reduced, under the recent contract. This contract expired on the 1st of July current, by its *own* limitation.

Increased depot accommodations will be required at Portland. The present passenger and freight building can be extended with moderate cost, and used, when needed, exclusively for freight.

Arrangements are in progress for the necessary buildings along the line of road and at its terminus at the junction.

The contract with the city of Portland, for walling in and making Commercial street is nearly closed.

The sinking fund, provided for in the acts authorising the city of Portland to loan its credit to the company, amounted July first, to seventy-five thousand five hundred and ninety-six dollars ninety eight cents. The report of the commissioners of that fund is hereunto annexed.

The amount of cash means, required under the contract with Mr. Wood for completing the residue of the road to the common junction, is now provided, and the whole of our part of the joint enterprise will be accomplished in November next.

Our friends on the other side of the line assure us that their part of the joint enterprise shall be fully completed for business by July 1st, 1853. We shall soon therefore begin to realize the results of our labors and efforts. The work, in which we have engaged is of immense magnitude, considering the paucity of our means, but we now believe it will be fully accomplished without embarrassment to stockholders, and with comparatively light sacrifices for means. We have thus far met all our engagements promptly, and trust, that whatever floating debt we may be opliged to incur to furnish equipments and depot buildings, etc., will not be so large as to embarrass the treasury.

Our contractor, John M. Wood Esq., is entitled to great credit for the ability and determined energy, with which he has prosecuted his work, and the prospect now is, that his work will be fully completed in advance of the time specified in his contract.

JOSIAH S. LITTLE, President.

Louisiana.

New Orleans and Opelousas Railroad.—We gave last week the address of this company to the taxpayers of New Orleans. Below will be found a portion of a report of Backner H. Payne, Esq., made to the company on the 7th of May last, pursuant to instructions to report; 1st upon the practicability of route; 2nd, the amount of stock obtainable in the parishes, and 3rd, the advantages that the road would secure to the city and country, and the probable value of the stock as an investment, etc.

As far as the route is concerned, it is of a most favorable character; so much so, that it is estimated that the road can be built for $10,000 per mile. No part of it will be elevated more than a few feet above the Gulf, and most of the distance will be upon fine and well drained land. The country traversed is of very great fertility, although now in a great measure cut off from a market, from the cost of transportation.

The report states that there will be no difficulty in obtaining from the parishes the amount expected from them, viz, $800,000. The most important portion of the report is devoted to a consideration of the business prospects of the road, which with some slight exceptions, we copy in full.

The region through which this road is proposed to pass, produced last year of sugar as follows, viz: (and it was a bad year for sugar.)

Parishes.	No. of Plantations.	Hhds. Sugar.
Jefferson	20	4,733
St. Charles	24	4.253
St. John the Baptist	29	3 656
St. James	41	8,704
Ascension	36	6,882
Assumption	148	15,468
Lafourche Interior	77	10,883
Terrebonne	90	13,758
St. Mary	195	20,434
St. Martin	101	6,324
Vermilion	21	771
Lafayette	20	1,859
Calcasieu	14	123
St. Landry	71	5,132
Rapides	46	7,820
Total	933	110,800

and 193,900 barrels of molasses. The upper parishes produce also 33,000 bales of cotton; and St. Landry, Rapides, Lafayette, Calcasieu and Vermilion, sell, according to their statistics, as published the last winter in Opelousas, 40,000 head of beef cattle, calves and sheep, for mutton to the New Orleans market,

It must not be forgotten that it cannot reasonably be expected of plantations fronting on the Mississippi river, nor those near Donaldsonville on the Lafourche, nor the thirteen plantations on Red river, in the parish of Rapides, included in the above estimate, that they will send their produce by this road; but it must be equally borne in mind that the present price of transport for beef cattle through the year ranges from three to five dollars per head, sugar from two and a half to four dollars per hogshead, until you reach the Lafourche, where it is some lower. The plantations on the Mississippi river generally sell their crops at home. But in order that the full force of the calculation, now to be submitted may be appreciated, I shall at this point introduce the statistics of the Attakapas country, comprised of the parishes of St. Mary and St. Martin, as published in the Planter's Banner, in the town of Franklin, under date of the 21st February last, as predicated upon and verified by the books of the steamboats that have done their business the *past four* years. Its correctness I was informed by the most respectable merchants and planters, was undoubted. From this document, it appears that the cost of transport of their products to New Orleans, the return freights and passage money to and fro, have averaged the past four years $295,000 for these two parishes. Now Lafayette, Vermilion and St. Landry, comprising what is called the "Opelousas country," and lying above the Attakapas, and having further to go to market; and although not producing so much sugar, yet they more than make up that deficit by their cotton, beef cattle etc., and consequently their expenses would be equally great, if not greater, than those of Attakapas. But taking it as only the same, say $295,000, we have the sum of 590,000 as the present business of the Attakapas and Opelousas, and which is only the upper half of the road. The cost of making the whole road is estimated at $10,000 per mile, or about $1,600,000 for the whole road. Now, let us see what would be the profit on this half of the road. The cost of maintaining the road and running the cars on the Georgia railroads per annum is 39½ per cent of their gross receipts; those of New York 39½, and the average of the latter for the past seven years, is 40⅝ per cent. Now to take 40 per cent off $590,000, [the business of Attakapas and Opelousas, and from their peculiar situation, it would have to come by this road] would leave $354,000 as the profit on this half of the road, being equal to 22 per cent on $1,600,000, the whole cost of the road! Nor is this all. By the present mode of getting their produce to market, these planters are subjected to expenses of cooperage and great loss from drainage of the sugar, from its having to be rolled so much in loading and unloading, and of insurance which is equal to sixty cents to each hogshead, all of which would be saved by this road to them, even if the charges were the same they now pay. The back freight is equal to about 65 per cent of their down freight. Let us now return to the sugar statistics, and suppose the transport on this road would be reduced to $1 50 per hogshead on the average, which is about half the present prices, and we will have:

110,800 hogsheads sugar at $1,50	$166,200
200,000 barrels molasses and cistern bottoms, at 50c.	100,000
Return freight and passage money equal to 65 per cent	172,900
Gross receipts	$439,100
Deduct 40 per cent for maintenance of road	165,640
Net annual income	$273,460

Equal to 17 per cent on the cost of the road, beside the saving of insurance, cooperage of hogsheads and barrels, and loss of sugar by drainage and other causes. Nor do I refer to any increase of business, the natural result of such a convenience as this road will produce. In this estimate I have not included the large amount of beef cattle, calves, sheep for mutton, [of which they have thousands] nor the cotton. These I have purposely left out to counterbalance shipments by steamboats, of planters residing on the Mississippi and Red rivers, and that part of the Lafourche near Donaldsonville. These items must reach $150,000, and are deemed amply sufficient to cover all produce sent from this section by means other than railroad. These calculations are based on the actual statistics the past year. But when we remark that the section of Louisiana through which this road is contemplated to run, comprises 23,000 square miles, equal in size to three such states as Massachusetts, and that not one-fifth of its finest lands are now in cultivation, for want of such an outlet as this road is designed to furnish; and not one-tenth of the land that can be cultivated, if the road is made, it is not unreasonable to suppose that the stock of this road will be the best in the United States. From its healthfulness, it is destined at no distant day to be to the United States what the south of France is to Europe—a resort for health. Its great fertility, furnishing every inducement the richest soil can claim, its beautiful islands along the Gulf shore,

offering the finest places for summer resort, sea air and sea bathing; and its exhaustless supplies of fish and game of every kind, its mineral springs of St. Martin, its Belle Cheney sulphur springs of St. Landry, all, conspire to give this road a pre-eminence over all others on this continent for dividends; whilst its power to enhance the value of property in both city and country is incalculable. In proof of this latter, let a few facts suffice. Massachusetts commenced making railroads in 1831. In the year 1840, the total value of all the property in the state, as returned to the Auditor's office for that year, amounted to $299,878,320. In 1849, when she had nearly a thousand miles of railroad completed, the value of her property had increased to $590,531,889, showing an increase in nine years of $290,653,560, and for which she had paid, in the cost of them, a fraction over $44,000,000 only! and this immense increase attributable to her railroads—I say, attributable to her railroads alone! No commercial excitement, nor extravagant speculative fever has happened to her, more than to any other state in the Union, in that time; nor has any local cause stimulated this vast increase. It is not her manufactures, for as many factories have perhaps, gone out of existence, or suspended, as there have been new ones to supply their places within that period. The value imparted to property in the towns and counties [for the same period] through which these roads run, is $156,000 000 over what it was in 1840, leaving $134,653,560 as the general indirect power of railroads to impart value to property in the state, contiguous to but through which they do not run. In Georgia, lands that in 1846 could be readily bought for twenty-five and fifty cents per acre, now, that her railroads have developed them, command ten, twelve and fifteen dollars per acre. In point of fertility, those lands bear no comparison to the lands through which this road is designed to run From a map of this section of our state, from Algiers to Opelousas, made by the surveyor general, designating all the swamp and overflowed lands it contains, it appears there are over 14,000,000 of acres of land, of which only 373 000 acres are marked as swamp or overflowed lands, leaving more than 13,000,000 of acres of cultivatable lands. If Georgia by her railroads, in four years, was enabled to impart an additional value to her interior soil of ten or twelve dollars per acre, can it be doubted that an equal or geater value will be imparted by this road to our more fertile lands in this most beautiful and healthful region of ours? But if it only equaled that of Georgia, the landed value must be increased to nearly $140,000,000 over what it now is! But the first railroad running from the city of Boston was commenced in 1834. That year the value of all the property of Boston was but $21,590,300, while in 1849 [the same period as taken for the state] it was $102,827,500! and on the 1st day of January, 1851, it had advanced to $238,000,000! exhibiting an increase of $226,000,000 in sixteen years!—With such facts before us, can we slumber, or hesitate to subscribe the $1,600,000, or even $2,000,000, if necessary, to make this road, with such prospects before us, and such examples to stimulate our energies? If Massachusetts, with her barren, frozen, hilly, rocky soil, by her railroads, can work such wonders for her great commercial emporium, what is there too extravagant to say, must be the result to New Orleans, from developing this magnificent, but now tied up portion of our State, itself three times as large as Massachusetts? Should we not arouse as one man, and subscribe this stock, that New Orleans, like Boston, may pour this more than $200,000,000 into her pockets; and distribute the thrice told $290,000,000 of Massachusetts to the parishes along the line of this great highway.

* * * * * *

But to return to this road, and look for a moment beyond Opelousas, its present proposed terminus, and what do you see? The distance from thence to the eastern border of Texas, between the thirty-first and thirty-second degree of north latitude (which is her centre) is only 124 miles; in this distance there will be developed another portion of Louisiana, equal in size to the whole State of Massachusetts, giving in the route from Algiers to Texas, four such States in territorial extent as Massachusetts, and all within our own limits. But what is Texas? She is out of debt, with three millions of money in her treasury, by the recent settlement with the United States Government. She owns more than one hundred and fifty millions of acres of vacant land; she is forty-four times as large as the State of Massachusetts, and New Jersey thrown in besides; the tide of immigration to her, across our own State, is immense; at two points on Red River, viz: Grand Ecore and Shreveport, there passed, the last year, over sixty-three thousand immigrants, most of whom would have taken the road had it been in existence. The price of passage to them would alone have paid ten per cent. dividend on three millions of capital—a sum sufficient to make the road the whole way to Texas. The great outlet and market for Texas is New Orleans. With this road to strike her centre on the east, [as all her rivers are small and unnavigable most of the year, except in great floods of rain,] her Legislature will, doubtless, direct her grand improvements to meet this one from New Orleans.—She has no seaport, except for vessels of the smallest kind, and can never have any great commercial mart, even if the Northern winds did not render, as they do, her coast dangerous. Her interest is, therefore, identified with New Orleans as the great Southern emporium. Her soil through the centre and north of it, produces the finest wheat grown in the United States, and all other grains. She produces cotton and sugar in as great perfection as Louisiana. Her ability to produce mules, horses, cattle, hogs and sheep, no country can surpass.—Her health is fine; and she has 325,520 square miles in her territory—equal to seven such States as New York and Pennsylvania, nine of Kentucky, and thirty of Maryland, and nearly forty-five States such as Massachusetts in size. When De Witt Clinton projected, in 1816, the great New York canal, that master idea of that master mind was to connect the Western States bordering the Lakes with New York, and through that medium to connect the fortunes of the great West with the future destiny and glory of his favored city. Most of that West was then a wild; as much, or more so, than Texas is to us, even as far as El Paso, on the Rio Grande.

By that canal and her railroads, New York has obtained the commerce of Michigan and the back part of Ohio, Indiana, and Illinois. But will any one say now that De Witt Clinton began too soon, or that New York has expended her money foolishly or extravagantly for the commerce that now flows through her canals and along her railways from these States? And yet, in point of territorial limits, it is not half the extent of Texas; and no portion of it surpasses Texas in health and fertility. It is, therefore, doubly important to New Orleans in particular, and to Louisiana in general, that this road be made, and made immediately, before Texas begins any of her railroad improvements. All the New England States dropped their State pride for the sake of having one great commercial capital, and now we see the good sense of these people in having all their roads terminating on railroads connecting with Boston. Why wont Texas do as much for New Orleans? She is as patriotic, and the interest of all her citizens would be promoted by having within convenient and cheap reach such a great commercial mart as New Orleans. Her good sense will lead to it—her whole State is to be benefited by it; and with so much money on hand, and so many millions of acres of vacant lands as she has at her disposal, can we doubt that she will do it? Begin this road and she will do it. The whole country from New Orleans to the western boundary of Texas, in a direct line to El Paso, is nearly a dead level, with not a single mountain for a thousand miles, and but few hills, and they of slight elevation. Nature seems to have made the country for, and God, in his wise purposes, to have kept it hid from the world until railroads had been invented, that here they might be displayed on the grandest scale. New York has recently paid over twenty-three millions of dollars to make her great railway to Dunkirk, on Lake Erie. The late Gen. Worth estimated the cost of a railroad from New Orleans to San Diego, on the Pacific, at $24,000,000. In time this road will be made, and when made, the commercial destiny of the world will be fixed. New Orleans will be its centre, if we are true to ourselves, and true to the glory of Louisiana.

On the west bank of the Mississippi river we are now without any competitors for this great commerce. Should we fail of using the occasion now to make this improvement, we shall be, as we are now on the east bank of the Mississippi, scrambling with others for commerce that would wholly have remained ours had we commenced in time these improvements now talked of at this late day. We have seen the millions expended by New York alone, on her canals and railroads, for the commerce of Michigan, Ohio, Indiana and Illinois; and none will say she has expended her money unwisely.—But admitting she thereby obtained the whole commerce of these States, (which she has not) how much territory will she have gained? Only 185,451 square miles; while, on the other hand, we shall have opened to us the commerce of this portion of our State and all of Texas, amounting to 355,770 square miles—and for which we have now no competitors.

One word in conclusion. We all see the error committed by Louisiana, and New Orleans in particular, in waiting until the commerce of the great West has been tapped in numerous places by the North, and soon to be by Charleston, Savannah and Mobile, in the South. By one master movement now, we can render all these works of theirs tributary to our own grandeur, wealth and prosperity. What is that movement? Fix our eyes upon the Pacific, and never flag in our energies until this Algiers road reaches its surf-beaten shore. When that is accomplished, we shall have all the commerce and travel of the Northern Atlantic States, and all the commerce and travel of Europe, that is destined for the Pacific Ocean, for India and China, passing through our city; portions of their products will be left for sale here, or exchanged for our own, or those of the great West, and the thousand products of our artistical and manufacturing skill. Is not every State in the West and South interested in securing such a mart as New Orleans will then be for their productions? It will then be the market of the world, from which the farthest Western State will not be distant six days run of one of our steamers! Appeal to those States in behalf of their own interest in such a work, and to Congress, and the means can be had to make it, and New Orleans will sway every railroad in the West and South, now made or making, or that may be hereafter made, as so many instruments to make her the commercial queen of the world. I trust the importance of this road and its power to confer such advantages, will find an apology, in your minds, for the length of this report, and what, to some minds, may appear as irrelevant matter; but what it contains my judgment has deemed it proper it should contain. In this I may be mistaken, but it is now respectfully submitted to your scrutiny and that of the public by, very respectfully,

B. H. Payne, Agent.

Railroads in the South.

A large railroad convention was held at Aberdeen, Miss., last week. Mr. Robb, the president of the New Orleans and Jackson railroad convention was present. Through his instrumentality a consolidation between the New Orleans, Jackson, and Great Northern railroad, was effected. Not less than two thousand persons were assembled, and about eighty thousand dollars subscribed, in stock in addition to the sum previously obtained. When the invitation was given to subscribe for stock, an interesting incident occurred. It was proposed by a lady present that she would make one of twenty of her sex to subscribe one thousand dollars each, and in less than twenty minutes time the number was made up, and twenty thousand dollars subscribed in stock. Twenty wealthy citizens of Tennessee have united together and taken the whole amount of stock necessary for the construction of the road from Nashville to the Alabama line a distance of about ninety miles.

We have also a portion of the proceedings of the railroad convention recently held in Little Rock, Ark., having in view the construction of a great trunk railroad from the Mississippi river, through Arkansas to Texas The result of the proceedings of the convention has already been stated by telegraph. Delegates from Texas, Louisiana, Mississippi, and Tennessee attended it. Arkansas was of

course largely represented. Hon. John T. Mills, of Texas, presided, assisted by a number of vice presidents.

Population of the Canadas.

The result of the late population returns has been published. From it we learn that, for the first time, the population of Upper exceeds that of Lower Canada. The Upper Province has increased more rapidly in population within the last four years, than in any similar period which preceded it, with the single exception of the four years between 1830 and 1834, a time of extraordinary emigration :—

1824	151,097
1830	210,437
1832	261,060
1834	320,693
1836	372,502
1839	407,515
1841	465,357
1842	486,055
1848	723,292
1852	950,530

In the ten years from 1841 to the end of 1851, the population was considerably more than doubled, while during the same period, that of the neighboring Union only increased a little more than a third.

The population of the Lower Province is announced by the Quebec *Canadien* at 904,782, a much larger number than was expected, which leaves a majority to Upper Canada of only 45,748. The Lower Province, during the last eight years, has been advancing faster than ever before, as will be seen by the following statement:—

1825	423,680
1831	511,919
1844	690,782
1852	904,782

Great as this is, the same period of eight years has enlarged the population of Upper Canada far more :—

Upper Canada.		Lower Canada.	
1844.	1852.	1844.	1852.
560,000	950,530	690,772	904,782

Montreal.—Ville Marie, now called *Montreal* had on the

17th May,	1642	40 to 45 souls.
	1659	25 to 30 families.
	1677	1,500 to 1,600 souls.
Per census	1720	3,000 souls.
"	1759	4,000 "
"	1765	7,000 "
"	1805	9,020 "
"	1831	27,297 "
"	1835	31,193 "
"	1842	40,464 "
"	1852	57,715 "

Montreal Pilot.

Cincinnati, Richmond, New Castle and Chicago Railroad.

Our thanks are due to Jehu T. Elliott, president of the above road, for the exhibit of the 24th ult.—In the multiplicity of railroads seeking Chicago, few of our citizens, we apprehend, are aware of the road designated above, notwithstanding it is not a mere *paper* road, but has a tangible existence by right of having 69 miles between Cincinnati and Richmond in active running order, and the stock taken and contracts let for 108 miles, between Richmond and Logansport, the latter being on the Wabash river, where the Michigan road crosses it, 113 miles South East of Chicago. The whole road between Cincinnati and Logansport will be opened for trade and travel during the month of September, 1853. This side of Logansport no work has been done, and it is not definitely determined whether it will connect with the New Albany road at Monticello, in White county, about twenty-five miles north of Lafayette, or by a direct line which would be somewhere in Pulaski county. It is in contemplation to have this matter settled and the connection made so as to have a continuous line opened between Cincinnati and this city by the close of 1853. The road, as we know from personal observation, and familiar acquaintance with the country through which it is to pass, will have the trade and travel of one of the richest agricultural regions in the West, and its stock must be of the first rank.—South of Logansport, and between that place and Cincinnati, the country is not equalled in richness of soil, and all the elements necessary to sustain a dense population, by any part of the West that we have ever visited. Logansport possesses the heaviest water power in the West, and must be a great manufacturing and milling place. Mr. Beech, the celebrated mill proprietor, of Rochester, N. Y., after visiting every part of the West, in search of valuable water privileges, selected Logansport. The Wabash and Eel rivers here form a junction, running over beds of solid limestone rock for many miles, with a fall of twelve feet to the mile. All along these rivers are extensive beds of iron ore of the best quality, which only requires population and capital to develop it. These the proposed railroad will bring. After giving a statement of the stock subscribed, and the cost of the road, the circular says in conclusion: "The facts which have been stated show that this will be among the most productive roads in the United States. It will be the great thoroughfare for commerce and business between Cincinnati and Chicago,—the greatest manufacturing and commercial emporiums of the West."—*Cincinnati Gazette.*

New Hampshire.

Sullivan Railroad.—The annual meeting was holden at Charlestown, N. H. From the report of the directors it appeared that the business done by the road during the past year had been ample, at fair rates of toll, to have paid all the interest on the debt, and have left a fair dividend for the stockholders. The freight carried over the road exceeded the amount carried the year before a hundred and twenty-five per cent. The passenger business, also was largely increased. But owing to the ruinous rates at which the business had been done, the net receipts exceeded those of last year by a small amount only.

After the reading of the report, and some remarks upon the present condition of affairs, the stockholders proceeded to ballot for directors, and the following were chosen: Edward Crane, Philo Sandford, Jonas Livingstone, James Straw, Timothy Farrar, John S. Eldredge and John M. Glidden.

At a meeting of the new board of directors, Edward Crane, Esq., was unanimously chosen president, Edward Haynes, Jr., treasurer, and P. C. Freeman, clerk.—*Post.*

Production of the Precious Metals from 1492 to 1852.

An officer of the United States treasury department at Washington, in answer to a semi-official inquiry made at the department, has presented an elaborate report, estimating the production of the precious metals from 1492 to 1852. The writer after an examination of the standard authors upon the subject, Humbolt, McCulloch, and Jacobs, estimates the total product of the world, exclusive of Australia as follows:—

America, exclusive of the U. S.		$6,877,833,800
California rec'd at Mint.	$98,408,000	
California for'n exports.	51,592 000	
Other U. S. gold at mint.	15,855,000	
Not brought to Mint...	1,145,000	
Total United States		167,000,000
Total America		$7,044,833,800
Europe and Asia, exclusive of Russia		1,755,000,000
Russia		213,581,000
Total product, 1492 to 1852		$9,013,414,800

The present annual product of the precious metals, the writer estimates as follows:—

All South America	$30,710,000
Add for any probable increase	3,290,000
Hungary, Saxony, and Northern Asia.	4,000,000
Russia at the highest estimate	20,000,000
Africa and South Asia, a rough estimate	1,000,000
Carolina, Georgia, etc	500,000
California	61,500,000
Total	$124,000,000

The compiler of the estimates remarks:—"It is not clearly expressed by any of the authorities quoted, whether the amounts of the precious metals, stated to have been produced at different periods, applies to the amount coined or to the entire production, but the inference is strongly in favor of the latter.

"The limited production of gold and silver in the last years of the 15th century, may be very naturally accounted for in the limited number of people who at first ventured to explore the New World, and in the scarcity of those metals in the lands first occupied by Columbus; but it will, perhaps, excite surprise to find that the first deposits of California gold in the mints of the United States, in the year 1851, exceed the highest annual production of gold and silver in Mexico and South America by nearly 40 per cent."

Georgia.

The State Railroad.—Wm. M. Wadley, Esq., general superintendent of the Western and Atlantic railroad, having just completed his first report to the Governor, of the earnings and expenses of the road, has kindly permitted us to make the following exhibit—which, we feel quite sure will be received with great gratification by the friends of the road in every part of the state. We omit the expense column, but we assure our readers that it exhibits quite as gratifying a phase [being as greatly reduced from previous exhibits] as the one presented :

Statement of the earnings of the Western and Atlantic railroad, during the months of February, March, April, May, and June 1852, as compared with the corresponding months of 1851

February, 1852	$28,382 02	
" 1851	23,220 93	
Increase		5,161 09
March 1852	$43,234 35	
" 1851	34,480 07	
Increase		8,654 28
April 1852	$43,054 17	
" 1851	27,487 22	
Increase		15,566 95
May 1852	$41,642 70	
" 1851	20,369 94	
Increase		21,272 76
June 1852	$32,527 29	
" 1851	16,662 08	
Increase		15,864 31
Total increase		$66,519 39

—*Atlanta Republican.*

Wisconsin.

A large number of men are now employed laying down the iron on the Milwaukee and Mississippi railroad west of Eagle. It is expected that the track will be completed as far as Palmyra tomorrow, and in two or three weeks more to Whitewater. Beyond Whitewater the contractors are hard at work with the grading. With the continuance of fine weather, and the abundant means now at the disposal of the company, there is every reason to suppose that the road will be pushed through to the Rock by the first of November.—*Milwaukee Journal.*

The Route to Wheeling.

In a very short time an engineer corps will commence the survey of the R. R. route, along the Ohio valley, from Marietta to Wheeling. Funds applicable to this survey have already been subscribed, and we understand that the means for making a survey of the interior or air line route will probably soon be tendered to the company, so that immediately upon the completion of the survey of the river line, the other may be commenced. We know nothing of the comparative feasibility of the two routes—and can know but little until the two surveys are completed—but the grades and curvatures will no doubt be in favor of the valley line. The lineal distance must be shorter by the inland route, but how equation will settle the question can only be known after thorough explorations and careful surveys.

There is a vast amount of undeveloped wealth in those parts of Washington and Monroe counties which an interior line would penetrate, and if the people appreciate the importance of the road, they will be prompt in their efforts to secure a work which will bring out the resources of their

soil, and put the "hills of Monroe" in communication with the valleys, "and the rest of mankind."—*Marietta Intelligencer.*

American Railroad Journal.

Saturday, August 7, 1852.

Atlantic and St. Lawrence Railroad.

We give this week the report of this company under date of July 1st. A large portion of the route being through an unsettled country, though capable of sustaining a large population, the *completion* of the road has always been considered as necessary to its success, as a paying project. As far as length of line, ease of grades and curves is concerned, it always must remain the shortest, best, and cheapest route by railroad for western produce between the St. Lawrence river and the ocean.

This fact we consider as conclusively settling the question of the eventual success of the project. A large portion of the corn, flour, and cured provisions consumed in the state of Maine, are produced in western states. These supplies are now received by way of New York. We entertain no doubt of the capacity of the above road to divert so much of this trade as is necessary for the wants of Maine, and the Lower British provinces. To supply such a demand would tax the road up to its full capacity.

A very important fact connected with the success of this road, is the arrangement just completed for a line of ocean steamers to run in the winter months between Portland and Liverpool. This line is to consist of five ships, which are to have a capacity for 1000 tons freight each. This arrangement is to go into effect next Year. For the same reason, that the above road will become the convenient outlet for western and Canadian produce, it will also become the avenue through which the Canadas will receive their winter supplies of merchandise. The great, primary object of the road, was to secure to the cities of Montreal and Quebec access to navigable tide water, during the winter season. This object has been steadily adhered to by the Canadian government, by which the means for the Provincial portion of the line have been furnished. Althoug Boston is now connected by railroad with Montreal, thus opening a new outlet in the desired direction, the *patronage* of the Canadian government has been confined exclusively to the Portland line. We look upon the arrangement for the line of steamships already referred to, as a most triumphant vindication of the soundness of the Portland and Montreal project, coming as it does from entirely disinterested parties. It will be so regarded every where; and while it will add vastly to the revenues of the road, it will effect equally beneficial results in the increased confidence and credit secured to it. A line of steamers between Europe and America, is a subject of world wide interest, and a railroad which is identified with such line, at once advances to a most conspicuous position among the leading projects of the kind in both hemispheres. A vast bonus has been considered necessary to secure such a line. The strength of the position of the Portland and Montreal line in reference to the European trade and travel, has enabled it to secure the advantages, without burdening it with the cost, of contributing largely to support a line of steamships. The Atlantic and St. Lawrence road is an excellent structure. All its works are upon a scale commensurate with the design of the road. By waiting patiently a little longer, we have no doubt the expectations of the projectors of the road, be fully realized.

Penobscott and Kenebec Railroad.

This project has met with something of a head flaw. At the recent annual meeting at Bangor, J. M. Wood, Esq., contractor on the Portland and Montreal line, submitted a proposition to build the road for $26,000 per mile. The acceptance of this proposition was urged by a portion of the directors, and opposed by those representing the Bangor stockholders, who were highly incensed at what they considered the extravagant price proposed by Mr. Wood. The result was, that a new board of directors were chosen, in which the Bangor interests is entirely unrepresented, and the subscribers to the stock recently taken in that city, absolved from all liabilitiee to payment on account of the same.

The project therefore it seems is in *statu quo.* We learn however that the people of Bangor are determined at once to construct the road, with their own means, without asking aid from others. They are determined to remain no longer isolated from the improvements that are effecting such marvelous results in promoting the growth and prosperity of other cities. The world now moves forward under the influence of *new* agencies, which though of recent birth, have changed the aspect of the world, and which none can slight, without retrograding in all their material and social interests. The city that builds railroads, prospers at the expense of all that do not. The city of Portland is a perfect illustration of this fact. She is advancing with rapid strides, and threatens to concentrate in herself the whole trade of the state. This tendency must be counteracted on the part of other cities, by the construction of similar works, or they must be content to see their business depart and their property decay. Bangor is the only city in the northern States, of equal population, that has not long since enjoyed the advantages of railroads. We are glad she is to hesitate no longer, but is about to put her own shoulder to the wheel, and achieve a result that is easily within her grasp.

Nashville and Cincinnati Railroad.

A sufficient amount of stock having been subscribed to secure the charter granted by the Legislatures of Kentucky and Tennessee, at their last sessions, to the above named company, a meeting of the stockholders, in pursuance of a public notice given by the commissioners, was held at Glasgow, Ky., on the 18th of July, when the following gentlemen were elected directors: John Brannan, of Sumner county, Tenn.; Wm. F. Evans, of Allen county, Ky.; Robert D. Maupin, John G. Rogers, and Samuel Brents, of Barren; Josiah Brummel, of Green; and John B. Anderson, of Taylor.

At a meeting of the directors, on the same day, Thomas L. Bransford, of Glasgow, was unanimously elected President of the company. Active measures will be immediately taken for the construction of the road from Nashville, Tenn., to Danville, Ky., where it will be met by the roads now in progress of construction from Covington and Maysville, via Lexington, to that place, thus affording a continuous line of railway from Cincinnati or Maysville, through the finest agricultural portion and geographical centre of Kentucky, to the capital of Tennessee, connecting at the latter with the railroads converging to that point from Memphis, New Orleans, Mobile, Savannah and Charleston. When finished, this will be an important and leading line of railway, and in addition to the business which it will do for the country through which it will pass, not surpassed in point of fertility of soil by any portion of the United States, will be the shortest and most direct route from the southwest to the Atlantic cities of the east.

D. K. Minor, Esq.

Our readers will be gratified, once more to meet in the columns of our paper, with their old friend D. K. Minor, Esq., the former proprietor and founder of the Journal, who after three years absence, has again returned to this city, from *California.*—Mr. Minor has promised to give, for the benefit of our readers, the result of his observations in the New State. They will be of peculiar value, coming from a person who has had the best opportunity of *seeing*, and who possesses the faculty of *describing*, things as they *are.* Mr. Minor returns profoundly impressed with the greatness of California in everything that constitutes wealth. The specimens of lump gold and gold bearing quartz, which he brings with him, are full evidence of its vast richness in the precious metal. The quartz rock shows nature to have been prodigal almost beyond belief. A *single* mass in Mr. Minor's possession, is estimated to be worth at least $2,500, for its gold alone. It is the greatest curiosity of the kind, we presume, ever brought to this city. Its richness completely dazzles the eye. It was taken from the top of a very extensive vein. Mr. Minor has numerous other specimens from the same vein, equally rich, but not so large. A person visiting his room, may, for a few moments, well imagine himself in the land of gold. We understand that the immediate object of Mr. Minor's visit to N. Y., is to complete arrangements for working the vein, from which his specimens were taken.

Mr. Minor informs us that the quartz rock mining is, as a general thing, very successful, and that nothing is wanting but a more thorough experience, and machinery better adapted to its object, to render it entirely so. He is of opinion that California has hardly begun to disclose the vast extent of her mineral wealth.

Canada.

Ontario, Simcoe and Huron Railroad.—We had occasion to notice recently this enterprise, starting from Toronto, a city containing a population of over 32,000, and rapidly increasing, to Lake Huron.

We learn that the progress of the work of this iron band is giving every satisfaction, and is being pushed forward by the energetic contractors, M. C. Storey & Co., who, we understand, confidently expect to open the road as far as Bradford, or Lake Simcoe, about the 21st September (the time appointed for the Annual Provincial Fair, which is to be held this year at Toronto), and to Barrie, a distance of 64 miles, this fall.

This road is entitled to the government guarantee for the half of its cost to ensure its completion, so soon as the one half of its line is completed.

We learn from the official account of the proceedings of the city council on Thursday last, that the corporation of Toronto have purchased at par, of the contractors £50,000, or $200,000, of the stock taken by them. This looks well for the future prosperity and success of the road, and we congratulate this part of Canada, at having, at so early a date, the first locomotive running in that most flourishing country.

We also learn that it is the intention of the government, as soon as Parliament meets, to adopt such measures as will secure the early construc-

tion of the Sault Ste. Marie canal, thus uniting Lake Huron and Lake Superior by a navigable water line. This undertaking has long occupied the attention of both the Canadian and United States governments, and there now seems to be every probability that our efforts will be anticipated by the superior sagacity and energy of the Hon. Francis Hincks, the head of the Canadian Cabinet. We congratulate the Canadas upon a fact so creditable to them and so mortifying to us.

This national improvement will open at once the rich mines of lake Superior and the adjacent country, to the enterprize of the world. These mines will then be brought within 48 hours time of New York and Boston, by a route passing through a fine agricultural country, the beautiful and picturesque Manatouline islands, and along the shores of our great inland sea, abounding in copper, silver, iron, lead, etc. etc. We have always regarded this as one of the most interesting parts of this continent, and when it shall be fairly opened to the business world, by means of the above road and the Sault Ste Marie canal, we shall expect to witness a tide of emigration, industry and capital flowing in that direction, with the same hopes and prospects of fortunes, that now attract to California and Australia. Canada has fully caught the internal improvement spirit of the United States, and she has almost equal resources for development.

In this connection we are glad to bear testimony to the value of the services of F. C. Capreol, Esq., of Toronto, in promoting the construction of the above work. But for him, who matured and organized the scheme, and whose entire labors for years, have been exerted in its behalf, and to whose resolution and constancy it was indebted for a long time, for its very existence, till a lapse of time, and a better appreciation of its merits, and prospect of success, secured to it the confidence and support of the public, its construction would have been indefinitely postponed. Mr. C. was for a long period, almost the only believer in a scheme, which has now become a favorite project in Western Canada. In this, as often in similar cases, what was deemed extravagance on the part of the pioneer, is now approved by the sound judgment of the Conservative, who must have *demonstration* before he will believe.

To Contractors.

Contractors will notice a number of advertisements of work, in our present issue. It will also be seen that the time for receiving proposals in the Ohio central railroad, has been extended one week.

Illinois.

Rockford and Rock Island Railroad.—The Dixon Telegraph ascertains that Mr. Oglevie, the Engineer of this company, arrived at Albany with a full corps of assistants on Wednesday last; and at once commenced the second division of the road; being that portion between Albany and Dixon.

Stock and Money Market.

We have no alteration to note since our last.—Sound securities of all kinds are very firm. Fancies are bearly sustained. There is but little doing in new securities, and the market may be said to be dull; and it will probably remain so, till the close of warm weather. Money is abundant, but too many of our business men are absent from the city to allow any activity in the market. By bringing out new securities at the present time is only forcing the market, and we would advise our friends to delay their offerings for the present.

The operations of the United States Mint at Philadelphia, for July, 1852, will be seen by the following tables:

COINAGE FOR JUNE.

Gold.

209,093	Double Eagles	$4,181,860 00
40,305	Eagles	403,050 00
40,924	Half Eagles	204,620 00
66,650	Quarter Eagles	166,640 00
43,860	Dollars	43,860 00
430,838	Pieces	$5,000,030 00

Silver.

120,000	Dimes	12,000 00
862,400	Three Cents	25,872 00
1,383,288	Pieces	$5,037,902 00

Copper.

466,599	Cents	4,665 99
1,849,337	Pieces	$5,042,569 99

GOLD BULLION DEPOSITED FOR COINAGE IN JULY.

From California	$4,040,000 00
From other sources	160,000 00
Total	$4,200,000 00
Silver Bullion deposited	21,500 00

COMPARATIVE GOLD DEPOSITS.

	1851.	1852.
January	$5,071,667	$4,161,680
February	3,004,970	3,010,222
March	2,880,271	3,892,156
April	2,878,353	3,091,037
May	3,269,491	4,335,578
June	3,637,560	6,689,474
July	3,127,517	4,200,000
Total	$23,869,329	$29,380,155

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, AUGUST 7, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	108
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	—
U. S. 6's, 1867	117½
U. S. 6's, 1868	117½
U. S. 6's, 1868—coupon	118½
Indiana 5's	95
Indiana 2½	54½
" Canal loan 6's	95½
" Canal preferred 5's	46
Alabama 5's	95
Illinois 6's, 1847	82½
Illinois 6's—interest	52¼
Kentucky 6's, 1871	108½
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	108
New York 6's, 1854-5	—
New York 6's, 1860-'61-'62	116½
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110½
New York 5's, 1854-'55	—
New York 5's, 1858-'60-'62	105
New York 5's, 1866	—
New York 4½'s, 1858-'59-'64	101½
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	104½
Ohio 6's, 1860	99½
Ohio 6's, 1870	108½
Ohio 6's, 1875	116½
Ohio 5's, 1865	105½
Ohio 7's, 1851	105½
Pennsylvania 5's	98½
Pennsylvania 6's, 1847,-'53	99½
Pennsylvania 6's, 1879	99½
Tennessee 5's	—
Tennessee 6's, 1880	107
Virginia 6's, 1886	110½

CITY SECURITIES—BONDS.

Brooklyn 6's	—
Albany 6's, 1871-1881	107
Cincinnati 6's	100
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	108
New York 5's, 1858-'60	102
New York 5's, 1870-'75	105
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	107
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	96½
Erie convertible bonds, 7's, 1871	96½
Hudson River 1st mort., 7's, 1869	105
Hudson River 2d mort., 7's, 1860	94½
New York and New Haven 7's, 1861	106
Reading 6's, 1870	87½
Reading mortgage, 6's, 1860	93½
Michigan Central, convertible, 8's, 1860	109½
Michigan Southern, 7's, 1860	99
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	101½
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Aug. 5.	July 29.
Albany and Schenectady	107	106
Boston and Maine	106½	106½
Boston and Lowell	—	108
Boston and Worcester	104	103½
Boston and Providence	89	89½
Baltimore and Ohio	82½	82½
Baltimore and Susquehanna	29½	29½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	126½
Eastern	96	97
Erie	87½	85½
Fall River	—	—
Fitchburgh	103	103½
Georgia	—	—
Georgia Central	—	—
Harlem	72	70½
" preferred	110	110
Hartford and New Haven	—	—
Housatonic (preferred)	35	35
Hudson River	67½	65½
Little Miami	—	—
Long Island	19½	20½
Mad River	—	—
Madison and Indianapolis	112½	—
Michigan Central	113½	113½
Michigan Southern	116½	116
New York and New Haven	113½	114
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	54½	53½
Ogdensburgh	26	25½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	91½	88½
Rochester and Syracuse	—	117½
Stonington	57½	55½
South Carolina	—	—
Syracuse and Utica	134	134
Taunton Branch	115	115
Utica and Schenectady	134	133
Vermont Central	14½	14½
Vermont and Massachusetts	20	20
Virginia Central	—	—
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

American Railroad Securities.

There never was a period in our history in which we were accomplishing so much toward the development of our resources, in which we stood in such need of capital, and in which such opportunities were presented for investment, as at the present time. We have a country of boundless resources, a tithe of which are only turned to account, for the want of *Capital*. Our unoccupied lands are covered with the most valuable kind of wood. A large portion of our soil is untouched, for the want of means to bring it into cultivation; but still more for the want of an outlet for its productions to a market. No country in the world can boast of such vast mineral wealth, which, with a few exceptions, lies as dormant as it did a thousand years ago. Every branch of industry in the country is prosperous and active; yet we can hardly point to one that could not profitably employ an unlimited additional amount of capital. It must be remembered that we are reclaiming a continent from a state of nature; that we have not the benefit of the labor of successive centuries, as so much *accumulated* capital in our hands. Our mission is to subdue a new world received rough from the hands of the Creator; to build cities, ships, roads and houses; convert the wilderness into cultivated fields; to exhume the treasures that lie beneath the soil—coal, iron, copper, lead, gold, etc., etc. A long line of ancestry have not accomplished these things for us. All these things are to be done as we go along: and it is the accomplishment of this great mission, to subdue the earth and till it, that we are now attracting the attention of the world.

In this country we both appreciate the circumstances in which we are placed, and the destiny before us. The foreigner cannot do this, for his imagination cannot convey to his mind our condition or wants. We need capital, and shall need it for a hundred years to come. Not that we are not rich; far the richest people in the world, measured by the only correct standard, the comfort, happiness and well being of our people. But we need more capital to make our lands more productive, to work our mines of coal, iron, gold, lead, copper, etc., to build ships and roads, in fact to render available and useful the real wealth which we possess.

An illustration will better help a foreigner to understand our position. For this purpose we will take the case of the State of Ohio. In 1800, this State had 45,000 inhabitants; in 1850, in round numbers, 2,000,000. Fifty years ago, with here and there an exception, the State was covered with an unbroken forest. How is it now? It has at least 2,150,000 people. During the same period the valuation of the State, which is estimated for taxation (and which does not equal two-thirds the real value of property in the State) has gone from 5 or 6,000,000 up to $500,000,000. Its commercial metropolis has a population of 150,000, and will vie with any city of its size, in all the elements of real prosperity. There are numerous other towns numbering from 10,000 to 25,000 inhabitants, and which are centres of a very large trade, and which are moving forward in population and wealth, with unexampled rapidity. In the State are 821 miles of canal, costing $16,000,000, in active operation. There are completed and in progress about 3,000 miles of railroad, of which 1,500 miles will be in operation by the 1st of January next. Other works, designed to promote the advantage of her people, are on a scale to match the above improvements. Its northern boundary is formed by Lake Erie, and its southern by the Ohio river, upon which float a numberless fleet of steam and sailing vessels, bearing the products of the State to a market. Its iron and coal mines are very extensively and prosperously worked. The soil is divided up into small farms, which are owned by the occupants. The fertility of the soil is a proverb. The people of the State are well fed, well clothed and housed, and there is not probably an equal number upon the face of the earth, who are so well off, as far as the enjoyment of every comfort is concerned, as those of Ohio.

Now, how have all these results been accomplished. The population has been supplied chiefly by the older States, but not the means of the people. They emigrated to the State poor, to better their condition, as, at the present time, the pioneer leaves the older States, where lands are high and labor comparatively cheap, to reclaim new lands, and to profit by their increasing value. Those who are able, as a general rule, prefer to remain in the older States, to which they are attached by numerous ties, and which promise more comfort and happiness than the life of a pioneer. A vast majority of the immigrants to this country are driven here by sheer necessity. Some property from the east has undoubtedly been carried to Ohio, but this has been a mere drop in the great mass that now exists there. This vast property has been the *creation* of the industry of the State for the past fifty years.

But, compared with its future destiny, the State of Ohio is in its earliest infancy. We doubt whether there is an equal extent of country in the world capable of sustaining a greater population, or which possesses in a greater degree all the elements of wealth. It cannot be excelled in climate, in fertility of soil, in commercial advantages, nor in the two great mineral treasures, coal and iron. The coming fifty years will disclose as astonishing results, as have the past fifty. There is as wide room for the expansion of all her great interests as ever. The only check to progress is the lack of *means*. These must, to a great extent, be created by the industry of the people as they go along. But we know from experience, how small a portion of the *gross* earnings of a community go into its *net* earnings, and how comparatively slow is the progress of a people, who have no capital but what a generation only has accumulated.

Under such circumstances, the people of our new States turn to the capitalists of the old, and of Europe, for assistance. They say, "we wish to realize, in a few years, that degree of physical and social comfort, which in older communities it has been the work of centuries to secure. We wish to borrow, not what you alone have earned, but a portion of the accumulations of successive generations. We have the basis of vast wealth, but have not the corresponding labor and capital to make it available. While we are occupied upon our farms, we wish you to come and build roads, bridges, ships, waterworks, to work our coal and iron, and, in fact, to do all that we have not means nor time to do. As a return, we will share our prosperity with you, by a liberal compensation for the use of your money. We can afford to pay well, and be vastly the better off into the bargain."

Such is a plain statement of reasons why we need more capital, and why we can pay so well for its use. Our people do not ask it for any speculative projects, but for such only as will vastly increase our means, and bear the most careful scrutiny. We wish to make up in a few years the time lost in not discovering this continent a few centuries sooner. *Time* is no longer a *necessary* element in our progress. With accumulated capital, which represents *time*, we can in fifty years reach a point which, without it, it would take us two hundred to attain.

We would not convey the idea, by what we have said, that any portion of our country is really poor. Far from it. Every part of it is rich, very rich. What we mean is, that our capital bears no proportion to our opportunities for profitable investment. Take Illinois, for instance. She is one of the newest, and consequently poorest, of the western States. Yet, in 1850, which was by no means an unusually favorable season for the farmer, she produced over 60,000,000 bushels of corn and wheat, or over 70 bushels to the individual. Allowing 20 bushels to each inhabitant for domestic consumption, and we have a surplus of more than 40,000,000 bushels of the above articles alone. In New York this surplus would have been worth $40,000,000. In Illinois it did not net the producers more than $12,000,000. This difference is due to the charges for transportation alone. Ilinois turns her vast resources to small account, for the want of more and better avenues to markets. Had she such, instead of losing $28,000,000 in transportation expenses, she would have saved more than half this sum. Now her people ask chpitalists to construct these avenues, and share with them the amount to be saved.

We think we have shown the demand for capital for this country, for the further development of our resources, to be a legitimate one. That the lender, as well as the borrower, may be benefitted by supplying it. That the demand must probably continue for a long time to come, till the disproportion now existing between our means and our opportunities for investment, shall to a great degree be remedied.

We think, too, that the reader will readily admit, that if a demand exists for a greater extent of railroad than we are executing, that the projects under way are those best adapted to meet this demand, and consequently are legitimate projects. This is nothing more than a necessry reference. It would not be correct in fact, neither would it be in theory, to admit that certain works were needed, and assert that those interested in their construction were not capable of deciding whether they were or were not adapted to secure their objects.

The previous reasoning will also render an explanation of the mode by which we raise money for our roads by the issue of city and county bonds very easy. A line of road is projected, running through a half a dozen counties. The people of these counties, having use for all their money, prefer to borrow the money for the proposed work, if possible. For this purpose they get authority from their respective Legislatures to pledge their collective credits to the work. These credits are, as a general rule, guaranteed by the company, which undertakes to see that all the obligations assumed are promptly met. Now, in fact, this is not only the most equitable mode of raising means for a road, but the credits themselves are of the very best class of our securities. The road is a public benefit.—The burden created, should there be any, should be shared in the same proportion. The purchaser of such credits holds a security, the basis of which, (the aggregate property of the community by whom they are issued) is constantly and steadily increasing. In this country, we may state it as a general rule, that the property of our cities and counties rapidly increase in value. It is individuals, not

the community in the aggregate, that fail. But the stock in most of projects proves to be good; to pay well. The company takes care of all liabilities assumed on account of the road; and when this is done, the municipal bodies that took stock, go out of the concern. Such will, ordinarily, be the result, in the cases of subscriptions by cities and counties to our railroads.

The great interests of this country, particularly the railroad interest, was never in a sounder state than at the present time. The closer our projects are examined, the better they bear scrutiny. We recently had a good illustration of this fact. We had the opportunity of meeting a few days since, with an intelligent capitalist of Bremen, Germany, who had just returned from a tour of the country, made for the purpose of examining, personally, the various projects of which he held securities.—Through an eminent German house in this city, he commenced his purchases with the very first issues of Western bonds. The house referred to, having a *carte blanche* to make his investment in such securities as they might deem proper, became early satisfied, from a careful consideration of the subject, that western road and county bonds, issued by, and to, good projects, were, their market price considered, the best securities to be had, and they commenced buying freely of these securities at a very early day, even before they became very current in New York. This house had invested, for, the gentlemen referred to, in about *forty* different securities. On his return to New York, he informed us, that he considered every security he held as perfectly sound, and said he would not dispose of one of them, except for the purpose of realizing an advance, and investing again. A large number of his investments were in county bonds. In addition to what he had received in interest, the advance upon his whole investment was equal to about 10 per ct. It was his first visit to the country, and he has returned to Europe not only perfectly satisfied with the safety of his investment, but profoundly impressed with the magnitude of our resources, the vastness of our projects, and the progress we are making toward physical and material greatness.—Such is the testimony and conviction of our impartial witness, whose observation was whetted and sharpened by the very large interest he had at stake, and which, we have no hesitation in saying, would be the conviction of every person of sound judgment who would take the same method to inform himself as to our real condition.

We may pursue this subject still further in subsequent numbers of our Journal. We are satisfied, that all we have to do, to secure ample means for our legitimate works, and we have no intention of encouraging any others, is to spread before capitalists all information possible in reference to our condition.

Kentucky.

Maysville and Big Sandy Railroad.—We learn from the Maysville Eagle that more than enough stock has been subscribed to the Maysville and Big Sandy railroad, to authorize the organization of the company. The charter is imperative that as soon as $100,000 shall be subscribed, the books shall be closed and notice for an election of a board of directors be given. The amount of good subscriptions in the hands of the commissioner in Maysville authorised to receive them, is nearly double the amount required by the charter in view of organizing the company, and is about one half the whole amount necessary to grade and bridge the road to Portsmouth.

Massachusetts Railroad Statistics.

Western Railroad.—Incorporated in 1833. Opened throughout October, 1834. Length, 156 miles. Length of double track, 54 miles. Cost, Jan. 1, 1852, $9,953,700.

The following table exhibits the operations of the road, during the last ten years; its cost, and the market price of the stock, at the beginning of each year. The item of "Interest" is not included in the receipts or expenses:—*Boston Courier.*

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842....	$.....	$80 per sh.	$512,689	$266,619	$246,070	0 per cent.
1843....	2,087,200	45	573,882	303,973	269,909	0
1844....	2,501,200	53	753,753	314,074	439,679	3
1845....	2,686,200	91	813,48	370,621	442,859	5
1846....	2,741,700	96	*878,418	*412,679	*465,739	6
1847....	8,185,800	99	1,325,327	676,689	648,647	8
1848....	8,769,500	105	1,332,068	662,357	679,711	8
1849....	9,900,100	102	1,343,810	588,322	755,488	8
1850....	9,926,900	101	1,369,514	607,549	761,965	8
1851....	9,963,700	104	1,353,595	597,756	757,139	8
			10,256,845	4,790,639	5,466,206	Av. 5 2-5 pr c

* For eleven months.

Ohio and Pennsylvania Railroad.

The business of this road, for the month of June, says the Pittsburgh Gazette, shows an increase over any former month.

The receipts for June, were as follows:

From passengers	$16,519 09
" freight	5,196 91
Total receipts	$21,715 99

This is exclusive of mail service, which amounts to about $600 per month.

The receipts from passengers and freight, since the 1st of January last are as follows:

Receipts in January	$12,058 46
" " February	11,037 01
" " March	16,041 28
" " April	17,741 51
" " May	20,807 94
" " June	21,715 99
	$98,902 19

Number of passengers carried in June, 19,584. The number carried since the first of January last, six months, 85,173.

The total receipts, received since the opening of the road, last August, amount to $181,845 31. Number of passengers carried since the opening of the road, 148,379.

The road will be formally opened to Wooster, sometime during this month. This desirable result has been delayed by a heavy section in the immediate vicinity of that place.

Beyond Wooster the work is progressing finely. More hands would be employed if they could be obtained, but it is expected that the whole road will be finished to Crestline early in the next year.

Connecticut.

Connecticut and Passumpsic Railroad.—The 7th annual report of the directors of the Connecticut and Passumpsic Rivers railroad company states:

The receipts for the year ending May 31, 1852, were		$151,995 45
Expenses		77,009 07
Net earnings		74,986 38
Appropriated as follows:		
Interest on bonds	$36,828 40	
Interest on floating debt, (now canceled)	2,963 03	
Repairs	8,045 26	
		47,836 69
		27,149 69
Dividend, July 1, 1852, 2 per cent.		19,692 00
Balance of earnings		7,457 69
Which has been carried to contingent account.		
The contingent account per last report was		1,858 24
Amount of present contingent fund		$9,315 93

The receipts during the past winter and early spring have fallen below the expectations and estimates of the directors.

The amount charged to construction is $1,747,167 58. The floating debt has been cancelled by sales of bonds, and the company have $30,000 of the second mortgage issue on hand. The capital stock has been reduced by cancelling 1,100 shares, received in payment for bonds. Negotiations are pending for a connection with the Boston, Concord and Montreal railroad at Wells River.

A Flying Railroad Bridge.

The Scientific American states that C. B. Hutchison, of Waterloo, New York, has invented, and taken measures to secure a patent for a valuable improvement on railroad bridges for navigable waters. The object of the invention is to have a bridge perfectly open and free at all times for vessels to pass except the few minutes required for a train to pass over, and to carry over trains expeditiously and cheaply. A certain number of piers or abutments are built in the river, with spaces between them for the passage of vessels; instead of having a stationary platform or roadway extended across on the piers, he employs a flying or running platform, which carries the train spanning and springing over the successive spaces between the piers, from the one side to the other. There are tracks of rails on all the piers, and on the flying platform there are wheels to run on the tracks, like a long railroad car. The length of the flying platform is in proportion to the width of the spaces between the abutments, so that it will be impossible to overbalance it while springing from one pier to the other like a sliding draw. The flying platform is stationary at one side or the other, when a train is not passing. It is to be propelled across by having stationary power on itself, or to have it so constructed that the locomotive of a train may propel it across.

Virginia.

The Blue Ridge Tunnel.—The work on the Blue Ridge Tunnel is steadily progressing. We learn from the Staunton Spectator that the mountain has been penetrated on the Augusta side some 900 feet, and on the Eastern side about 600 feet. Three sets of hands are engaged alternately during the whole twenty-four hours, and the energy with which the work is carried on gives promise of its completion by the time specified in the contract.

Chesapeake and Ohio Canal.

The Cumberland Alleganian of Saturday has the following items:

Canal Officers.—We learn that at the meeting of the board of directors of the Chesapeake and Ohio canal company, last week, several changes were made in the officers and agents of the company.—Jacob F. Saylor was appointed receiver of the tolls at Cumberland. William P. Sterrett, of this place, and James Cloudy, of Hancock, were appointed superintendents for the two upper divisions of the canal. Charles B. Fisk remains Chief Engineer; and L. I. Brengle has been re-appointed treasurer; and W. P. Ringgold secretary.

Navigation on the canal has been resumed.—Some ten or twelve boats, freighted with coal, have departed since Monday—the day of opening.

The first load of coal, from the Westernport or Piedmont region, for Baltimore, passed down the railroad on Monday last. It was from Miller's mines. About 5,000 tons of coal have been forwarded, over the railroad, from the Frostburg basin, within the week.

Ohio.

Eaton and Hamilton Railroad.—The first regular train on the Eaton and Hamilton railroad ran *through* on the first day of July. Opening at this season of the year, when it might be expected that all of last year's produce was shipped off, and every body busy harvesting, and but little travel or business doing, every body thought if the road paid expenses the first month, it would be doing remarkably well. The officers inform us, however, that the income thus far has been above $132 per day! being about six per cent on the entire cost of the road from Hamilton to Richmond. The daily tonnage of the entire road, up and down, is not much short of fifty tons, and the passengers thus far have averaged 175 per day.

Now if our road, only twenty-five miles long, and running into the heart of a county of 21,000 population, produces these results, what will it do when traversing some twelve or fifteen such counties and uniting the cities of Cincinnati and Chicago? —*Eaton Register.*

Southern Railroad.

At a meeting of the stockholders of the Southern railroad company, held in Vicksburg on the 10th inst., Messrs. T. A. Marshall, W. C. Smedes, J. H. Johnston, M. Emanuel, W. Soffold, C. W. Taylor, S. Zimmerman, A. M. Paxton, and James Roach, were duly elected managers. W. C. Smedes was afterwards elected President, and James Roach secretary.

We rejoice to see, says the Savannah Republican, that our Mississippi brethren are going to work in earnest to prosecute this great work, which is designed to complete the chain of railroad from Montgomery, Ala., to Vicksburg, Mississippi, a part of which, from Vicksburg to Brandon, is already finished and in operation. This done, and the road from Jackson, Miss., to New Orleans in operation, of the early construction of which there is now the most flattering prospects, we shall have a continuous line of railroad from Portland, Maine, to New Orleans, a distance of over two thousand miles.

Ohio.

Cleveland and Wellsville Railroad.—The Cleveland Herald states that sufficient subscriptions have been secured to insure the immediate completion of the extension of the railroad from Wellsville to Wheeling, whereby the latter city will be put in direct connection with Cleveland and Lake Erie. The work is to be put under contract during the coming month. The completion of this link is an important one for Baltimore, and will afford another avenue by which trade and travel will be attracted to the Baltimore and Ohio railroad at Wheeling.

William Durbin, Esq.

This gentleman, who has been for many years connected with the Mad River and Lake Erie railroad company, as Engineer, and more lately with the Sandusky City and Indiana road, has accepted an offer from the company lately organized for the construction of a railway from Lake Erie to St. Louis, known as the "Lake Erie, Wabash and St. Louis railroad company," to become its Chief Engineer. While, in common with the people of Sandusky, among whom he has resided for the last sixteen years, we most deeply regret a suspension of the pleasant intercourse which has so uniformly marked his residence in this city, we congratulate the company that it has secured the services of one so able, skilful and efficient, as Mr. Durbin has shown himself to be. We predict that his intelligence and urbanity will make him as popular on the line, as his professional capacity will render him useful to the company.—*Sandusky Register.*

Opening of the Pennsylvania Railroad.

This important thoroughfare was yesterday formally opened to a point within two miles of Greensburg, being twenty-nine miles from Pittsburg. At nine o'clock, a train of five passenger cars, especially provided for the accommodation of the city councils, members of the press, and a large number of invited guests, left the depot on Liberty st. The road from Turtle creek (to which point it has been in use for some months) to its present terminus, was found to be in excellent order, the track being well ballasted, and the cars passing over it with an easy and agreeable motion. The difficulties experienced by the engineers in at once bringing this road to its present point of perfection must have been very great, there being a number of deep cuts upon the route—one 95 feet in depth—many bridges and culverts had to be constructed, and the materials and workmanship are both of the best description.—*Pittsburg Gazette.*

New York.

Plattsburgh and Montreal Railroad.—The *Plattsburgh Republican*, gives the following account of the proceedings on this road:—

"We learn that the two tracklaying parties on the line of this road between this place and Moores, have been doing wonders during the past week, and that by to-night the last bar will probably be put down to complete the connexion between our place and the Ogdensburg railroad at Moore's.

The regular passengers train, we understand, will commence running on or about Tuesday, July 20th, in connection with the trains of the Ogdensburgh road, the morning and evening boats on the lake, and the Rutland and Burlington railroad, and that a large amount of travel will be immediately poured upon the road there can be no doubt, and within a month we may expect to see the cars running through from Caughnawaga to this place over the entire line of 52 miles in length."

Aurora and Chicago Railroad.

The recent action of the legislature, in amending the charter of the Aurora extension railroad, has been followed by a prompt organization, and the adoption of measures for completing the road, as fast as labor and money can do it, to its connection with the Galena branch of the Illinois central railroad, fifteen miles north of La Salle. The entire stock of $640,000 was subscribed in one day. We learn that lettings will be advertised in a few days.

The following named gentlemen are the directors:

Messrs. S, F. Gale, Allen Robbins, L. H. Burch, J. Van Nortwick, John Frink and Edwin C. Larned, of Chicago; Benj. Hackney, and L. D. Brady, of Aurora; J. W. Brooks, and James F. Joy, of Detroit; and Gilbert C. Davidson, of Albany, New York.—S. F. Gale is president of the company.

New-York.

Buffalo and Lockport Railroad.—This road is to be built as a branch of the Rochester, Lockport and Niagara Falls railroad. The contract for the building has been awarded to Messrs. Parmelee & Clyde, who are to have that portion extending from the line of the Rochester and Niagara Falls road, three miles from Lockport, to Tonawanda, finished by the first of November next. From Tonawanda to Buffalo the track of the Buffalo and Niagara Falls road will be used next winter. Messrs. Parmelee & Clyde are capable men of large experience, and will undoubtedly have the road in running order in the time specified. The stock for this road was taken in one hour.

Ohio and Mississippi Railroad.

We learn that a company under the firm of Sanger, Camp, and Co., has entered into contract with the contracting parties of the Ohio and Mississippi railroad, to build their entire road from Vincennes on the Indiana line, across the state of Illinois to St. Louis. This company is to survey, locate and build the entire road ready for the cars—a distance of 140 miles. The firm is composed of Sanger and Co., of St. Louis, and Col. Irvin Camp, William Kelley, Wilson King, M. W. Gallagher, and Wm. Truesdail, Esqrs., of this city. Col. Camp is an experienced engineer, and Messrs. King and Kelley have had much experience as contractors on our railroads and public works. Mr. Gallagher, is collector of this port, and a gentleman of undoubted enterprise and business capacity. Our friend Truesdall, who has doubtless done the talking part in this contract, is an experienced railroad operator, having seen much service on railroads at home, and also on the great Panama railroad in New Grenada. Altogether, if the St. Louis branch of the firm is as good as the Erie, the president and directors of the Ohio and Mississippi railroad company have been truly fortunate in their contractors.—*Erie (Pa) Observer.*

North Carolina.

Raleigh and Gaston Railroad.—A special meeting of the stockholders of the Raleigh and Gaston railroad company was recently held at Henderson, to take into consideration the propriety and expediency of authorising the president and directors to negotiate a loan not exceeding $100,000 for the purpose of equipping the road with the necessary Locomotives, Coaches and Cars, etc., and connecting this road with the North Carolina railroad.

The president and directors make their report, as also the superintendent of the road, showing fully the present condition of the work, state of the finances, etc.; whereupon the stockholders, by a unanimous vote, authorized the proposed loan on such terms as the president and directors might think proper.

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stand without a rival.

Naylor & Co's Steel for sale from Stock, and orders received for importation.

Also orders taken for *J. Martin & Co's* well known "Vickers" files.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

LOW MOOR

BOILER PLATES; the best article that is made for Steam Boilers and Fire Boxes, for sale by WM. BAILEY LANG, 9 Liberty Square, Boston.

To Contractors.

CENTRAL OHIO RAILROAD.

THE concluding day for the reception of bids for Grading and Masonry of the forty-one sections of this Road, extending from a point five miles east of Cambridge, towards the Ohio River, will be postponed from the 15th to the 20th instant. by which last named day, bids will also be received for the remainder of the line to Wheeling—embracing some eight or nine sections, and making in the aggregate forty-nine or fifty sections.

Bids for the *Whole Line* as well as by sections, for Cash alone, or Cash and Stock, will be duly considered.

ROBERT MCLEOD,
Chief Engineer.

Zanesville, August 2nd, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work.

LEWIS TROOST,
Chief Engineer.

New York, August 3d, 1852. 5t32

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Directors,
GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,
31st July. 1m

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Notice to Contractors.

CHICAGO AND MISSISSIPPI RAILROAD.

SEALED PROPOSALS will be received at the office of the company in the city of Springfield, Illinois, until SATURDAY, August 14, for the GRADING, MASONRY, BRIDGING, and CROSS TIES of that division of this road which extends from Springfield to Bloomington, Illinois.

The distance is about sixty miles, and the route traverses the most elevated and healthy portion of the State.

The line is divided into sections of about two miles each, and the work is to be commenced without delay.

Payments for work and materials will be made in cash.

Profiles and plans may be seen and blank forms obtained at the office of the company in Springfield and Bloomington, Illinois, where any information will be furnished by the Engineer Department.

Satisfactory proof of responsibility will be required from those proposing for the work.

The subscriber will be in New York, at No. 68 Warren-st., up stairs, over Hudson River Railroad Office, until August 3; and will be prepared to exhibit profiles, plans, etc., and give information to such as prefer to offer proposals in this city.

New York, July 15, 1852.

OLIVER H. LEE,
Chief Engineer Chicago and Miss. Railroad.

To Contractors.

CENTRAL OHIO RAILROAD.

PROPOSALS will be received at the office of the Central Ohio Railroad Company, in Zanesville, until the 15th day of August next, for the Graduation and Masonry of 41 Sections of the Road, extending from a point five miles east of Cambridge, to within about six miles of the Ohio River, near Wheeling, Virginia.

The work upon the greater portion of this Division is very heavy, including several Tunnels and a large proportion of Masonry.

Bids proposing to receive a per centage of payments in the Stock of the Road, are desirable; though a favorable consideration will be given to proposals for entire cash payments.

Specifications may be obtained at the Engineers Office in Zanesville, and also in Cambridge and Wheeling, on and after the 21st inst.

ROBERT McLEOD,
Chief Engineer.

July 15th, 1852.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August	15th—At	Quitman, for line in Clarke County.
"	25th—At	Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September	5th—At	Macon, for line in Noxubee County.
"	15th—At	Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
"	25th—At	Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
"	30th—At	Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon.

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3101, 3102 and 3103, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK 'IM IN," containg about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc, all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES. (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GE RGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

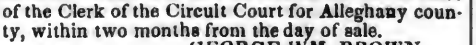
Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

To Contractors.



SEALED PROPOSALS will be received by the undersigned, at the Post Office, in Easton, Pennsylvania, until 7 o'clock A. M., of the 10th August, prox. for the Grading and Masonry of fifteen miles in length of the Belvidere Deleware Railroad, from Milford to Phillipsburg, opposite Easton.

The line will be ready for inspection, and profiles and specifications shown at the offices of the resident Engineers, in Millord and Phillipsburg, on and after the 3rd August.

Good references will be required of bidders unknown to the undersigned.

ASHBEL WELCH, Engineer B. D. R. R.
Lambertville, July 19th, 1852.

Nashua Iron Co.,

NASHUA, NEW HAMPSHIRE.

MANUFACTURERS of Bowling, Pembroke and Lowmoor Locomotive Tires, Engine Frames, Crank and Car Axles, Wrought Iron Shafting of all sizes, Shapes of all descriptions used in Machine shops and upon Railways.

FRANKLIN MONROE, Treasurer.
Messrs. Fullerton & Raymond, Agents, Boston.
" Raymond & Fullerton, " New York
Orders received by the Treasurer at Nashua, N.H. or by the Agents in Boston or New York.

RAIL ROAD CAR FINDINGS,

BRIDGES & BROTHER,

64 Courtlandt Street, N. Y.

WHEELS AND AXLES,

JAWS, BOXES, AND CASTINGS FITTED.

WROUGHT NUTS, BOLTS AND WASHERS,

ENGINE AND CAR SCREW BOLTS, all SIZES,

COACH LAG AND TELEGRAPH SCREWS,

LOCOMOTIVE ENGINE LANTERNS,

From the BEST Manufacturers and at their Prices.

CAR, HAND and SIGNAL LANTERNS.

COTTON DUCK, FOR CAR COVERING,

of any required width to 124 inches.

ENAMELED HEAD LININGS,

The best article made in this country.

PLUSH, and CURLED HAIR.

HAND CARS AND BAGGAGE BARROWS.

PASSENGER, FREIGHT-CAR, AND SWITCH LOCKS, DOOR KNOBS AND BUTTS.

BRASS and IRON WOOD SCREWS.

BRASS AND SILVER PLATED TRIMMINGS

For Windows and Seats.

VARNISH, COACH JAPAN, AND GLUE,

Paints, Varnish and Glue Brushes.

SILVER PLATED AND WHITE METAL LETTERS.

ENGINE and SIGNAL BELLS.

ANTI-FRICTION, OR BABBITT METAL.

PORTABLE FORGES & JACK SCREWS.

HEMP PACKING, AMERICAN, RUSSIA AND ITALIAN.

CONDUCTOR'S BADGES AND BAGGAGE CHECKS.

Iron Bronzed and Brass Hat Hooks.

VENTILATORS AND WHITE METAL RINGS,

And all other Articles pertaining to Cars.

ALBERT BRIDGES. { Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES. { Late Davenport, Bridges & Co., Fitchburg, Mass.

Patent Hose.

DAY & MCMULLEN'S PATENT HOSE.—THE TRIAL made of this incomparable Water Hose, for two years past, has fully demonstrated its superiority. Orders from Railroads, Factories, Water Companies, and others, solicited. Every piece warranted to give satisfaction, by the Patentee and Manufacturer. The following is one of the many certificates, and published, to show the estimation from actual use:—

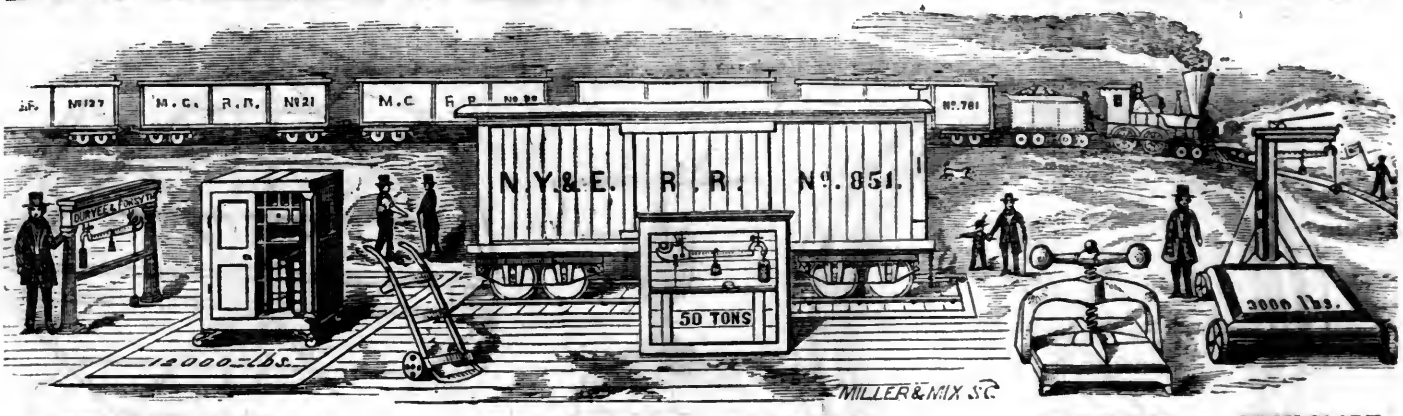
JERSEY CITY, Dec. 17th, 1851.

HORACE H. DAY, 23 Courtlandt st. N. Y.

DEAR SIR I take great pleasure in stating to you, in answer to your inquiry in regard to the India Rubber Hose furnished by you for the New Jersey Railroad and Transportation Company, that we have found it of the very best description, and to answer much better purpose than either leather or canvass. It is not only more durable, but in the end, the most economical. We have now rubber hose on some of our locomotives, that we purchased of you two years ago, which has been in constant use and is still as good as ever, and I have found your four-ply to stand pressure of 150 lbs. to the square inch.

Yours, very respectfully,
JAMES McFARLAND, Superintendent
Motive Power for N. J. R.R. and Trans.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co., " Chicago, Ill.
Crawford & Reynolds, " Cleveland, Ohio.
Joseph E. Elder, " St. Louis, Mo.
Byram, Miller & Shreve, " Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,
New York and Harlem,
New York and N. Haven,
Sandusky, Mansfield and Newark,
Indianapolis and Bellefontaine,
Syracuse and Utica,
Columbus and Xenia,
Lexington and Frankfort,
Hillsboro' and Cincinnati,
Greenville and Miami,
Cayuga and Susquehanna,
Rome and Watertown,
Rutland and Washington,
Erie and State Line,
Rochester, Lockport and Niagara Falls,
Cleveland and Columbus,
Michigan Central,
Mad River and Lake Erie,
Paterson and Hudson R.,
Cincinnati, Hamilton and Dayton,
Buffalo and Rochester,
Rochester and Syracuse,
Louisville and Frankfort,
Chicago and Galena,
Dayton and Western,
Central Ohio,
Chemung,
Illinois Coal Company,
Buffalo and State Line,
Cleveland and Pittsburg,
Michigan Southern,
American Express Co.,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

TO MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

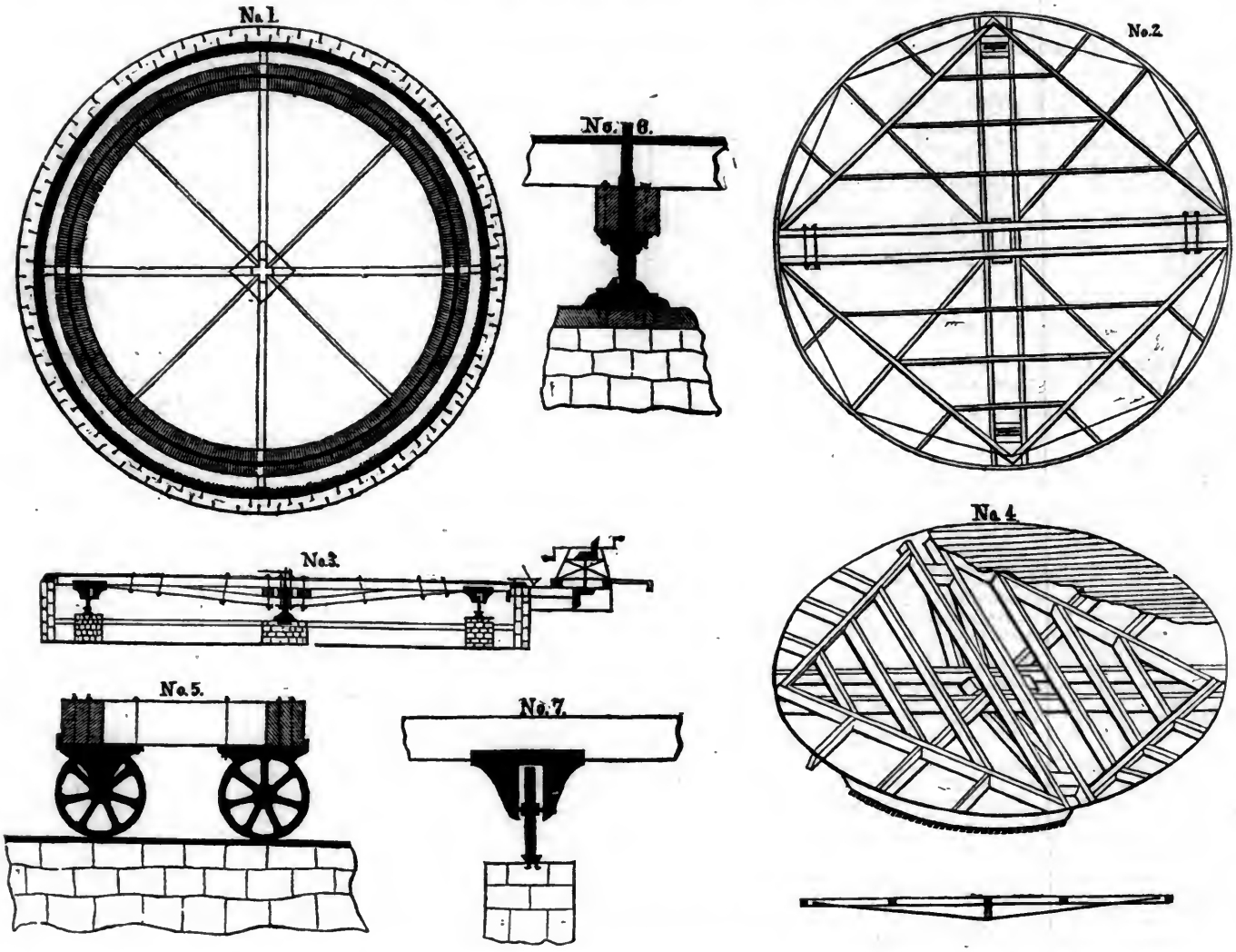
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Com panies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of b eing turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Tra ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montre al at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.

Do. for Bridging, of great strength.

Flat Rock, Boiler and Flue Iron, rolled to pattern.

Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 33] SATURDAY, AUGUST 14, 1852. [WHOLE No. 852, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Quartz Mining in California, by D. K. Minor.497
Mobile and Ohio railroad.....520, 515
New Orleans and Opelousas Railroad.....516
Steamship Line between England and Canada.517
Lackawanna and Western Railroad.....517
Railway Traffic of the United Kingdom.....518
Lake Superior Copper Region.....518
Northern Cross Railroad.....518
French Railways.....518
Quebec and Halifax Railroad.....520
Stock and Money Market.....521
Camden and Atlantic Railroad.....522
Railway Accidents.....522
Syracuse and Binghamton Railroad.....523
Rutland and Burlington Railroad.....523
New Orleans, Jackson and Great Northern R.R.524
York and Cumberland Railroad.....524
Baltimore and Ohio Railroad.....524
Nashville and Cincinnati Railroad.....524

American Railroad Journal.

Saturday, August 14, 1852.

Quartz Mining in California.

H. V. POOR, ESQ.,

Dear Sir: In compliance with my promise, I now proceed to give you the result of my observations and inquiries in California, in relation to quartz mining.

I arrived at San Francisco in July, 1849, but my attention was not called directly to the subject of quartz mining until June, 1851, though I had frequent opportunities, while residing in San Francisco, to read and listen to the reports of those who were engaged in the business, or had visited the mines.

The first discoveries, to any considerable extent, of gold bearing quartz, were made in 1849, in what is known in California as the "Southern Mines," in the Mariposa region, lying east of the *San Joaquin river*, and south of *Stockton*—but it was not long after these discoveries were made, before others were also made on the Moquelumne and Cosumre rivers, in the "*Central* mining region;" and soon after in the "Northern mines," or in the *Nevada* region, between Bear river and the Youba.

At first there were few people who had any confidence in the reports made, in relation to the discovery of gold in the quartz; yet there are *few* men so firmly fixed in their principles of unbelief that they will not be converted when the evidence is made plain to the senses of *seeing* and *feeling*—and thus have *many thousands* become warm advocates of the theory, that the *quartz* rocks have furnished the *mountains* the *canyons* the *gulches* and the *rivers* of California with their rich stores of gold, from which so many have made large drafts during the past few years. Indeed the most skeptical, who sought industriously for truth, became firm believers, and in their turn "*prospectors*," until it is now well understood that, from the extreme south to the north—wherever there are *placer diggings*—the quartz is not far off; and there is scarcely a month in the year that some new and rich development of gold bearing quartz is not made, though it is not unfrequently that much time and money are lost, in seeking for "*rich veins*"—while others, not looking for them, accidentally stumble upon what makes them rich in a day. Indeed accident seems to have more to do in these discoveries, than science or judgment.

The first machinery for working quartz was erected in the Mariposa district in ————, by Stockton & Aspinwall, and by Palmer, Cook & Co., and others, upon the plan of Commodore Stockton—or "Stockton's mill," as it is usually termed—several of which were sent out to California, and put in operation.

These mills were, I believe, originally designed for the gold mines of Virginia and Georgia, where they may have been very successful; but they were, unfortunately, found entirely unsuitable, under the circumstances, for California; as it will readily be seen by the following statements:

The Stockton mills sent to California, were designed, or rather were suitable, to be driven by an engine of *eight* to *ten* horse power—though they might be larger—and therefore competent to crush from eight to ten tons per day. We will say *ten tons*. It will probably require to *quarry* and haul ten tons of rock in *Virginia*.

16 men—slaves, of course—at.....	$1 00	$16 00
2 pair mules.....	1 50	3 00
2 cords wood.....	2 00	4 00
2 Feeders.....	1 00	2 00
1 Superintendent	4 00	4 00
1 Assistant	2 00	2 00
1 Engineer.....	2 50	2 50
1 Assistant do.....	1 50	1 50
1 Mechanic	2 00	2 00
Sundries, repairs, etc.....		13 00
Thus we estimate the expense per day at		$50 00

—and we will suppose that the rock will yield *one cent per pound*—ten tons at $20 per ton—or $200—per day—less expenses $50—gives a net return of $150 per day, which may be considered a good business in Virginia.

Now let us suppose a mill, of the same descriptions, to have been erected in the Mariposa district in California in the spring of 1850; and at the distance of 200 miles interior from San Francisco—to which place you must go for every repair which cannot be made by an ordinary smith or carpenter—when common laborers got from $8 to $10 per day, and mechanics and machinists from $10 to $16. We will employ the same number of men in California as in Virginia, and work the same number of tons of rock, viz:

16 Men at $8.....	$128
2 pair mules, $8.....	16
2 cords wood, $6.....	12
1 Superintendent	20
1 Assistant.....	12
1 Engineer	16
1 Assistant	12
1 Mechanic carpenter.....	12
2 Feeders, at $8.....	16
Sundries.....	30
Here we find that the expense is.....	$274

per day, to work ten tons, which, at one cent per pound, does not pay expenses by seventy four dollars per day—and even at *two* cents per pound we get but $400, and only $126 over expenses, which is not enough in California. Many persons who purchased and erected these mills, were sadly disappointed in their *ability* to crush the rock. Where they expected to crush fifteen or twenty tons a day—according to representations made—they crushed perhaps *six*, *eight* or *ten* tons.

Most people, indeed, who have erected quartz mills, have *over* estimated the amount of work to be performed; and it is a common thing to take a large day's work, upon rich ore, and then base the operations of the mill, for three hundred days in the year, upon that day's work; but the safer plan is, in my opinion, to allow *one* day in *each* week for repairs, and five days for work, and then take a *medium* day's work as a basis for calculating results; at least such is decidedly the safer plan.

It must be borne in mind, also, that in California, where reports are constantly circulated of "*new and rich diggings*,"—where men can make "*twenty dollars and upwards a day*," it is no easy

matter to retain men steadily in employ, even at the rates allowed them in this estimate; and thus it is, that many of the early efforts to work quartz rock, by *inexperienced men* with *inefficient machinery*, were unsuccessful—and the opinion became prevalent, that the "*quartz business was a humbug and a failure.*"

In many instances those who engaged in this business embarked all their capital and their credit also in the enterprise, and of course when it was unsuccessful, they were unable to go on and introduce such machinery as they had learned by experience would be successful; whilst others more fortunate in means, or with greater financial skill and enterprise, managed to make material alterations and improvements in their mills and power, and are now doing a very successful business.

I was at Nevada and Grass valley on the last day of April and first days of May last, and visited *thirteen* mills, most of them in operation, and several of them doing, as I have good reason to believe, a very profitable business.

There is scarcely a mill in that region, that has been in operation six months, that has not undergone *one* or *more* material alterations—some of them indeed have been completely remodeled, as their managers have learned experience by practice, and they are now realizing the benefits resulting from their experience, their perseverance, and their enterprise.

It is very probable, indeed I am quite sure, that a mill might be erected at Grass valley for $25,000 which would crush 30 tons of rock per day, five days in each week through the year, at a cost not exceeding $450 per day as per the following estimate.

It must be borne in mind, however, that labor of *all kinds*, and provisions, can *now* be had much cheaper than in 1850, when the first quartz mills were erected in Mariposa.

To work 30 tons per day will require:

Fifty men to provide the rock at.....	$5	$250
Five pair mules.....	6	30
Five cords wood.....	5	25
Superintendent	20	20
One engineer.....	10	10
Two assistants.....	8	16
Two firemen.....	5	10
One carpenter and one blacksmith.....	10	20
Amalgamator	10	10
Five feeders.....	5	25
Sundries.....		34
Here we have an estimate of.....		$450

for crushing 30 tons per day for five days in each week, which at *one* cent per lb. gives $600, and at *two* cents $1200 per day, giving a net profit of $150 or $750 per day, as the rock may yield *one* or *two* cents per lb, and as the rock increases in value, so the net profits will increase—but I consider that it is *quite safe* to make my estimate upon two cents per lb.

There are several mills in Grass valley working at this time about 30 tons per day, and before the year closes, I believe there will be several crushing over 50 tons per day.

There has been another very *serious* difficulty in the business, which was not anticipated by the first operators.—It was thought by most people, that after they had found a vein of gold bearing quartz, and had got a mill erected which would crush ten or twelve tons per day, there was *no further trouble* to be apprehended. It was very soon found that their mode of "amalgamation" or of *separating the gold from the quartz* after it was pulverised, did not obtain all the gold, and in some cases not more than *one-half* or *one-third* of it, as was found by assaying the "tailings," as the fine quartz is called, after it has passed through the mill. Of course this was an unexpected difficulty to be overcome—a difficulty which has prostrated many enterprising men, who had got deeply in debt for their mills, expecting liberal discounts from their "banks" of quartz, when their notes became due—but when the proprietors presented their drafts to their superintendent, his reply was "no funds in hand" and therefore their notes for machinery, labor etc., could not be paid at maturity.

But that difficulty has been to a considerable extent obviated by improved amalgamators, and most assuredly there will soon be important improvements made in this department of working quartz, as there is at this time a great amount of *mind and capital* directed to the subject. It is a matter of vast importance to the community, equal at least, to that of the *locomotive* in 1832, and it is sure to meet with equal success in a much shorter period.

Indeed before I left California an improved method had been introduced into several mills, by which the amount of gold saved, as I was informed, was in *one* instance as 2 ounces and 11 pennyweights by the old method, to 7 ounces 6 pennyweights by the new;—working the same rock and conducting the work of three stamps into each mode of amalgamation.

I have also heard from various sources since my arrival here, of several new—*and each one* "*the best possible*" mode of saving the gold—but as *experience only, on a large scale* can satisfy me and other practical men, of the value of new methods, I shall do all in my power to aid in their having a fair trial.

When at Nevada and Grass Valley, on the first of May last, I visited thirteen mills, and examined them with care, taking notes in relation to all of them, which I might give entire, but I prefer to give only brief extracts in relation to three mills, viz: the "*New Helvetia* Company," the "*Grass Valley Quartz Mining* Company," late John A. Collins & Co., and the "*Gold Hill* Company."

The first of these mills is under the management of Dr. Bacon, a gentleman of experience in the Georgia gold mines; it has 8 stamps 8 inches square, weighing 450 lbs. each, driven by a ten-horse power engine, crushing from 8 to 10 tons per day of 24 hours, and taking out gold to the amount of from $600 to $1200 per day, according to the quantity and quality of the rock worked. I was informed, when there, by Dr. Bacon himself, that they had taken out, the week previous, $7,256, or over $1200 per day—while there expenses could not have reached $300 per day—thus giving a clear profit of over $900 per day; but this was, I imagineing, more than an average yield. They probably worked harder than usual, as they had recently purchased a part, 6-11ths, of a very rich vein at $38,000, and had a large amount of money to pay in a few days; and they worked hard to get the amount out of the vein in time to meet the payment; in which they were successful, as I have been informed since my arrival here; and I have also been informed that after taking out over $60,000, the parties sold out their interest for $72,000, which shows that there is little apprehension of deficiency of either rock or gold.

The second mill to which I shall refer is that of the Grass Valley Quartz Mining Company, formerly owned by, and better known as J. A. Collins & Co.'s mill—now under the management of Mr. J. L. Crossett—which was first put at work in May, 1851, with *five* stamps 8 by 14 inches square, weighing 700 lbs. each. The number of stamps has since been increased to *ten*, and they are driven by an engine of about 30 horse power, and they will crush 30 to 35 tons per day. Mr. Collins says they can crush 40 tons per day, but I prefer to give what may be considered the *usual* working business of the mill. They *have* taken out over $3,000 from the work of 24 hours, but that was probably an uncommon yield, yet the regular work of this mill is over 25 tons a day. Mr. Collins, as I understand, sold out his interest in this mill last fall, and organised another company called the *Manhattan* Quartz Mining Company, and has purchased and sent out machinery of great power, which he intends to have in operation by the first of January next, thus proving that his confidence in working quartz is by no means diminished.

The *third* mill which I shall refer to, now in operation, is called the "*Gold Hill Company's Mill*," an exceedingly well arranged mill, with *eighteen stamps* 6 inches square, weighing about 600 lbs. each, driven by an engine of about 30 horse power, and crushing, as I was informed, on an average, over 25 tons per day, said to yield from $30 to $60 per ton. But, as I was a stranger, those in charge seemed not disposed to be communicative, and I, therefore, obtained very little information except what I got through the medium of the eye and my *pocket rule*; yet, I was favorably impressed with the mill. These three mills are all of them, as well as *several others* that I visited, doing a profitable business; while others, for want of *power* and *experience*, and means to improve their machinery, are not doing as well.

I have thus far spoken mainly of what has come under my own observation, and of what I have learned by enquiry—upon which I placed confidence—in relation to the working of quartz up to this time, basing all my calculations upon *one* and *two* cents per pound.

It should be *distinctly* recollected, however, that there are veins now worked which *average* 3, 4, and even 5 cts. per lb. I have endeavored likewise to show the importance of improved and more powerful machinery for crushing quartz rock—and I have reason to believe that, within a year from this time, there will be several mills in operation as much superior to the *best now* in use, as they are superior to those first put up in California. If so, then it will be no uncommon thing for them to crush *one hundred tons* in 24 hours.

With mills of power sufficient to crush *fifty* to *one hundred* tons a day, and with improved *amalgamators* which will obtain *all* the gold, when the rock is pulverised, we may confidently anticipate the most satisfactory results from working the quartz veins of California.

But, possibly some of your readers may enquire if there is rock in sufficient quantities to keep *many* mills, of this capacity, in operation for any considerable length of time. In reply to this enquiry, I will give the opinions of men of science and research on the subject.

Professor Blake, who has devoted much time to the subject, says:

"There can be no doubt but that the quartz veins of California are capable of furnishing a supply of gold, which it will probably take centuries to exhaust, and the amount of which is far beyond the limits of calculation, at least with our present data. Scattered over a belt of land, ten miles broad, and running the whole length of the country, north and south, these veins are evidently deposits of immense riches. Setting aside the extraordinary

yields, where some huudreds of thousands of dollars have been obtained from holes of a few feet square, we still have hundreds of miles of veins from which ore can be obtained, yielding from two to six cents to the pound, and from which a powerful machine can extract one or two thousand dollars a day. When these veins are exhausted there will remain many others which will be profitably worked, when labor shall be cheaper. *There can be no doubt but that quartz mining is destined to be the most permanent source of gold in this country*; and it will not be many years before it will attract that attention which as an investment for capital it evidently deserves. * * * * *

He also says that—

"The richest veins of quartz that have yet been worked to any extent, are those of Carson creek and Grass valley near Nevada. At the former of these places the gold has been found not only generally disseminated through the rock, but also in large masses some of which have weighed as much as 18 pounds. From the most reliable information I could collect on the spot, I believe as much as $300,000 have been taken out of one hole of 15 feet on the vein, and which has not been sunk lower than twelve or fifteen feet. * * * *
At Grass valley very rich quartz has been found. In many specimens that I have seen the quartz might have been said to be literally imbedded in the gold, rather than the gold in the quartz."

Professor *Spiekcer* says—

"The California gold mining region proper, that is to say, where active operations are being carried on, extends, at present, from the Mariposa river on the south, to the Klamath river, the boundary line of Oregon on the north, running in a south-east and north-west course, a distance of nearly five hundred miles, and consists of the spurs and foot range of mountains of the Sierra Nevada."

Here we may safely rely upon an ample supply of gold bearing quartz, for all the mills which are likely to be erected during the present generation.

The district of *Volcanoville*, in Eldorado county, where I have been residing during the past year, is yet scarcely known abroad as a *quartz* region—as it required considerable time to develope its true character; but it may, in my opinion, be considered as one of the richest, and most promising localities in the State; some of the most convincing evidence of which may be examined by those who will take the trouble to call on me at the Howard Hotel. D. K. MINOR.

New York, August 10th, 1852.

Public Lands of the United States.

The number of acres of the public lands in the States and Territories unsold and undisposed of on the30th of June, 1851, was 1,400,632,305, distributed as follows:

States and Territories.	Acres undisposed of.
Ohio	302,195 62
Indiana	1,049,680 91
Illinois	8,219,628 22
Missouri	26,635,589 32
Alabama	15,486,849 23
Mississippi	8,849,165 11
Louisiana	13,579,348 47
Michigan	20,011,134 77
Arkansas	22,303,746 72
Florida	32,863,518 66
Iowa	25,661,550 27
Wisconsin	24,506,294 83
California	120,477,840 00
Minnesota Territory	50,075,931 85
Oregon Territory	206,349,333 00
New Mexico Territory	127,383,040 00
Utah Territory	13,589,013 00
Northwest Territory	376,040,960 00
Nebraska Territory	87,488,000 00
Indian Territory	119,789,440 48
Total	1,400,632,305 00

At the lowest government price, $1 25 per acre, these lands amount to $1,750,790,380.

Mobile and Ohio Railroad.

CIRCULAR OF THE BOARD OF DIRECTORS.

Mobile, August 2, 1852.

The Directors of the Mobile and Ohio Railroad Company, having made provision for the grading, masonry, bridging and other local work of the entire line of this road, from Mobile to the Ohio river, (with the exception of a short link in North Mississippi and Tennessee, where subscriptions are sufficiently advanced to ensure the necessary am't before the first of October next,) propose, in pursuance of their original policy, to offer the six per cent bonds of the company, in London, having from twenty to thirty years to run, to the amount of five million dollars, or as great a portion thereof as may be required for the purchase of iron, equipments, etc., sufficient to place the whole road in full working operation.

Preparatory to entering the market for the first time as borrowers, and for the better understanding of the nature and value of the securities which are to be presented to the consideration of foreign capitalists, as a basis of credit; the following brief exhibit of the origin, progress, resources and prospects of the company is submitted:

In the month of February, 1848, favorable charters were obtained from the States of Alabama, Mississippi, Tennessee and Kentucky, for the construction of a railway from Mobile, on the Gulf of Mexico, to a point at or near the mouth of Ohio river, by a company, under the corporate title of "THE MOBILE AND OHIO RAILROAD COMPANY." In May thereafter, books for subscription were opened at Mobile, and a sufficient amount of stock having been taken, the company was organised, June 7th, 1848, by the election of its first board of directors.

The first step of the directory, was the institution of a thorough instrumental survey of the country to be traversed by the road. Such a survey was commenced in October, 1848, under the immediate direction of John Childe, Esq., Engineer in Chief, with an efficient corps of assistants; was finally completed in the Autumn of 1849, and the results fully reported to the stockholders at their second annual meeting, July 5th, 1850.

The survey developed the fact, that the country, from Mobile to the mouth of the Ohio river, was eminently adapted for railroad purposes; presenting no natural obstacles in the way of a cheap, direct and level highway between the termini; crossing no navigable streams, but running parallel with the rivers, and upon dividing ridges elevated and beyond danger from freshets. Notwithstanding the favorable report of the Chief Engineer, and while the great feasibility and importance of the undertaking was everywhere admitted; yet the magnitude of the work, its ascertained cost, the apparent remoteness of its accomplishment, and the general indifference of the people of the interior, not then awakened to a spirit of railroad enterprise, rendered the task of accumulating means and confidence a work of time and difficulty.

The directors, however, well assured of the extraordinary merits of the undertaking, determined to proceed with such means as they could command, and accordingly thirty three miles of the road, extending north from Mobile, were placed under contract, and the work of construction commenced. Meanwhile, application was made thro' the State Legislatures, and by the company, to the Congress of the United States, for a grant of government lands, to aid in the construction of this road. That body, promptly recognising in this enterprise a work of high public consequence, forming in conjunction with the Central road of Illinois, a grand national thoroughfare, donated to the States of Alabama and Mississippi, alternate sections of the public lands, for six miles in width, on each side of the road traversing those States. This munificent donation was accepted by the States, and by acts of their respective Legislatures, transferred to the use and benefit of the stockholders of the company. The effect was most auspicious. Public confidence, before withheld or wavering, became decided in favor of the ability of the company to carry through, with this aid, the work which they had undertaken; and the efforts of the directors to obtain stock were promptly responded to by liberal subscriptions. They have been thus enabled to take up the whole as an unit; to secure the means for the local work; and to perfect their plans for the simultaneous and rapid preparation of the roadbed throughout its whole extent.

The line is now finally located, and after a resurvey and carefully revised estimates upon the actual location, the entire cost of the road, including superstructure 65 lbs. per yard, depots, station houses, machine and repair shops, equipments, etc., etc., ready for full and active working operation, is estimated by the chief engineer at $9,750,000, or adding to the sum for extra contingencies, in round numbers, $10,000,000.

The resources in the hands of the directors, for construction, may be stated as follows:

Thirty-three miles completed by Mobile subscriptions, costing	$500,000
Real estate tax in Mobile, two per ct. per annum for five years (assessment $11,500.000 for 1852	1,100,000
Proceeds sales village lots at 13 and 33 mile stations	50,000
Private and county subscriptions in Alabama and Mississippi, (county subscriptions payable from special taxes each year	1,305,000
Do. do., Tennessee and Kentucky	700,000
	$3,655,000

Making the total resources thus far available for the construction of the road bed $3,655,000. In addition the entire right of way has been obtained for the road—in most cases having been freely given, without cost to the company; while for a nominal sum a large and valuable depot ground—forty acres in extent—has been secured in Mobile, together with a valuable water front and extensive and commodious wharf privileges at the north and south parts of the city.

Beyond the means thus provided, and subscriptions now in progress, the sum of five million dollars will be ample to cover the entire construction account, and place the road in complete and profitable operation. An act of the Legislature of Tennessee, at its last session, authorises the endorsement by that State of the company's bonds for eight thousand dollars per mile, upon the portion of the Mobile and Ohio road passing through Tennessee. This endorsement will amount to about one million dollars.

The purchasers of the bonds of the company will receive as guaranty and security for their payment at maturity—

(1.) A first and only mortgage lien upon the whole road of five hundred and seventeen miles in length, [including the branch of 23 miles to Tennessee river,] together with all its appurtenances, machinery, fixtures, etc., costing say ten million dollars.

(2.) An endorsement by the state of Tennessee upon one million dollars of these bonds.

(3.) A first and only mortgage lien upon one million acres of Government lands, donated in aid of the road, and located within fifteen miles of the track in the states of Alabama and Mississippi, worth, when the road is completed, an average of three dollars per acre, or three million dollars.

An examination of the peculiar features and characteristics of the route of the Mobile and Ohio railroad, will at once establish its value as an investment, and its sounduess as a security to the extent applied for.

1. It is, and will be for all time, the shortest practicable route between the Ohio river and the Gulf of Mexico, being only eleven per cent longer than an air line.

2. It will be a north and south line, crossing the parallels of latitude, and extending by its connection with the Central Illinois line, from one extreme of the Union to the other, crossing over twelve degrees of latitude, and the consequent variety of climate and production.

3. It will be nearly a straight road, having few curves, and those of large radius; with a maximum grade moving south, not exceeding thirty feet to the mile, and going north not exceeding 40 feet to the mile; thus giving it a higher capacity for cheap, certain, speedy and heavy freight transportation than any other long road now constructed.

4. The great length of this road under a single management; the absence of large streams upon the route, rendering it less liable to disaster from high

water; the mild climate, and freedom from the action of frost; and other favorable circumstances, will combine to make its net annual income larger in proportion to the gross receipts, than is possible upon the best managed roads of the northern states.

5. Long lines of railway now in progress, east and west, will cross this road at various points, making it the most accessible and convenient route of transit to the Gulf for a vast area of country. One hundred and twenty miles north of Mobile the Alabama and Mississippi railroad will intersect the Mobile and Ohio road, forming westwardly a continuous line to Vicksburg, Mississippi, and eastwardly to Charleston, South Carolina. About two hundred miles further north, the Memphis and Charleston railway will also connect this road with Memphis, Tennessee, and the various lines eastward to the great thoroughfares of the Atlantic slope of the Alleghanies In north Mississippi, a branch diverging to Nashville, Tennessee, again divides north of that city into two important lines, extending to Louisville, Cincinnati. In Tennessee, one branch rests upon the Ohio, at Paducah, and another terminates on the Mississippi, at Columbus Kentucky, while the main stem to Cairo unites with the Central road to Illinois, and forms a connection with an extended network of railway, spreading over the whole western valley, and converging towards the Gulf, upon this great trunk line.

6. This road will pass, for one hundred miles over a heavily timbered country, abounding in lumber of excellent quality, for which Mobile is rapidly becoming a large market; and after leaving the forest, will strike one of the most fertile cotton regions of the south; again leaving which, it will enter the wealthy grain-growing districts of West Tennessee. The local traffic which will be furnished by the wealthy country immediately dependent upon this road for an outlet to the sea, will alone make it a profitable line for the stockholder.

7. The cost of the road will not exceed the estimates. They have already been verified in part by the completion of 33 miles of the work at $1655 per mile less than estimated, and the further contract of 55 miles, also at rates within the figures of the chief engineer; and from the abundance of provisions the coming year, now rendered certain by the favorable season, a fair prospect exists of making a greater saving upon the contracts soon to be offered.

8. The estimates of business and income are rather under than over the mark. They are based upon actual data of the products, commerce, population, etc., of the counties dependent upon the road; and are made by an officer of large experience, sound judgment, and thorough knowledge of railroad affairs, whose approximations heretofore have been found remarkably correct. In his official report to the directors, Mr. Childe estimates the net income of this road at 14¾ per cent upon its cost, and says: "From a careful examination of the country, its products, and present tedious and expensive modes of reaching the markets, I feel great confidence that the road will, in no case fall short of the amount of traffic and income stated above for the first year, commencing six months after the divisions shall be fully and respectively completed."

9. The road is now in active healthful progress. As stated, above 33 miles are completed and in operation; 55 miles more of the line is under contract for the graduation, masonry and bridging, upon which a large force is now actively employed; 179 miles further is advertised, and will be contracted before 1st October next; and the remainder of the line to the Ohio river at an early day thereafter. By the time the iron can be laid down in Mobile, the most forward sections will be ready to receive it, which will enable the company to bring the southern portion of the road into early profitable use, and provide for the first instalments of interest upon their loan from its earnings, thus retaining the principal nearly unimpaired for purposes of construction alone.

The directors feel satisfied that, for the reasons herein set forth, a mortgage upon the road itself would constitute an abundant and ample security for a loan of the amount required, namely $5,000,000, or about one half its cost.

But they propose to offer the additional guarantee of the credit of the state of Tennessee for 20 per cent of the entire loan, as provided by act of her legislature—a state whose securities (6 per cents) are now quoted at 109¼ to 110, or nearly ten per cent above par. This recognition by Tennessee of the Mobile and Ohio road furnishes evidence, to which the directors could add nothing, to increase its weight, or commend it more strongly to consideration.

Again, and in addition to these, the company holds large and valuable tracts of land bordering upon the road, the gift of the general government, containing about one million acres. A portion of these lands is covered with heavy forests of valuable timber; another portion embraces excellent cotton lands; and the whole is equal in fertility to the average of the country through which the road passes. These lands at the lowest valuation, will be worth, the moment the road shall be completed, fully one-half the amount to be loaned to the company, or one-fourth the entire cost of the work. If withheld from sale for a few years after the completion of the road, it is believed that a much larger sum may be realized from their disposal, estimated at 40 per cent of its cost, or four-fifths the amount of the company's proposed loan. A first lien upon these lands will also be given in trust to the bondholder, as security for the loan.

The basis of credit with the company has thus established, as briefly set forth in this communication,—into the correctness of which in all particulars the closest scrutiny is invited and desired—and the perfect and complete security that is offered, will, the directors feel assured, attract the attention of capitalists, and place the bonds of the company where they of right belong, upon an equal footing with the best first class securities offered in any market.

NOTE.—The county subscriptions mentioned upon page 3 are to be collected by special tax, levied for the purpose, and not by the issue and sale of county bonds. The Mobile tax it is now believed will yield nearly $1,500.000 in consequence of the rapid improvement in real estate, upon which the assessments are made.

Louisiana.

New Orleans, Opelousas and Great Western Railroad.—The Speech of Buckner H. Payne, Esq., at the Little Rock railroad convention, 5th July, 1852, has excited much interest among the friends of internal improvements at the South, particularly the citizens of New Orleans and St. Louis as well as those of the State of Arkansas, to whom it was addressed. After stating the fact of the organization of the New Orleans, Opelousas and Great Western railroad company, the subscription among the citizens of New Orleans of $750,000, the passage of a resolution by the City Council of New Orleans, under an act of the State, providing for raising a million and a half to be paid by taxation, and that the parishes through which the road runs are pledged to subscribe by a tax as well as private subscription an amount equal to that obtained in the city for its construction, Mr. P. expresses the confidence, that these means amounting to over four millions of dollars, will be found sufficient to build the main road from Algiers, opposite New Orleans, to the Texas line near the 32° of latitude, and a branch to the boundary between the States of Louisiana and Arkansas.

The proposed branch of the New Orleans, Opelousas and Great Western railroad across the State of Arkansas, through Camden and Little Rock on its way to St. Louis, would be 238 miles long, viz: From the Louisiana line to Little Rock 120 miles; thence to the Missouri line 118 miles; making, as stated. 238 miles of road to be built by Arkansas.—The country through which it will run is level, and the cost of its construction will not exceed $10,000 per mile, making the cost of the road $2,380,000. The length of a branch thrown off at the proper point to Memphis would not exceed seventy-five miles. This, at the estimated cost of your Engineer, Mr. Robinson, of $12,000 per mile, will make the sum of $900,000. Another branch taken off at Camden to Fulton on Red River, a distance of fifty-six miles by Langtree's map, will cost say $560,000, as it runs through a level country. Now adding these sums together, and we have $3,840,000 as the cost of the St. Louis and New Orleans road through Arkansas, with branches to Memphis and Fulton.

The construction of this road is compared with that of the "Central railroad" contemplated by the State of Arkansas both as it regards expense and probable advantages. The cost of the Central road from Memphis by way of Little Rock and Fulton to the Texas line is estimated at $4,656,000. Mr. Payne goes on to say—

Memphis and Fulton are the two main points of the central, and they are developed by the proposed branches. But this Central railroad gives no outlet for the mineral resources of your State. It will cost double that of the New Orleans and St. Louis road, and *it takes nothing to market.* Its effect will be, if first made, to destroy all your mineral wealth for years to come, because it will absorb all your present means for constructing railroads; and when constructed, this road will afford no outlet for your minerals, as they will not bear re-shipment, transhipment nor storage. The handling of them at Memphis will cost more than they can afford to pay; and as for cotton, instead of being taken *to* market, it is actually transported further *from* market. From southern and western Arkansas it is almost as near to New Orleans by railway as it is to Memphis. The cost of railroad transportation will be about the same to either; but the planter who ships to Memphis is 1200 miles from market, and has paid as much to get there as the one pays to get to New Orleans.

The trade of St. Louis and New Orleans, opened by this road to Arkansas, cannot be otherwise than of vast importance to her citizens. On the north it gives them all the supplies of Western produce and manufactures, and opens the whole agricultural and mineral resources of the State. On the south it gives them the market of New Orleans at all seasons, without subjecting them to the cost of transhipment, reshipment or storage, and consequently the avoidance of injury from rehandling of cotton and other merchandize. It will also relieve the small planter from the necessity of selling his few bales of cotton in an inferior market, by securing to him at less expense the advantages of the best. But besides these advantages, great as they are, it will open to Arkansas *the* market, and the *only* market she can have for her mineral wealth, and which must be dead and valueless to her unless this road is made, by which they can be brought to New Orleans. Any one acquainted with the uses to which her minerals must be necessarily applied, must also know that New Orleans is her only market. Iron for heavy machinery, for steamships and boats, for manufactures, for engines, for locomotives, for railroads, etc. etc., her lead, her zinc, copper, coal, granite, marble, slate, nickel and mineral paints, etc., *all must have their market in New Orleans.* This road, therefore, is essential to Arkansas. Without it her people can have no outlet that will justify the working of these mines. Crossing all your streams, as this road would at right angles, it secures to people the advantage of reaching it from above and below with their produce, at any time.

The following are laid down as the general principles governing railroad improvements.

First.—That all railroads beginning at any great commercial city on the seaboard never fail, if persevered in, to be good paying stock.

2. That they never fail to advance the commercial prosperity of that city.

3. That they advance the value of the landed estate or property of the city and country through which they pass from 100 to as high, in some instances, as 5000 per cent.

4. That no matter how far the road is extended, or how many branches it may have, the extension, and the branches, equally impart such value to the country developed by them.

5. That the company building such road, if pro-

perly managed, never break, nor the stock becomes valueless.

Witness: The railroads from Boston, New York, Charleston and Savannah, and the same in Europe.

Second.—As a general rule, all railroads not terminating on such commercial point, nor directly connecting with one that does, fail, and the company breaks, and the stock becomes of little value.

2. That they neither build up the town they terminate in, nor do they add much, if anything to the value of the property of the country through which they pass.

3. That the exceptions to this route are so few, or have some special local cause to account for it, that it might almost be said to be invariable, as it is certainly generally true.

Witness: All the New England railroads outside of Massachusetts—they broke—and their stocks became of little value until they formed connections either with Boston or New York, or both. Also, the Vicksburg and Jackson, the Natchez and Jackson, the Bayou Sara and Woodville, the Port Hudson and Clinton, etc., etc., here at home are living and *dead* proofs of its truth.

Third.—That the railroads of States distant from the great commercial seaboard market, but connecting with the main trunk leading to that market, are also good paying roads, and possess the power of enhancing the value of the country developed by them.

Witness: The New England roads since their connection with Boston, the Michigan, Northern Ohio, Indiana and Illinois railroads connecting with New York, etc., etc.

Fourth.—That where railroads have been constructed in violation of these principles, the companies have failed, and consequently if disregarded in future they will continue to fail.

Fifth.—That this is so well understood by all bankers of any note, that roads starting from, or directly connecting with such great commercial seaboard mart, receive moneyed facilities which are invariably denied now to roads where no such connection exists.

Sixth.—That all transhipments, reshipments and delays from physical causes must be avoided, and the road made as direct as possible.

Seventh.—That geographical and local causes, such as a wide extent of country aggregating from natural facilities the produce and merchandize upon a particular point *in the interior*, serve to make that point or city one from which railroads may radiate, and produce good effects upon the value of its property and that of the country through which they pass, if not counteracted by special local obstacles.

Eighth.—That where the principles here set forth have been disregarded, the country has been retarded in its growth and prosperity, and a distaste and aversion to railroad improvements engendered in the minds of the people in consequence.

Ninth.—That, as a general rule, it may be affirmed that all railroads not connecting directly with the great seaboard market of the country fail, and the company breaks.

Tenth.—That at the first all railroads must necessarily be *local* and *sectional*, but although local and sectional.

Eleventh.—That prudence demands and success requires, that, in order to obtain the greatest amo't. of benefit from railroads, they should be so located that their extension may bring about such connections with other roads, and other sections, as will convert *local* roads into *State* roads, and State roads into *international* and *national* roads.

Twelfth.—That railroads when so constructed, starting from the great city and market where the produce seeks its sale, and the country its supplies, never fail to add to the value of real estate of both city and country.

When the road is completed as far as the Texas line, that State proposes to grant a sufficient quantity of land to complete the road as far as El Paso on the Rio Grande. If this State is as liberal as it is said she will be, the road to El Paso will be built in five years. From El Paso to San Diego, the disance is 613 miles, this portion Mr. P. considers, will be built by Congress or else grants of land will be given by them to the company to aid in its construction. From El Paso to the Pacific there is but one mountain to cross in order to reach the waters of the Gila. The crossing of this mountain only 604 feet in elevation will be at the gold-copper mines discovered by the Spaniards in 1604, and worked since 1608 to the present time.

The importance of the two great termini of the St. Louis branch are glowingly summed up, and the people of Arkansas exhorted to help, for their own sake, in opening the means of communication between these great centres of trade.

By looking at the map of the United States, it will be perceived that New Orleans is the geogra phical and commercial seaboard centre, between the Atlantic and Pacific States. That from the crest of the Alleghanies on the east, to the crest of the Rocky Mountains on the west, and our *present* boundary on the north, there are 1,921,146 square miles, drained by the Mississippi river and its tributaries; of which New Orleans is the natural outlet and market. That the Mississippi river and its tributaries furnish an inland navigation *over* one hundred thousand miles long. It is an old saying and true, that we can *aid* nature, but cannot reverse her laws. It is equally true, that we can aid commerce, but cannot reverse its laws. Railroads can aid commerce, and can aid the Mississippi in her natural powers in bringing the commerce of this vast country to New Orleans; but to reverse it, *can never be accomplished*—if we are true men.

The hundreds of millions of gold produced by California: the rapid development of our possessions in Oregon; the great increase of the whale trade in the North Pacific; an increased trade with Mexico and South America; the absolute certainty of finally crushing the Chinese walls and overthrowing Japanese nonintercourse; and the opening of commercial relations with 700,000,000 of people who inhabit Asia, and the millions of the islands of the Pacific; and the bringing of that commerce to New Orleans for distribution among our people and that of Europe, or for exchange for our products and manufactures, will furnish to this road and its St. Louis branch a transportation and business unknown to the annals of railroad prosperity on this globe. The speed of railroad cars in England has reached fifty miles per hour. We can accomplish it on this road. The distance by railway from New Orleans to the Pacific is 1,643 miles. It can be passed in thirty-three hours! and from St. Louis in the same time. This renders it important that the St. Louis branch and the main trunk road should be conducted by one board of directors, connecting as it will with the Pacific trunk. This acceleration of transit, and the perfect security of life and property, it is certain that commerce would no longer undergo the expensive, tedious and perilous voyage of months around Cape Horn, nor even that of weeks across the Isthmus of Tehuantepec or Panama, but would pass this road, and pour millions into the country, as well as the coffers of the company. The voyage from Europe to New Orleans can be performed in ten or twelve days; from New Orleans to the Pacific in a day and a half; from the Pacific ports to China in ten or twelve days more; thus performing in twenty-five days, a trip that has usually heretofore taken from five to seven months.

If the price of passage were fixed at fifty dollars to the Pacific, (only *one-seventh* of the price now charged to California,) with 150,000 passengers annually going, it would produce $7,500,000; and as many returning, would make the income of the road $15,000,000, to say nothing of other business and way travel; and the whole road would not cost over $30,000,000 to San Diego from New Orleans.

Any man acquainted with the geography of our country must see that from the natural position of St. Louis that she has thirty times the extent of territory whence produce must aggregate upon her, than either of the others, and to which supplies are to be distributed. New York, with all her railroads and canals, including all the commerce of the lakes and that of Ohio, Indiana and Illinois, most convenient to the New York market, together with the whole of Michigan, has only 186,500 square miles of territory whose commerce is aggregated upon that city. while St. Louis has Missouri, Iowa, Wisconsin, Nebraska, Minnesota and that part of Illinois convenient to her, together comprising 279,959 square miles, besides the Northwest Territory, lying between Minnesota on the east, the Rocky Mountains on the west, Nebraska on the south and the British possessions on the north, estimated to contain 725,248 square miles more. This great extent of country of a million of square miles, must, from its inland position, have some point nearer to them than the seaboard market, upon which their produce must and will be centralized, and from which their supplies of groceries and merchandize must be obtained, and *that point is St. Louis.* From her very position, in reference to the country here mentioned, and her connection by railway with New Orleans, she is destined to be the *greatest inland city of this continent.* What the trade of such a city will be, connected with such a country and with New Orleans by railroad, is impossible to tell. We leave it for the imagination to picture. Such, however, is the place to which we wish, at the earliest moment, to see constructed a railroad from New Orleans. The travel and trade upon this road, to and from New Orleans, must surpass that of any road in the world.

Steam Communication Between England and Canada.

We yesterday had the gratification of announcing the completion of arrangements between our government, the city of Portland and the American and Canadian branches of the St. Lawrence and Atlantic railroad company, on the one hand, and a Liverpool firm on the other, by which the great desideratum of a regular fortnightly steam communication between that city and the St. Lawrence, has been secured—the vessels to ply to and from the St. Lawrence in summer, and the Atlantic terminus of the railroad, Portland, in winter. We are since indebted to Mr. Bellhouse, (late of Liverpool, and formerly of the firm of Budden and Venor of this city.) who will be the resident agent in this country of the line, for further particulars of the contract just completed by him with our government and the other parties mentioned above. The Liverpool firm, for whom Mr. Bellhouse acts, is, we find the house of McKean, McLarty & Co., the pioneers, we believe in the great Mediterranean steam navigation, and consequently, thoroughly experienced in all matters connected with ocean steamers. This firm in their Atlantic steam navy, will, we understand, be associated with other large capitalists, as well as with two of the most eminent engineers in Scotland, and two of the most successful builders of iron steamships in that country, so that their perfect ability to perform their part of the contract is placed beyond all doubt, whatever may be the result of the undertaking.—That the result will be highly favorable to all parties concerned, we can see no reason to doubt; more especially, now, that we have learned the very judicious terms to which the contractors have bound themselves, and which, if vigorously carried out, can scarcely fail to give them an immense business, both as to passengers and freight. As we stated yesterday, the vessels to be placed on the line are to be in speed and class equal to any afloat, and are not to be under 1400 tons burden. but will, more probably range from 1800 to 2,000 tons. They are to be propelled by screw paddles, and the maximum rates for passage and freight are to be as follows:—For first and second class passengers who will be found in every thing on the passage excepting wines and liquors respdctively, twenty and twelve guineas; and for third class or steerage passengers, six guineas—these last being provided with three substantial meals *per diem*, finding their own bedding, linen, etc. For the passage to Europe the rates will be proportionally reduced. Freights outward are not to exceed £3 per ton for fine, and £2 for coarse goods; and from America to Europe will not exceed the average rates charged by sailing vessels. On these terms, and considering the comparative shortness, and expedition of the passage, we cannot doubt that the Liverpool and Quebec line of steamers will attract a very large share of the business between the two continents. With a view to securing a portion of the vast emigrant transit from Germany, and other parts of the conti-

nent, to Western America, it is the intention of the company, to establish agents in all the leading cities of Europe, as well as in Great Britain and Ireland, who will be prepared to arrange passages, not for Quebec and Portland alone, but through to Chicago, and other principal points in the interior of America. Such arrangements, ably carried out can scarcely fail to secure to our river and inland waters a large share of this lucrative trade. On the whole, we think we may safely congratulate the country on the favorable terms upon which our government have effected this contract, nor must we omit stating that Mr. Bellhouse expresses himself much indebted for the liberal and business-like manner in which throughout the negotiations, he has been treated by our government, and especially for the aid given him by the Hon. Mr. Young, in making his arrangements with the railroad companies and the city of Portland.—*Montreal Herald.*

New Feature in the Business of Boston.

Sixteen cars loaded with eight sticks of timber, for ship masts, 84 feet in length and three feet in diameter, loaded in Buffalo, were yesterday brought over the Buffalo and Rochester railroad, Rochester and Syracuse, Syracuse and Utica, Utica and Schenectady, Schenectady and Saratoga, Saratoga and Washington, Rutland and Washington, Rutland and Burlington, Cheshire, Fitchburg, Grand Junction, to East Boston, and thence over the Eastern railroad to Portsmouth, N. H., 628 miles without change of cars. Four car loads of slates were also brought at the same time over the Rutland Cheshire and Fitchburg railroad to the Grand Junction depot at East Boston, from the slate quarry recently opened at Fairhaven, Vt.– *Boston Courier, Wednesday.*

Lackawana Coal, and Railroads.

We copy from the Buffalo Courier the following interesting notice of this celebrated coal, and of the railroads which are to supply central and western New York with fuel:

"Bituminous coal, from the mines of Pennsylvania and Ohio, has been used for some years, on the steamboats navigating our western lakes. It was a decided improvement on wood, saving greatly in time, room and labor. The completion of the Erie railroad, and of the lateral routes connecting with it, has been the means of introducing during the present season Anthracite coal, from the mines recently opened at Scranton, Pennsylvania.—And this coal will undoubtedly, from its great superiority over every other kind, supersede the use of bituminous coal.

Where is Scranton? Go to Binghamton, all know where that is; fifteen miles east of it you will find a railroad running south, get on to that and travel fifty miles, and you will arrive at the termination of the road, and at Scranton at the same time. Here you will see a busy population disemboweling the earth, on one side digging out coal, on the other iron-ore, furnaces in full blaze, tripbammers pounding away with the aid of steam, railroad iron in process of rolling out, and every indication of a thriving, happy and contented people. From this spot comes the Scranton coal. Formerly this place was called Legget's Gap. The good people down there having heard that there were two or three ponds of water out this way on which steamboats ran, determined to introduce their coal, and for that purpose dispatched hither a name-sake of their town, Col. Scranton, who has merits enough of his own, to make almost anything popular. He met, however, with some prejudices, and much resistance from rival interests, but no wise disheartened he persevered in his efforts, sent to the east for blowers, and for men accustomed to the use of his fuel, and finally all things being properly prepared, he made last week an experimental trip on the steamer Empire State. And with complete success steam was kept up to the required gauge, without diminution and without effort. *Thirty* tons less coal were consumed than on any former trip, the dirt and smoke of the bituminous coal were obviated, and the boat made a quicker run than ever before. All hands from Captain to stoker, were delighted with the experiment, which has satisfied the most skeptical of the superior qualities of this coal.

It is, we understand, to be introduced at once into the new boats of the Michigan southern railroad and also into other boats and propellers. And we have no doubt that when known, it will be generally used in private dwellings.

Col. Scranton deserves much credit for the energy and skill he has displayed, and we hope that his enterprise, so promising to our own interests, will be a remunerative one."

Railway Traffic in the United Kingdom.

From a return just issued relative to the passenger and goods traffic on railways in the United Kingdom it appears that the receipts from all sources of traffic for the half year ending 31st December, 1851, amounted on 6,890 miles of railway to £8,247,937, and for the corresponding period of 1850, on 6,621 miles to £7,147,378, showing an increase of 269 miles, and of £1,100,559 in the receipts. The gross receipts on railways in England and Wales for the same period amounted on 5,304 miles to £7,171,551, and for the corresponding period of 1850 on 5,131 miles, to £6,154,943, showing an increase of 173 miles, and £1,016,608 in the receipts. The gross receipts of railways in Scotland for the half year, ending 31st of December, 1851, on 962 miles of railway, amounted to £772,677, and for the corresponding period of 1850 on 953 miles to £718,023 showing an increase of nine miles, and £54,664 in the receipts. The gross receipts on railways in Ireland on 624 miles for the same period amounted to £303,709, and for the corresponding period of 1850, on 537 miles, to £274,421, showing an increase of 87 miles and £29,288 in the receipts.

Comparative summary of traffic upon railways in the United Kingdom during the half year ending 31st December, 1851, and during the corresponding period in the previous year.

Number of passengers.

	1851.	1850.	Increase.
1st class	5,474,086	4,635,531	839,555
2nd class	16,710,716	15,218,930	1,491,786
3rd class	9.386,398	9,079,858	306,540
Parliamentary	15,921,212	12,153,600	3,767,612
Total	47,509,392	41,087,920	6,421,472

The length of railway open at the commencement of the half year ending December 31, 1850, was 6,308, at the end of it, 6,621, increase, 390; at the commencement of the half year ending Dec. 31, 1851, 6,698 miles were open, and at the end of it, 6,890 miles, increase, 269.

Receipts during half year ending 31st December.

	1851.	1850.	Increase.
	£	£	£.
1st class	1,378,265	1,151,764	226,501
2nd class	1,722,626	1,543,361	179,266
3rd class	707,278	399,248	8.030
Parliamentary	1,026,651	723,030	303,621
Periodical tickets	42,499	.....	42,499
Total	4,580,827	3,817,403	763,424
Goods, cattle, par. mails, etc	3,667,110	3,329,974	337,136
Total receipts	8,247,937	7,142,377	1,100,500

Receipts during half year ending 31st Dec., on lines in England and Wales.

	£	£	£	Pass.
	1851.	1850.	Increase.	1851.
1st class	1,240,690	1,029,374	220,316	4,751,899
2nd class	1,554,473	1,370,163	184,310	14,727,574
3rd class	356,710	284,832	71,878	8,226,340
Parliamentary	827,482	601,241	226,241	11,876,913
Periodical tickets	36,148	.....	36,148	4,887
Excess fares	3,489	.....	3,489	.....
	4,027,992	3,285,611	742,381	39,587,613
Goods, cattle, par. mails, etc.	3,143,559	2,869,332	275,227	.....
	7,171,551	6,154,943	1,016,608	

The length of line open at the commencement of the half year ending Dec. 31, 1850, was 4,901 miles, and at the end of it 5,131 miles; at the commencement of the half year ending 1851, 5,200 miles, and at the end of it 5,304 miles.

Receipts on Lines in Scotland.

	1851.	1850.	No. pass.
	£	£	1851.
1st class	85,615	79,632	418,637
2nd class	92,687	96,588	930,846
3rd class	37,604	57,247	851,531
Parliamentary	134,943	113,256	2,745,799
Periodical tickets	2,290	.....	6,364
Total for pass	353,140	346,723	4,952,177
Goods, etc	419,537	371,290	.....
Total	772,677	718,013	.....

The length of railway open at the commencement of the half year ending Dec. 31, 1850, was 892 miles, at the end of it 953, increases 61 miles; at the commencement of the half year ending Dec. 31, 1851, 961 miles were open, and at the end of it, 962 miles.

Receipts on the Irish lines.

	1851.	1850.	Pass.	Pass.
	£	£	1851.	1850.
1st class	42,359	42,758	303,550	353,577
2nd class	75,466	76 610	1,052,296	1,465,013
3rd class	12,964	57,169	308,526	1,115,705
Parliamentary	64,226	8,533	1,298,500	155,220
Period. tickets	4,061	.....	5,728	.....
Excess fares	18	.....	.....	.....
Total pass	199,695	185,070	2,968,601	3,089,516
Goods, etc	104,014	89,351	.....	.....
Total	303,709	274,421		

The number of lines open at the commencement of the half year ending Dec. 31, 1850, was 515, and at the end of it 537 miles; the number open at the commencement of the half year ending Dec. 31, was 557 miles, and at the end of it 624 miles—increase 87 miles.

The aggregate length of lines open in England and Wales for traffic on the 30th June, 1851, was 5,038¼ miles, and on Dec. 1851, 5,115½ miles of companies who made complete returns to the Board of Trade, and from which it appears that the mileage travelled by first class passengers was 138,435,079 miles, by second class 268,357,556 miles, by third class 95,926,232 miles, by parliamentary class 214,955,004 miles; the total mileage travelled by passengers during the half year was 717,673,873 miles. The miles travelled by passenger trains was 14,952,759 miles, goods trains 9,114,272 miles. The number of passenger trains was 436,779, and of goods trains 189,729. The following companies have not furnished complete returns:—Ambergate; Bodmin and Wadebridge; East and West India Dock and Birmingham Junction; London and Blackwall; London and Greenwich; Newmarket; South Wales; and South Yorkshire. The aggregate length of theese lines was on June 30, 1851, 161¼ miles, and on Dec. 31, 1851, 188¼ miles. The number of miles travelled on them by passenger trains was 586,823, and by goods trains 42,932; the number of passenger trains was 69,677, and of goods trains 2,072.

The total mileage travelld by passengers on 20 Scotch lines, 671¼ miles in length, was 47,341,100 miles, of which 9,181,747 miles was travelled by first class passengers, 9,443,086 miles by second class, 5,901,800 miles by third class, and 24,814,484 miles by parliamentary class. The mileage travelled by passenger trains was 1,438,228 miles, by goods trains 1,254,378. The number of passenger trains was 64,415, and of goods trains 44,040. The following companies, it appears, have not furnished complete returns:—Caledonian and Dumbartonshire, Edinburgh and Glasgow, Glasgow and South Western; Glasgow, Barrhead, and Neilston, and Stirling and Dunfermline, together 289¼ miles in length, and upon which the passenger trains travelled 450,326 miles, and goods trains 144,231 miles. The number of passenger trains was 14,598, and of goods trains 4,970.

On the fifteen Irish lines during the half year the passengers travelled 39,096,735 miles, of which 6,010,504 miles were travelled by first class passengers; 11,242,416 by second class; 6,784,762 by third class, and 15,059,058 by Parliamentary. The mileage travelled by passenger trains was 950,035

miles, and by the goods trains 234,182 miles. The number of passenger trains was 37,126, and of goods trains 6,097. Complete returns it appears have not been furnished by the Dublin and Kingstown. The mileage travelled by passenger trains on which was 88,020 miles. The number of trains was 14,670. This company carry their goods by passenger trains.—*Herapath's Journal.*

Lake Superior Copper Region.

The correspondent of the Tribune, furnishes the following account of the leading Lake Superior copper mines, to a very late date.

The Minesota has so far proved the most successful mine on the Ontonagon. This company employs a force of about two hundred men—have invested about $60,000 in surface improvements—shipped 500 tons of copper, and are now raising about 50 tons per month, mostly mass and barrel work. Some of the largest masses yet found in this country have been taken from this mine. I saw a mass at the company's wharf at Ontonagon, which I should judge to be three feet thick. The stock of the Minnesota company is divided into 3,000 shares, and they expect to make their first dividend the present year.

The Norwich Company, under the superintendence of Clayton Davis, are working about 40 men now; but have employed only 15 during the past winter. They have a very rich vein, on which they have sunk three shafts, the main one to the depth of 143 feet, intersected by an adit level (163 feet long,) at a depth of 63 feet, and by another level 60 feet below the adit. This company have shipped five tons of copper this season, and have some 80 tons of masses and barrel work out and in sight at the mines, besides a large amount of rich stamp work. Near the bottom of the main shaft, Capt. Davis has found an immense mass of pure copper. It has not been entirely uncovered yet, so that nothing like an accurate estimate of its weight can be made now; but Capt D. and others who have seen it, estimate that there are 25 to 30 tons of it in sight. The Norwich company have several buildings up, and will erect eight or ten more during the present summer; have 16 acres of land under improvement, and a natural meadow of wild grass which supplies hay for the horses used at the mines. The company commenced operations in the summer of 1850. Their stock is divided into 20,000 shares, and is owned largely in New York.

The Windsor is a new mine, on which very little work has been done as yet. It adjoins the Norwich on the east, and is supposed to be a continuation of the same vein.

The Forest Company have worked, 30 to 35 men, during the winter, and have shipped thirty-five tons of copper this season. The mine is working well.

The Adventure has shipped about thirty tons this season.

The Farm and *Taltec* have well defined veins, and are turning out a good deal of copper for new mines. They have made no shipment yet, and probably will make none this season.

The Ridge, Astec, Ohio and Piscataquis are all working in the same range of bluffs, and are working through a bed of rock which yields more or less copper, but they have found nothing like well-defined veins as yet.

The Ohio Trap Rock Company abandoned their old works and commenced new diggings in Sept. last, with results not very flattering, so far.

The Douglass Houghton Co. have done considerable work on their location and the vein is said to look so so.

The Peninsula, Ontonagon, Algonquin, Firesteel and Eagle are new mines and have not as yet been able to show anything calculated to astonish the natives.

There are many explorations going forward in the Ontonagon district, and large quantities of land, supposed to be rich in mineral, have been entered here this season.

Several attempts at copper mining have been made on Isle Royal, all of which have been abandoned except the Siskowit Co. They still hold out, but with what prospect of ultimate success I have not been able to learn. I understand that about 100 persons—men, women and children—wintered on this bleak island. They must have had a jolly time of it, as they were entirely shut off from communication with the rest of the world for six long, dreary months.

The Bruce Mines are on the Canada side, near the head of Lake Huron. This company commenced work in 1845 and have a tract of ten square miles. They have sunk eight shafts and run three levels, the deepest shaft being about 190 feet. They have a beautiful engine, 45 horse power, (English,) which drives their crushers and stamps. They have also a smelting works and refinery, but are not smelting at present, the dressed ore being shipped instead. Their lode is from 3 to 6 feet in width, bearing yellow sulphuret of copper, with a sprinkling of grey. They have shipped up to the present time about 500 tons of refined copper. Two hundred miners would take out now from 300 to 350 tons of ore per month, which, when dressed, would yield 15 to 18 per cent. of copper. The greatest population at the mine (in 1849) numbered 623, men, women and children. The present population is 326—134 of whom only are on the company's pay list. The capital of this company is £300,000, a large proportion of which has been paid in.

The Fisheries.

The following statistics of one branch of our fisheries, shows the importance of the interest which Massachusetts has at stake. These estimates are from Mr. Mayo, Inspector General of Massachusetts:

54,040 tons, being 858 vessels, navigated by 9,174 men and boys.

Value of vessels and outfits	$3,532,000
Annual value of catch	2,400,000
The value for the rest of New England may be considered as nearly equal to this amount, say value of vessels and outfits	2,500,000
Value of catch	1,600,000

30,000 tons—6,000 men and boys.

But only an approximation can be made, as many vessels are employed in both cod and mackerel.—The Massachusetts mackerelmen in 1851 caught fares as follows:

In American waters, bbls	188,336
In waters, the exclusive right to which is now claimed by Earl Derby, bbls:	140,906

All of them following the movements of the fish and fishing part of the time in each waters.

Illinois.

The Northern Cross and Central Military Tract Railroads.—We are gratified to learn that these two roads have been consolidated, and will be controled by one directory. The Northern Cross, as our readers will remember, from the notices we have heretofore made of it, has its Western terminus at Quincy, on the Mississippi, and its Eastern, opposite Naples, on the Illinois river. It is one of the works upon which the State expended a considerable amount of money, during the palmy days of speculation, fourteen years ago. The Central Military Tract road was to commence at or near Columbus, on the Northern Cross, and run Northeast. through the counties of Adams, Hancock, McDonough, Warren, Knox, and Stark, and connect in Bureau with the Chicago and Rock Island road. The two lines are located in the most lovely agricultural region in the world. It is a succession of beautiful groves and prairies, with a soil of unsurpassed fertility. The people in the counties interested have subscribed liberally, and in some cases, heavy subscriptions have been voted by the counties in their corporate capacity. Nevertheless, the progress of both works has been slow, owing, in a measure, to the want of concentration of the means of both lines on one, and the conflict of interests. To secure a union of the two roads, an act was passed, by the last Legislature, giving them permission to form connections with any roads running into Chicago. Under this they have united. The change will cause the Northern Cross to run directly from Quincy to Galesburg, in Knox county, where it will connect with the Military Tract. The latter will doubtless be able to make arrangements to come into Chicago on one of the several roads now in process of construction in the direction of Rock Island. We have reason to believe that within the next two years, the entire line between Quincy and Chicago will be open for trade and travel.—*Chicago Tribune.*

Progress of Steamboating in the West.

The first steamboat ever built in Pittsburgh was called "New Orleans." She was built under the superintendence of Mr. Rosevelt, for Messrs Fulton and Livingston, of New York; was of 138 feet keel, and calculated for about 400 tons burthen. She was launched in March, 1811, and arrived at Natchez in December of the same year, where she took in passengers and freight, and from thence she proceeded to New Orleans.

This was forty-one years ago. During the last year, 1851, no less than three hundred and twenty steamboats were constructed; at Pittsburgh 112; Wheeling, 46; Cincinnati, 111; Louisville, 61. The aggregate tonnage amounted to 63,297 tons. The total number of passengers carried on these steamers during the year was 3,050,626. The marine insurance effected on the hulls and cargos amounted to $32,811,440. For the six months of the present year, there are fifty-nine steamboats built or in progress of construction. Number of steamboats destroyed in the course of the year 1851, belonging to the four districts above named, was 44; of this number, 19 were snagged, and 13 burned. The number of lives lost, by these disasters, was 482.

Canada.

Richmond Railway.—The Quebec Mercury says, respecting this railroad:—

"We have heard that the most satisfactory arrangements have been concluded between Mr. Ross, the representatives of the English capitalists, and the directors of the company, by which the whole amount required for the completion of the road will be forthcoming. Mr. Ross will leave in a few days for Montreal, to examine and report upon the line from that city to Hamilton.

French Railway System.

I extract the following information touching the railways of France, from a long article in the *Moniteur* of this morning, setting forth the claims of the Government to public admiration for the zeal and intelligence with which its energies have been directed to this all-important subject. Hitherto the reproach of backwardness has lain with much justice at the door of the French Government.

The Prince Louis Napoleon seems determined to remove the stigma from the escutcheon of modern France by the prompt completion of the beautiful system of railway radii intended to unite the center (Paris) with at least seven principal points of the circumference of the Empire or of its extreme frontiers. The total length of seven lines, connecting Paris with the Atlantic and Mediterranean, and with the Belgian, Swiss, German, Italian and Spanish frontiers, is 6,983 kilometres. The French kilometre (1,000 metres) is equal to 1,093¼ English yards. The above total length of 6,983 kilometres is 4,337¼ of our miles.

Of this sum about four sevenths, or 3,979 kilometres, will, by the end of this month, (July, 1852,) be completed and in operation. For these lines the expense borne by the State will, on the 1st of January next, amount, in its grand aggregate, to 215,000,000f., (say $43,000,000). But, as the State will at that date have received, from the various companies the sum of 144,000,000f, the actual outlay of the State will be reduced to the sum of $71,000,000, or an annual average of 10,000,000f. It is believed that, unless some unforeseen events should intervene to prevent, the whole system will be completed and in operation by the end of the year 1859.

The line connecting Paris with the German frontier at Strasburg is just completed and will be opened to the public next week. The ceremony of inauguration is to take place the 17th inst. and the three following days. The Prince President himself intends to show the interest he takes in the subject by being present. He will leave Paris on the 17th, spend the night at Nancy and proceed next morning to Strasburg on the Rhine, returning to Paris on the 20th. No political demonstration, such as those which made similar occasions so

anxiously watched prior to the 2d December last, are now anticipated.—*Paris correspondence of the National Intelligencer.*

American Railroad Journal.

Saturday, August 14, 1852.

Mobile and Ohio Railroad.

In our paper of the 19th of June, we gave an interesting communication upon the subject of this road, prepared by John Childe, Esq, Chief Engineer and general agent of the company. We now give a circular letter of the company, issued with a view to prepare the public mind for the proposed issue of bonds, by which a portion of the means, required for the work, are to be raised.

The route of this road extends in nearly a direct line from Mobile to the mouth of the Ohio, a distance, in round numbers, of 500 miles. For the first 350 miles, it follows the dividing ridge between the waters flowing in different directions, chiefly into the Mississippi, and Bigby rivers. It traverses therefore, a country deprived of natural outlets to a market. By avoiding the large streams, a remarkably favorable route is secured. For the whole distance no bridge is required of over 130 feet span. There will be no heavy work upon the whole line, and there can be no doubt, from the known accuracy and caution of Mr. Childe, that the entire work will be executed within the estimates.

While from the want of natural avenues, the road must supply the outlet for the produce of the country traversed, this is well known to be not only one of the most fertile and productive portions of the South, but of the whole country. That portion of it lying in the State of Mississippi, produces a larger amount of cotton to the number of inhabitants, probably, than any equal area in the United States. This has now to be waggoned a great distance, and at great expense, over miserable roads, to a market. Like all portions of the country similarly situated, its resources have but just begun to be developed, and its productions are capable of being increased to an almost indefinite extent. The portion of Tennessee through which this road will run, produces a very large amount of cotton, and is a very fertile and well settled country. When we come into Kentucky the soil is equally fertile, and well settled, but the productions are of a character that belong to a more northern climate. The whole line of the road, with the exception of a short portion of its Southern extremity, may be said to pass through an extremely fertile and well settled country, having for export, a very large surplus, which must be forwarded by the above road to a market.

We would here remark what we have often stated, that in the cotton growing regions of the South, in particular, a much larger amount of traffic is thrown upon railroads, compared with the productive capacity of the whole community, than in the more Northern States where labor is more divided, and employed in the production of articles of immediate consumption among the producers. Large portions of the South are devoted almost exclusively to the production of *cotton*. None of this cotton is manufactured there. It is all to be exported, even such as is eventually worn by the cotton growers, themselves. The whole production of an entire section of country is thus thrown upon a railroad. But as nearly everything *raised* is *exported*, so nearly everything *consumed* is *imported*. The amount to be carried by railroad traversing such section represents nearly twice the bulk of the whole surplus product. In the North, on the other hand, the great diversity of labor in each town and village, supplies most of the wants of the people in them.—The various products that go into consumption pass directly from the producer to the consumer, without the interposition of a common carrier, like a railroad. The different state of things at the South, not only show a greater necessity for railroads, but as far as their business is concerned, gives them some decided advantages over those of the Northern States.

It is hardly possible to conceive of a better route for a railroad than that occupied by the Mobile and Ohio road. One great want in the south are good harbors, having a sufficient draught of water for the largest cotton ships. This the above road will have when extended to the lower bay below Mobile as proposed. This will secure to the shipping every convenience and advantage desired. Its north terminus may be said to be the agricultural centre of the U. S. From the mouth of the Ohio to New Orleans, by the Mississippi river, is over 1000 miles, and nearly 1200 to the Gulf of Mexico, against 500 by the Mobile and Ohio road. This river is now the only channel for the vast travel and business concentrating at this terminus. All this travel, and much of the freight, will leave the river as soon as the railroad shall be constructed. The prospects of the *through* business of the above road are as flattering as is its local traffic.

The extent of the local traffic of the road it is hardly possible to estimate, for the reason that it is impossible to conceive the amount of increased production due to the influence of the road, or the extent of this influence in diverting to it the business accustomed to take other and more circuitous routes to market. It must monopolize the carrying trade of the immediate region traversed. Commencing at its northern terminus upon the Missiesippi, and running to the gulf in a direction diagonally to that river, it must exert a strong tendency to divert from the river a very large amount of freight that now seeks that outlet. The position of this road for drawing trade from the accustomed channels that have been followed from necessity, and not from convenience, is most favorable, and cannot fail to exert a very strong influence over the success of the project. We do not, therefore, think that the company are in any danger of ever estimating the revenues of the road.

While the company have one of the best projects in the United States, it has been managed from the outset with the greatest ability and sound sense. They have uniformly acted upon the determination not to injure it by wasting a cent in construction, neither by excessive salaries, extravagant prices paid to contractors, nor in exorbitant shares of their securities. The company have proceeded upon the principle of making all contracts equal to *cash*, and of moving only so fast as necessary means were provided. The construction of the first division devolved upon the city of Mobile, and the work thus far has been carried on by means furnished by that city without creating any incumbence upon the road. As soon as the section of country was reached which was able to contribute liberally to the work, the company adopted the rule to proceed only so fast, as one half of the cost of the road should be raised by those living in the immediate vicinity of the route. This rule throws the burden of construction where it belongs, and has nearly secured the necessary amoun tfor the preparation of the whole road for the iron, and has created a basis upon which a future loan can be effected, for the purchase of this article, and the equipment, upon the most favorable terms. The company will not come into market with its road securities for a dollar until one-half of the cost of the road shall have been provided by the domestic means of the country. They then expect to, as they will, find their securities sought for, for investment, at the highest figure that those of similar first class projects command.

The present favorable condition, and the wise policy that has characterised the conduct of the company, is due in no small degree to their Chief Engineer and General Agent, John Childe, Esq., whose long and extensive experience in the line of his peculiar duties, eminently fit him for the arduous and responsible position he holds, and whose relation to the company is a sufficient guarantee to capitalists, that what is done, will be well done; that the means of the company will be faithfully applied and economically expended, and that this stupendous project will be carried forward with a firm and steady hand to its successful accomplishment. Mr. Childe understands the art of true economy, which consists in wasting nothing, nor in withholding liberal expenditures whenever the exigency demands. It is a matter of general congratulation that a work of such national importance is in such competent hands.

Canada.

Quebec and Halifax Railroad.—We find in the Canada papers, the reply of Sir John Pakington, Colonial Secretary, refusing to accede to the recent application of Mr. Hincks, for the Imperial guarantee to the above project. The reasons given by Sir John are, that a road by the valley of the St. John's river would not be likely to advance the interests of the mother country, however much it might those of the colonies. The route of the St. John is besides too near the American frontier; and a road that might be available rather in a military than a commercial point of view was the one most desirable by the British government.

We have always been of opinion that neither the construction of the Major Robinson, nor the St. John route, was justifiable on *commercial considerations;* so we do not quarrel with the decision of the Colonial Secretary. The Provinces think differently with regard to the St. John route. But in candor we must say, that we believe the reasons assigned by the British government, will be received with feelings of contempt by every provincial, and will in the end breed a mischief, the extent of which is little dreamed of, by the home government. The Provinces, seeing the care of the mother country to be influenced only by *military* considerations, will be very likely to take the management of their affairs into their own hands, and no longer be guided by the opinions and interest of a really hostile power.

Railroad Examination.

The committee appointed by the Legislature to inquire into the causes of railroad accidents, consisting of Senator Bartlett and Mr. McAlpine, State Engineer, with Senators Smith and Monroe, having passed over the Harlem, New Haven and Hudson River railroads, a few days ago, left in a special train, on a tour of examination over the Erie railroad. They were accompanied by Hon. J. C. Wright, comptroller; Col. Schlatter, superintendent of the Ogdensburg railroad; Mr. Doxater, Superintendent of the Watertown railroad; Mr.

Whistler, Superintendent of the New Haven railroad, Major Morrell, Civil Engineer; Messrs. Wright and Baker, and several of the officers of the road. Mr. Minot, Superintendent, Mr. Post, Chief Engineer, Mr. Marsh, Secretary, and Mr. Warren, Auditor, were also of the party.

American Association for the Advancement of Science.

The standing committee of this body, in view of the prevalence of cholera in the west, announce the postponement of the annual meeting, which was to have been held at Cleveland, Ohio, on the 18th inst.

Stock and Money Market.

The stock and money market presents the same general uniformity that it has maintained for some months past. Money has continued very abundant for the whole summer, giving every facility to speculation, which has been extremely active, during an usually dull period. From the amount of money seeking investment, the first class securities continue to rule high, which is the case generally with "fancies," for the same reason. We see no reason to doubt continued ease in the market, until some unforeseen influences shall develop themselves.

In bonds of new works, there is not an active business doing, more perhaps for the want of attractive securities, than from lack of money. A good many transactions are made, however, that do not come before the public. The Mobile and Ohio railroad company have recently made a large sale, at par, of City of Mobile 8 per cent bonds, based upon the late tax voted by the city to the above road, having about four years to run. We learn also that the Alabama and Tennessee railroad company are about to offer in this market $500,000 of their road bonds. These last bonds are based upon very ample security, the company having two dollars paid up for every one they wish to borrow. The road has a very strong route, and the security is one that is certain to become a popular one, from its intrinsic merits. The southern roads now coming into market, make a better show of strength in the shape of good stock subscriptions than the average of new projects. The southern people are now managing their projects with great judgment, and construct their roads with more economy, we think, and proceed with greater caution, than northern companies.

We learn that the Scioto and Hocking Valley railroad have negotiated $100,000 city of Portsmouth, Ohio, bonds; terms not made public.

The earnings of the Erie railroad for July were $301,000, and the receipts for 7 months ending July 31, $1,928,292. The company's estimate for the year was $4,000,000; to equal which, the road must earn over $400,000 per month, for the balance of the year.

The market has been unusually active for the time of year, improving both in fancy stocks and those bought for investment; and money is obtained on good security at very low rates.

To present in a more connected view the weekly state of the market, our future numbers will contain a brief notice of the transactions of each day.

Thursday 5, *August.*—The temporary depression of the previous week, gave place to day to an entirely different feeling, under which nearly all the securities in the street showed a marked advance, particularly Reading and Erie stocks, with large sales.

Friday, 6th August.—There were large transactions to day, the stocks of the Erie, Harlem, Hudson and Reading Cos., wers sound stocks, were in active demand for investment. Rochester and Syracuse were sold at 119. Madison 107. N. Y. and New Haven 114. Michigan Central 113¾. Northern Indiana 120 asked, 117 5-8 offered.

Saturday, 7th August.—The stock market was extremely active and the sales very large. No less than $150,000 of the convertible bonds of the Erie railroad were sold; those of '71 at 97 and '62 at 98. Southern Michigan at 119. Reading 92½. Harlem 71¼. Norwich 55. The receipts of this road for July were $25,187.

Monday, 9th August.—The buoyant feeling noted still continues. Government and State stocks advanced, U. S. 6's and 5's, ¼ per cent. Erie, 1¼ per cent. on the stock and the bonds ¼ per ct. Other railroad stocks shared in the advance.

Tuesday, 10th August.—The prices of yesterday were mostly maintained, 3,800 shares of Reading were sold, opening at 92¾ and closing at 92½. About the same amount of Erie varying from 89¾ to 89¼. convertible bonds of '71 sold at 97¼ and those of '62 at 96½.

Wednesday, 11th August.—A slight reaction occurred in some of the fancy railroad stocks. The premium railroad dividend stocks maintain their advance. The steamer of to-day took out $725,000 in specie, without any marked effect upon the market. We hear of no large operations during the week in new securities with the exception of those already noticed.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, AUGUST 14, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¾
U. S. 6's, 1856	108
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118½
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	119
Indiana 5's	95
Indiana 2½	53½
" Canal loan 6's	95½
" Canal preferred 5's	46½
Alabama 5's	95
Illinois 6's, 1847	82½
Illinois 6's—interest	52½
Kentucky 6's, 1871	109
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	108¾
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	111
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	106½
New York 5's, 1866	111
New York 4½'s, 1858-'59-'64	101½
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	106
Ohio 6's, 1860	109
Ohio 6's, 1870	111¾
Ohio 6's, 1875	116
Ohio 5's, 1865	105½
Ohio 7's, 1851	105½
Pennsylvania 5's	97¾
Pennsylvania 6's, 1847,-'53	99½
Pennsylvania 6's, 1879	100
Tennessee 5's	——
Tennessee 6's, 1880	107
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	106½
Cincinnati 6's	100
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	108
New York 5's, 1858-'60	102½
New York 5's, 1870-'75	105
New York 5's, 1890	106½
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	107½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	97½
Erie convertible bonds, 7's, 1871	97½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97
New York and New Haven 7's, 1861	106
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	95½
Michigan Central, convertible, 8's, 1860	112
Michigan Southern, 7's, 1860	99½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Aug. 5.	Aug. 12.
Albany and Schenectady	107	106
Boston and Maine	106½	106½
Boston and Lowell	—	109½
Boston and Worcester	104	104½
Boston and Providence	89	89
Baltimore and Ohio	82½	82½
Baltimore and Susquehanna	29½	29½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	126½
Eastern	96	97½
Erie	87½	89½
Fall River	—	—
Fitchburgh	103	103½
Georgia	—	—
Georgia Central	—	—
Harlem	72	72
" preferred	110	110½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	67½	68½
Little Miami	—	—
Long Island	19½	20½
Mad River	—	99
Madison and Indianapolis	112½	—
Michigan Central	113½	113½
Michigan Southern	116½	118½
New York and New Haven	113½	111
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	54½	53½
Ogdensburgh	26	26½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	91½	92½
Rochester and Syracuse	—	119
Stonington	57½	55½
South Carolina	—	—
Syracuse and Utica	134	136
Taunton Branch	115	115
Utica and Schenectady	134	135
Vermont Central	14½	15½
Vermont and Massachusetts	20	22
Virginia Central	—	—
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

New Jersey.

Camden and Atlantic Railroad.—The following is an abstract of the report of the Engineer, Richard B. Osborne, Esq., dated 24th June, 1852, containing the results of the preliminary survey and general examination of the route of the road, extending from the city of Camden to Absecum, N. J. The survey has been made more with the view of obtaining data, for estimating the cost and character of the line, than of absolutely determining its location. Starting East of Camden, in the vicinity of the first tollgate on the Haddonfield turnpike, the survey runs south of the turnpike, and nearly parallel with it to Haddonfield, and then by the valley of Cooper's creek to the summit of Long-a-coming which divides the streams flowing into the Delaware from those that run into the Atlantic. This portion is more undulated and varied than the rest of the route. The undulations occur on the streams tributary to Cooper's creek. The line then passes through the village of Long-a-coming, and running north of the Waterford road, occupies a favorite tract of land between it and Jackson, then curving toward the town of Waterford at the distance of half a mile, approaches within ¼ of a mile to the town and works of Winslow, then it shapes S. E. along the dividing ridge of the streams flowing into Little and Great Egg Harbors, respectively, which extends to the seaboard and is very eligible for the construction of a railroad. The survey then crosses the meadows which separate the beach from the mainland. Two lines have been surveyed across the meadows, the southern one is preferred as avoiding more of the "Thoroughfares," or streams, and presenting a better surface. The soundings on the northern line give a depth to the gravel on these meadows of from 8 to 20 feet, on the southern they do not exceed 6 to 12. The meadows are sometimes covered, when a spring tide and easterly gale combine, to a depth of three feet, this is however seldom, usually, but once a year. The Southern line crosses Beach Thoroughfare and turning north with this stream gains the point of the Beach at the mouth of Absecum Bay. The branch to the village of Absecum crosses the low lands at an elevation of 20 feet above low water mark, and terminates at the southwest end of the village. Its length is two and a half miles.

The length of the entire road will be about 57 miles, of which, upwards of 40 miles will be straight, and 23 of these will be in a continuous line. The gradients will not on any portion exceed 25 feet per mile, of which there will not be more than 5 miles in detached portions. On 12 miles they will not exceed 20 feet; on 20 miles they will not exceed 8 feet; and on 22 miles they will be either horizontal or not over 5 feet per mile. The total rise above mean low water to the Long-a-coming summit, is 181 feet. Between this summit and Camden the land is more undulated in its character than the other portions of the route.

The principal object in the construction of this road besides furnishing a rapid conveyance to a large number of passengers, is, to secure the business of carrying the products of the seaboard to the Philadelphia market, and the freight of the numerous and large factories upon the route.

The number of passengers at present passing by stage over the whole of this route is stated as at least, 32,000 yearly. It is believed, that if this road was constructed, the attractions of Absecum Beach, would bring over this road a very large portion of the pleasure travel from Philadelphia, and mainly in consequence of the speedy transit, viz: one hour and a half. At present, Haddonfield being six miles from Philadelphia, and other villages upon the route are places of much resort.—The trade of the towns upon the route with Philadelphia is large. The factories upon the line expend each year in transportation $30,000, not including the Weymouth Iron establishment which is obliged to provide its own vessels to Philadelphia. On the timber land, staves, lumber, and charcoal are produced, and carried to market in considerable quaatities. If railroad communication existed, the quantities of these transported would be greatly increased, as also of marl and lime.

The trade of the coast now passes to Philadelphia in small vessels. The whole of this coast produces immense quantities of the finest fish, black fish, sheepshead and sea bass. Codfish are taken in large quantities at certain seasons. The shore is well planted with the finest oysters. Through the want of a rapid transit to market, these valuable products of the sea, which Philadelphia so greatly needs, have been hitherto almost wholly lost to her. With all the difficulties attending the hauling of these commodities over 60 miles of heavy road, about 80 loads are now transported, weekly, to Philadelphia. If proper facilities were given to this trade it would doubtless be quadrupled. Several thousand tons of marl and lime are now hauled to the lands lying west of Haddonfield, and large quantities of charcoal are sent to Philadelphia.—The manufacturing establishments on the line of the road expend about $30,000 in the transportation of their products over land, without including the Weymouth iron establishment, which provides its own vessels to Philadelphia.

The following is a summary of the estimated annual receipts on the road and their sources.

32,000 passengers at $1	$32,000
20,000 visitors to the Beach $1 50	30,000
4,000 loads of Oysters at $4 per load	16,000
40,000 cwt of fresh fish at 25 cts per cwt.	10,000
225,000 bushels of charcoal at 1 cent per bushel	2,250
2,000 tons of lumber at $1 per ton	2,000
10,000 tons of marl at 50 cts	5,000
2,000 tons of lime at $1	2,000
1,300 tons of groceries at $5	6,500
Glass works freight, coal etc	12,000
Haddonfield passengers and freight	5,000
Mails	2,000
	$124,750
Management and working expenses 45 per cent	56,138
Profits	$68,612

Being about 10 per cent on the estimated outlay.

The engineer in estimating the cost of the road, proposes the adoption of a continuous rail, an increase in the number of sills, and a rejection of the old fashioned spike. He considers a well manufactured rail of 50 lbs., laid on sleepers 2 feet apart, preferable to one of the common description of 100 lbs. per yard laid on sills 3 feet apart.

The following is the estimated cost of the road with a single track, and outfit for the first year's business.

60 miles of graduation and bridging at $3,300 per mile	$198,000
60 " superstructure laid at $3,000 per mile	360,000
Stations	20,000
Outfit	80,000
Sidings, switches, etc	10,000
Engineering	25,000
	$693,000

This includes land damages to the amount of $10,000.

Statement of Outfit.

7	Locomotive engines at $7,500		$52,500
6	1st class passenger cars at $2,000		12,000
6	2nd " " " at $1 200		7,200
10	4 wheeled open cars at $130		1,300
10	4 " closed cars at $200		2,000
10	8 " open cars at $240		2,400
5	8 " closed cars at $450		2,250
			$79,650

Railway Accidents.

The subject of accidents on railways has been examined very fully in England by Capt. Huish. The conclusions he arrives at, may, making allowances for the different systems of working in the two countries, be found of value here. With regard to the road, or permanent way, from which fewer accidents occurred than from any other cause, its complete effectiveness, he considers, was the basis of all safety in railway travelling; and for keeping it up, constant vigilance was necessary, especially when any great and sudden change of weather took place, as then the weak points were sure to show themselves.

The increase of travel, and numerous crossings and turnouts to accommodate side lines had increased in the same proportion the risk of accidents, and it might be received as an axiom, that anything which broke the continuity of a rail tended to develop danger. The adoption of judicious regulations combined with effective signals, would tend to reduce the risk of accidents. The use of self-acting switches was attended with evils of no trifling magnitude, and many accidents had occurred from reliance on them; indeed, as a general rule, machinery to supersede personal inspection and manipulation was fraught with danger.

With respect to the rolling stock, out of 1,000 cases of engine failures within two years, on the London and North Western railway, the largest class was that of leaky and burst tubes; and these, with broken springs and valves amounted to one-third of the whole number. The passenger carriages presented almost complete immunity from accident; for the last four years, out of the large stock of the London and North Western railway, only six wheels had failed. The fracture of axles, the defective method of coupling and want of proper buffers, on the merchandise wagons, had led to the destruction of much property.

Various plans of communication between the passengers and the driver are alluded to. The plan of a wire or rope had been tried and failed. That of continuing the foot boards, so as to form a continuous narrow platform from end to end of the train, had been condemned by a committee of railway officials. The plan adopted on the London and North Western railway was for the guard's van at the end of the train to project about a foot beyond the other carriages, so that the guard looking through a window in this projection, might notice the waving of a hand or handkerchief; this was of course useless at night.

The electric telegraph had greatly facilitated working under variable circumstances, and so beneficial had its effects been, that, during the year 1851, out of 7,900,000 passengers, or nearly one-third of the population of England, who had travelled over the London and North Western railway, only *one* individual had met with his death, (from which casualty the author also suffered,) and this was the effect of the gravest disobedience of orders. In the six months during which the exhibition was opened, 775,000 persons were conveyed by excursion trains alone, in 24,000 extra carriages, center-

ing in a single focus, arriving at irregular hours and in almost unlimited numbers, from more than thirty railways, without the most trifling casualty, or even interruption to the ordinary extensive business of that line.

The author thinks undue importance had been attached to the question of irregularity in the times of the trains, as an essential element of safety, for with perfect signals and a well disciplined staff, no amount of irregularity should lead to danger; but, on the contrary, it should, to a certain extent, by its very uncertainty, induce increased vigilance, and therefore greater safety. Accidents very rarely happened from foreseen circumstances, but generally from a simultaneous conjunction of several causes, and each of these was provided for as it arose. The statistics of railways, and the periodical publication of the government returns, drew public attention very pointedly to the aggregate of accidents; but it was believed that if due regard was had to comparative results, if the accidents to steamers, or in mines, to omnibus passengers, or even to pedestrians, were as carefully recorded, that then, whether as regarded the ease and celerity of transit, or the facility of conveying numbers, the railway system, even in its present state, would be found to be incomparably safer than any other system in the previous or present history of locomotion.

It will be perceived that the general conclusion arrived at is, that no mechanical arrangements or scientific appliances can consistently with safety take the place of constant personal vigilance and attention to the numerous and unavoidable exigencies of the railway system of travel. A vigilant eye must always be present to perceive the source of danger, and a skillful hand ready as far as possible to prevent its occurrence, and these are the best reliance to ensure life and property on the railroad.

New York.

Syracuse and Binghamton Railroad.—The report of William B. Gilbert, Esq., the chief engineer of the Syracuse and Binghamton railroad, to the directors on the 9th July 1852, exhibits the following facts and estimates.

The line of the road has been located, the work prepared for contract, and an estimate of the cost of grading, masonry and bridging, for its construction is presented in the report.

The general character of the country from Syracuse to Binghamton, is very favorable for the construction of a good road. From Tully summit, south, (three-fourths of the entire distance) the grading will be less than that of any other road of the same extent in this part of the state. The geological formation of the conntry will furnish excellent material for the formation of the road bed. The location of the line from Syracuse to Tully Summit, where an elevation of about 800 feet must be overcome within a distance of 19 miles, presents the only engineering difficulty to be met with upon the entire route. Upon this part of the route three different lines have been surveyed and estimated; of which, the Jamesville route has been selected, the difference in its favor being estimated at $210,070, besides a saving in length of over three miles, and for each mile of distance saved in a comparison of routes, on roads yielding a net income of 10 per cent, and over, it is estimated that the company would be authorised to expend $60,000. From the north end of Little York Lake, two lines have been surveyed through Homer village. From the point of intersection the line continues down the valley of the Tiongnioga, crossing and re-crossing the north branch, north of Cortland village, to avoid curvature and distance. After leaving Cortland, the line is located along the western side of the valley of the Tiongnioga. A change is proposed in the route between the valleys of the Tiongnioga and Chenango, shortening the distance 4,600 feet and reducing the cost of grading etc., $12,221. This route will require a bridge 500 feet long to cross the Chenango river and canal at an elevation of 35 feet above the water. The road then passes over an undulated and broken surface, until it intersects the line of the New York and Erie railroad at Binghamton, making a total length of line of 79.64 miles. The estimate is made for a single track, with the requisite side tracks and turn-outs, and on a road bed of 25 feet wide, in excavations, and 14 feet in embankment, with the usual slopes of 1½ feet horizontal to 1 foot rise in earth, and ¼ to one in rock. The total cost of the road ready to receive the superstructure is estimated at $717,863 80, or $9,014 per mile.

The materials used in the construction of the road are abundant and of the best quality on every part of the line. The length of bridging will be comparatively small, there being but one structure of any importance on the line. At the crossing of the Chenango a bridge of 500 feet will be required.

The district through which the line passes, is densely settled containing an adult male population equal to 300 for each mile of travel. Assuming an average of $2 for each male inhabitant, this would yield an annual income of $48,000. The surrounding country is rich in agricultural and dairy products. Its present annual tonnage is equal to 40,000 tons, at an average distance of 30 miles at $1.20, amounting to $48,000.

The most important considerations are its connections with other roads, at Syracuse with the great Central line and at Binghamton with the N. York and Erie, the Albany and Susquehannah, and the Lackawaxen and Western roads, thus ensuring to the northern frontier of the state a permanent and cheap supply of coal.

At Syracuse the supply of fuel for the manufacture of salt is a matter of vast importance to the future prosperity of this business. In this manufacture and for other purposes, Syracuse now consumes annually 300,000 cords of wood. In a report recently prepared by a committee upon this subject it is stated, that "the annual saving in the expense of fuel in Syracuse, by the use of coal, would be more than $100,000.

It is a matter of certainty, that the coal trade will constitute a large part of the freight business of this road. The large supply that will be called for, at Syracuse, Oswego, and for shipment at the latter place, justifies the estimate of 100,000 tons annually, as through freight, which at $1 20 per ton would amount to $120,000.

Oswego will become the northern terminus of this line of road, which will there connect with the entire chain of lakes, and in addition to the Welland canal, with two great lines of railway entering upon lake Ontario to the Canada side, which will beeome tributary to Oswego by steamboat connexion.

Oswego, by its trade and manufactures, is now one of the most important of the cities on the lakes. The following statistics have been compiled from an authentic source.

In 1851, the coastwise trade at Oswego was over $22,500,000, and there was shipped by canal at that place, during the season the following articles:—

Flour, barrels	888,131
Wheat, bushels	1,676,213
Corn do	1,192,217

Of the articles imported by canal during the same season, were the following:

Domestic salt, barrels	439,400
Railroad iron, tons	50,000
Mineral coal do	8,500
Merchandise do	47,000

Of the articles imported by lakes during the same season were the following:

Flour, barrels	389,929
Wheat, bushels	4,231,899
Corn do	1,251,500

The water power of the Oswego river is one of the finest in the world. In the season of 1851, the Oswego mills manufactured 67,000 barrels of flour; in the same season the imports of wheat and the quantity were greater than at any other place in the state or the U. S. The mills already in operation are capable of manufacturing 1,500,000 *barrels of flour* during the season of navigation.

Oswego may therefore be expected to furnish a large proportion of all the flour consumed in central and southern New York and Northern Pennsylvania near the line of railroads. The tonnage of flour, salt, and plaster is estimated at 50,000 tons which at low rates would give $75,000.

The amount of through travel at $112,000 and that of way travel at $48,000.

Estimate of gross earnings is thus classified:

Way travel	$48,000
Freight	48 000
Through travel	112,000
Freight	195,000
Mails and express	12,000
Total	$415,000

Vermont.

Rutland and Burlington Railroad.—The fifth annual report of the Rutland and Burlington railroad company, submitted to the stockholders at the meeting of July 21, has just been published.

The total amount charged to construction to May 31, is $4,847,401 14, which has been provided from the following sources, viz:

Capital stock		$1,462,000 00
Preferred 8 per cent stock issued	$362,700	
On hand	137,300—	$500,000 00
Preferred 8 per cent stock		473,328 90
Bonds, 6 per cent		1,088,788 25
Mortgage bonds, 7 per cent		875,800 00
Interest		32,700 00
Notes payable		416,783 89
Total		$4,847,401 14

The earnings for the year have been $324,790 63 showing an increase of fifty per cent over last year, and the running expenses $159,450 91, leaving net earnings $165,339 72.

This is one of the mismanaged and unlucky Vermont roads. It is fast getting to be a good mate for the central Vermont road. The original stock in the Rutland road, will probably prove a dead loss, being eaten up by the amount wasted in construction, by extravagant shaves, and by the extravagant interest paid on preferred stock. We hope that no necessary fatality attaches to the Vermont roads, and that the Rutland and Central are not examples which must be followed by all others.

The Mobile and Ohio Railroad.

The city of Paducah has voted $200,000, and McCracken county $100,000, to the branch of the Mobile and Ohio railroad, which is to terminate at Paducah.

New Orleans, Jackson and Great Northern Railroad.

A railroad convention was held at Jackson, Miss., on the 30th of July, to aid in carrying forward this work. The proceedings are given at length in the Jackson Southern Star. Mr. Robb, the president of the company, was not present, as was anticipated, being detained by illness, Chancellor Cocke presided, and urged the claims of the road to the support of the citizens of Mississippi. The Hon. W. G. Kendall, the agent of the company, gave a sketch of the labors of Mr. Robb in behalf of the enterprise, especially in remodeling and reforming the municipal government of the city of New Orleans, by which new credit was given to the city and aid to the amount of $2,000,000 of bonds loaned to the company, to commence the road. Mr. K. stated that the engineers were already at work on lake Maurepas and that the route from New Orleans to the Mississippi would be under contract in the month of August. Col. S. W. Oak ey, of N. O., Gov. Foote, of Miss., and other gentlemen addressed the convention. A series of resolutions was passed pledging the meeting to the support of the road and to take all honorable means to secure the subscription of a sufficient sum to carry it through; likewise entreating the legislatures and citizens of the states of Mississippi, Louisiana, Alabama and Tennessee, to aid it as identified with the great cause of internal improvement.

The Star in a previous number ably advocated the merging of the Canton and Jackson road, with the N. Orleans, Jackson and Great Northern. The merger is urged principally on the the ground that under the present organization three or four years may elapse before the completion of the road, whereas under the New Orleans direction its speedy construction will be ensured. All the other local companies had been already consolidated.

Virginia.

A convention of the friends of Internal improvement is proposed to be held in the town of Union, Monroe county, Va., on the 19th inst, to derive means for advancing the system of improvements in Virginia.

South Side Railroad.—A meeting of the stockholders of this road as we learn from the Lynchburgh Virginian, was held at Petersburg, Va., on the 13th July last. A resolution was unanimously passed authorising the president and directors to issue not exceeding $800,000 of bonds for the purpose of completing the road as far as Lynchburg. Fifty-two and a half miles of the road have been already constructed and in successful operation. Of the capital stock $1,164,145.80 has been already paid in, and expended, leaving $219,554 20 to be paid up, all which has been appropriated to the completion of the road as far as it is under contract. Twenty-three miles remain yet to be constructed in order to reach Lynchburg, the western terminus of the road. This enterprise will unquestionably be soon carried through, and the company are in earnest to complete the improvement to Lynchburg.

North Western, Parkersburg, Railroad.—The annual meeting of the North Western R. R. Co. was held at Parkersburg on the 5th August. Thomas Swann, Esq., the president of the Baltimore and Ohio railroad was unanimously chosen president. Mr. Cook, the late president resigned, and strongly urged the election of Mr. S. The committee charged with obtaining a subscription to the stock of the company to complete the amount ($500,000,) required as a preliminary to the loan of a million and a half of the credit of the city of Baltimore, did not report, but it is understood that very little stock remains to be subscribed.

Pennsylvania.

We learn from the Pottsville Mining Register, that Wm. B. Foster, Esq., is now engaged in a survey of the railroad contemplated from Philadelphia to the Lehigh river and the Delaware Water Gap. The corps of engineers have commenced operations at the Perkiomen creek above Norristown.

York and Cumberland Railroad.—A meeting of the stockholders of the York and Cumberland railroad company was held Lyre Hall, Baltimore on the 27th July, in which the ordinance of the council of that city guaranteeing the bonds of the York and Cumberland railroad company given to aid in the construction of the Susquehannah railroad was accepted. The vote on the resolution of acceptance was taken by shares, and resulted—for accepting the ordinance 5689 shares, against accepting—none. A committee was appointed to procure a certified list of stockholders, and a copy of the ordinance and supplement passed by the city council, and action taken to secure the assent or dissent of the stockholders thereto. Messrs. Michael Herr, Jos. C. Wilson, and Wm. F. Murdock were placed on this committee. Another committee consisting of P. H. Sullivan, Wm. E. May, Hon. Wm. H. Curtis, W. Woodville, and A. W. Fitzhugh Esqs., were appointed to enter into negotiations with the president and directors of the Baltimore and Susquehannah railroad company to procure the assent of the stockholders of that company to a covenant binding them to the acceptance of the loan, to be passed by the legislature of the state of Maryland, and to be approved by the Mayor and city council of Baltimore, and to issue $200,000 of the bonds of the company, the proceeds to be appropriated to the construction of a railroad to tide-water, and to the erection of depots and wharves.

Consumption of Gold.

The following curious statistics relative to the consumption of gold, were stated in a lecture lately delivered at the Geological society at London:

The entire amount of gold in circulation is said to be £48,000,000, of which the wear and waste is stated to be 3½ per cent annually, or £1,680,000. The consumption of gold in arts and manufactures is as follows:

In the United Kingdom	£2,500,000
France	1,000,000
Switzerland	450,000
Other parts of Europe	1,600,000
United States	500,000
	£6,050,000

In Birmingham alone there is a weekly consumption of gold for chains only, amounting to 1000 oz. The weekly consumption for gold leaf in London is 4000 oz; in other places in Great Britain 184 oz. One of the potteries in Staffordshire consumes £3500 worth of gold annually in gilding; and the whole consumption for gilding porcelain in England is estimated at about 8500 ounces annually.

Baltimore and Ohio Railroad.

The Fairmont True Virginian of Saturday says it is confidently expected that the railroad will be finished to Manington by about the first of next month. From Manington the Ohio river can be reached in about 38 miles. We should presume that in the course of two months, by laying the rails on this end, the staging from here to the road might be reduced to some 20 or 30 miles, and thus an easy and short connection made that would be of service.

Nashville and Cincinnati Railroad.

In the Journal of last week we noticed the organization of this road, and the election of President and directors. Stock was subscribed during a few days previous to the organization to the amount of $118,000. The following table exhibits the amount of taxable property and population of the counties in Kentucky through which the road will run:

	Value of taxable property.	Population.
Allen	$1,482,609	8,742
Barren	3,806,749	20,240
Green	1,953 811	9,060
Taylor	1,462,790	7,250
Marion	2,511,630	11,765
Boyle	4,619,043	9,116
	15.836,632	66,173
Mercer	4,735,234	14,067

Beloit and Madison Railroad Company.

This company was organized at Madison, Wis., on the 1st inst., and the following named gentlemen elected directors:

Messrs. John B. Turner, W. L. Newberry, E. S. Wadsworth and E. I. Tinkham, of Chicago.

Messrs. John M. Keep, Hazen Cheeney, and L. G. Fisher, of Beloit.

Messrs. Volney Atwood, Joseph A. Sleeper, and O. W. Norton of Janesville; and

Messrs. F. G. Tibbits, Simeon Mills and Edward Ilsley of Madison.

Subsequently, Mr. Turner was elected president: Mr. John B. Ilsley, chief, and Mr. Van Nortwich consulting engineer; Benjamin Durham of Beloit, secretary; Mr. Ed. Ilsley, of Madison, treasurer; and Mr. Tinkham, of this city, assistant.

It is the intention to commence the grading, bridging, etc., so as to have it ready for the iron by the time the Beloit branch of the Galena and Chicago road is finished, some time next year.

We regret to learn that the Hon. Christopher Adams, of New Orleans, died in Philadelphia, on the 28th of July last. Mr. Adams was President of the New Orleans and Opelousas railroad company.

Education.

The Rev. Dr. Murdock delivered a lecture before the New York teachers' association, held recently at Elmira, on the necessities created by the extension of railroads and telegraphs, for a corresponding dissemination among the masses, of education. It is clear that a higher moral culture must keep pace with scientific improvements and their application to the arts of life.

Elmira Car Shop.

THE Undersigned is prepared to manufacture for Railroad Companies, Passenger, Baggage, Cattle, Freight, Gravel and Hand Cars, also Baggage Barrows and Freight Trucks. WM. E. RUTTER.
Elmira, N. Y., Aug. 14, 1852. tf

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

Railroad Iron.

CONTRACTS made by the subscribers, agents for the manufacturers, for the delivery of Railway Iron, at any port in the United States, at fixed prices and of quality tried and approved for many years, on he oldest railways in this country.
RAYMOND & FULLERTON. 45 Cliff st

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.
Apply to DAVIS, BROOKS & CO.,
31st July. 1m

To Contractors.

CENTRAL OHIO RAILROAD.

THE concluding day for the reception of bids for Grading and Masonry of the forty-one sections of this Road, extending from a point five miles east of Cambridge, towards the Ohio River, will be postponed from the 15th to the 20th instant, by which last named day, bids will also be received for the remainder of the line to Wheeling—embracing some eight or nine sections, and making in the aggregate forty-nine or fifty sections.

Bids for the *Whole Line* as well as by sections, for Cash alone, or Cash and Stock, will be duly considered.

ROBERT MCLEOD,
Chief Engineer.

Zanesville, August 2nd, 1852.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.
2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.
3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.
4. It must be finished in three holes, or nearly as hard as spring-wire.
5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.
6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.
7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.
8. The wire must be drawn on blocks of no less than 2 feet diameter.
9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.
10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.
11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.
12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.
13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.
14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.
15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.
16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.
17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"
18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work.

LEWIS TROOST,
Chief Engineer.

New York, August 3d, 1852. 5t32

Virginia Locomotive and Car Works.

Wolfe Street and River Potomac, Alexandria, Va.
SMITH & PERKINS, *Proprietors.*

MANUFACTURE

Locomotive Engines and Tenders.
Marine and Stationary Engines and Boilers.
Chilled Car Wheels and Axles
Patent Chilled and Wrought Slip-tire.
Machinery and Castings generally.

The undersigned having erected very extensive shops, and procured the most modern machinery and tools, are prepared to execute orders for Locomotive Engines, Cars, and Machinery of all kinds with despatch, and on the most favorable terms.

R. C. SMITH,
La te of the Alexandria Iron Works.
THATCHER PERKINS,
Late Master of Machinery on the Balt. & O. R.R.
July 22 1851

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S,—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon.

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK 'IM IN," containing about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1941, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Directors,
GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Notice to Contractors.

CHICAGO AND MISSISSIPPI RAILROAD.

SEALED PROPOSALS will be received at the office of the company in the city of Springfield, Illinois, until SATURDAY, August 14, for the GRADING, MASONRY, BRIDGING, and CROSS TIES of that division of this road which extends from Springfield to Bloomington, Illinois.

The distance is about sixty miles, and the route traverses the most elevated and healthy portion of the State.

The line is divided into sections of about two miles each, and the work is to be commenced without delay.

Payments for work and materials will be made in cash.

Profiles and plans may be seen and blank forms obtained at the office of the company in Springfield and Bloomington, Illinois, where any information will be furnished by the Engineer Department.

Satisfactory proof of responsibility will be required from those proposing for the work.

The subscriber will be in New York, at No. 68 Warren-st., up stairs, over Hudson River Railroad Office, until August 3; and will be prepared to exhibit profiles, plans, etc., and give information to such as prefer to offer proposals in this city.

New York, July 15, 1852.

OLIVER H. LEE,
Chief Engineer Chicago and Miss. Railroad.

To Contractors.

CENTRAL OHIO RAILROAD.

PROPOSALS will be received at the office of the Central Ohio Railroad Company, in Zanesville, until the 15th day of August next, for the Graduation and Masonry of 41 Sections of the Road, extending from a point five miles east of Cambridge, to within about six miles of the Ohio River, near Wheeling, Virginia.

The work upon the greater portion of this Division is very heavy, including several Tunnels and a large proportion of Masonry.

Bids proposing to receive a per centage of payments in the Stock of the Road, are desirable; though a favorable consideration will be given to proposals for entire cash payments.

Specifications may be obtained at the Engineers Office in Zanesville, and also in Cambridge and Wheeling, on and after the 21st inst.

ROBERT McLEOD,
Chief Engineer.

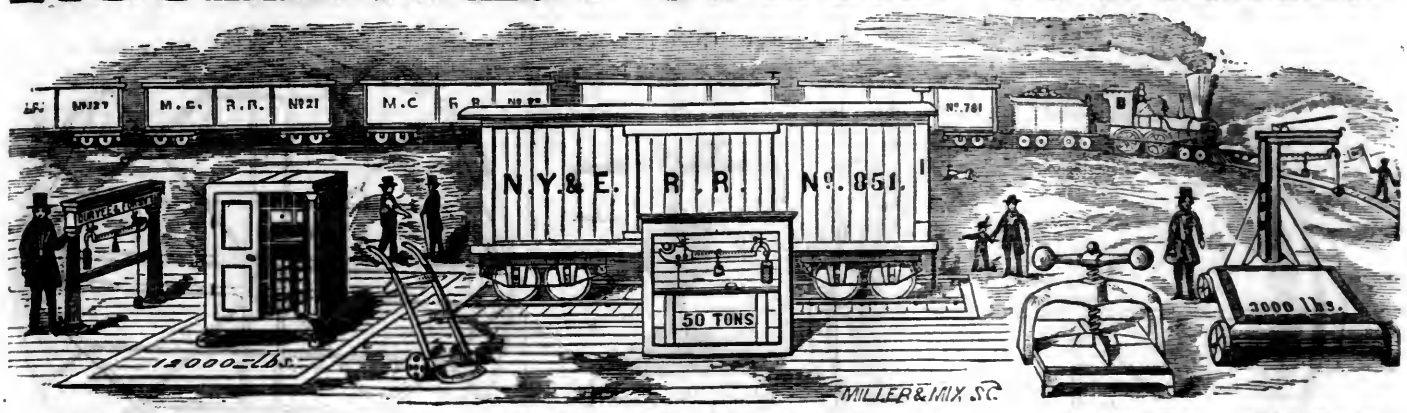
July 15th, 1852.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVEAT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rocheater,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami;	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

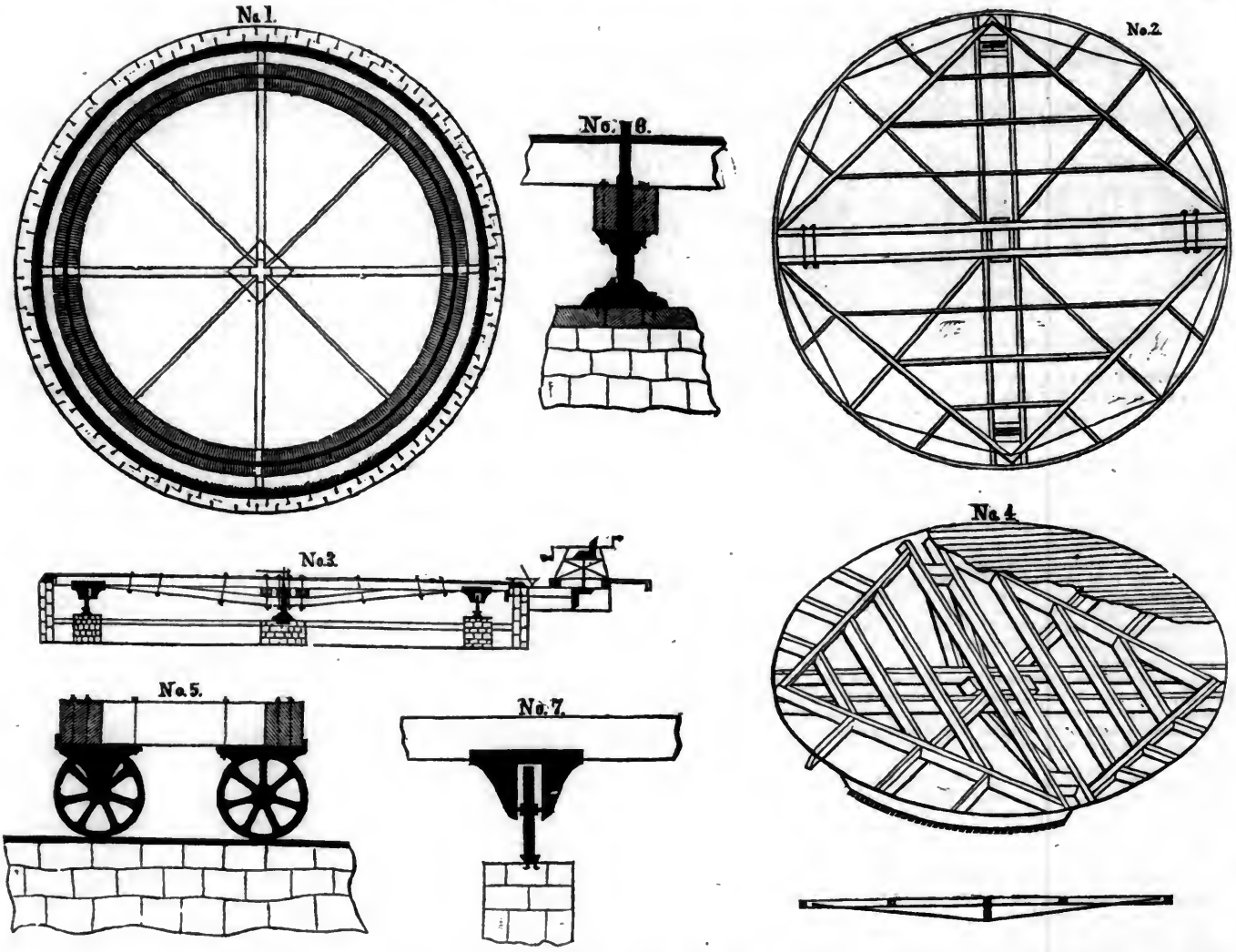
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra 
ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 34] SATURDAY, AUGUST 21, 1852. [WHOLE No. 853, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Time.....529
Maysville and Lexington Railroad.....530
York and Cumberland Railroad, Maine..537, 531
Ohio and Pennsylvania Railroad.....532
Savannah and Albany Railroad.....533
Pennsylvania Railroad.....533
Railroad System of the West.....534
Galena and Chicago Railroad.....535
Indiana and Bellefontaine Railroad.....535
Memphis and Charleston Railroad.....535
Springfield, Mt. Vernon and Pittsburgh Road..536
Terre Haute and Alton Railroad.....536
Stock and Money Market.....537
Hempfield, vs. Ohio and Pennsylvania Road..538
Dayton and Michigan Railroad.....539
Coal Trade.....539
Hillsboro' Railroad.....540
Mobile and Ohio Railroad.....540
Cleveland and Columbus Railroad.....540
Railroads in New York.....540
Louisville and Frankfort Railroad.....540
Railroads in Ohio.....541
Railroads in Illinois.....541

American Railroad Journal.

Saturday, August 21, 1852.

Railroad Time.

The railroad system of the United States is destined to be one of the most potent physical instruments in the onward course of the nation. Navigation hitherto solved, as far as its limits allowed, the grand problem of shortening the distance between the consumer and the producer, and therefore it was, that in the previous history of the world, wealth and power depended on the mastery, or proximity of the sea. The railroad has given us the power of navigating the land, and gliding more rapidly over its surface, than the smooth and level ocean permits. As an instrument of national development, we can even now hardly measure its value, but we can easily perceive it has a domestic worth greatly exceeding the influence of navigation. The American ship benefits the foreigner with each trip, as much as the countryman of its owner: but the railroad makes all its ports at home, and enriches directly the soil it traverses alone. Any improvement that will give to this mighty engine of modern civilization increased safety, efficiency and order, should be promptly adopted. The extent of the system in the United States is a proud evidence of national wealth and enterprise. This net work of iron tracks cost an enormous amount of labor and treasure; and the next question is, how to derive from its machinery the greatest amount of convenience and benefit for mankind at large, and of profit for the road owners. By an harmonious working of each line, and of all together, this maximum of use can alone be derived. Prudence and business management tell on the receipts of a railroad, as they do in every other department of life. But the profits thus gained by a well-managed road do not stand idle, for they run along in the same proportion upon the neighboring tracks; the travellers and the goods once set in motion, have a tendency towards farther locomotion; and they roll along from road to road. The necessity of a pertect unity of the entire system must be seen; and the more perfect the harmony in its working, the more valuable it becomes. It would be absurd to obtain a rate of travel of forty miles an hour, and then set the passenger who had been whisked along at such a rate, to wait for hours the coming up of a new train, to begin another section of his journey. Every circumstance which breaks the continuity of a road, and of a system of roads, introduces danger, loss and inconvenience. An uniform code of regulations, uniform rates as far as practicable, the same gauge, are all desiderata. It would be well, if the passenger and the box of goods could be ticketed and passed with certainty and despatch, from point to point, no matter how remote, of this common net work. It wants thorough and matured organization, however, to make our railroads what they ought to be. Notwithstanding the competition of parallel lines, there are in reality no jarring and discordant interests among railroads.

One great element of this unity and harmony in working, is time. The engineer and conductor must be as attentive to the lapse of time as the navigator and the pilot. He needs an accurate measurer of time, not to determine his own position, but to judge of the proximity of another ship of the iron track, from a collision with which equal wreck and ruin may be anticipated, as at sea from rocks and shoals. Unceasing vigilance is, on the part of those entrusted with the actual working of a railroad, and conduction of a locomotive, the only means to preserve life. To render this vigilance the more efficient, it is necessary that they should regulate all their movements in time, and be able to locate approximately the position of other engines and trains. This could not be done without all the engines observed, with punctual exactness, their hours and minutes for starting, and kept along at the prescribed pace. Time enters into the regulation of this matter, and chronometers are hence as necessary in the car as on board the ship. It will be obvious, that on long east and west lines, the difference in the apparent time of the termini, amounting on the Erie road to nearly 25 minutes, must introduce an element of confusion. A railroad should move by absolute time, and have its first meridian as a standard to start from, just as the astronomer and navigator require such an origin of time. We think the benefit of adopting this plan of having every movement regulated by one time-keeper must be obvious in the case of individual roads. Here safety of life, the most important railroad consideration, comes in to the support of an uniform standard. The regulation of times of starting, especially of expresses and extra trains, on an east and west line, must be greatly facilitated by its adoption. The conductors or other officers of the road may be called from end to end of their line, and as they go, they ought to find the company's clocks all in unison with their own time-keepers. In England the plan has been already adopted, and on all their roads absolute time has been substituted for apparent. The magnetic telegraph, the co ordinate of the railroad, the nerve to this vast muscle, furnishes the perfect means to make all the clocks within the range of an electric current, isochronous. The insular position and comparatively small size of England, renders the universal adoption of railroad time, an advantage. The difference in time, between Greenwich and the land's end, does not exceed the equations between the mean time at certain seasons and apparent time as indicated by the sun. Here, however, when the roads now in process of construction are completed, and Halifax and New Orleans thrown into railroad *rapport*, and within two days' journeys—there may ensue at first some strange mistake and misadventures, watches tripping each other up in the pockets of travellers—engagements unkept, where careless waytarers do not recollect their longitudes, and perhaps many a train or steamboat lost, to the painful separation of the owner and his baggage.

All these inconveniences would be avoided, if the railroad directors generally would adopt a meridian for themselves, the time of which might easily be transmitted from line to line by the aid of the telegraph, and the clocks on the route, corrected daily or weekly so as to keep time together; or even as in England, it may be found convenient to connect the clocks escapements with the same electric current, and render them absolutely isochronous. The principal towns and cities through the conntry on the lines of rialroad traffic, either now are, or soon will be, provided with their telegraph line, and the two will henceforth undoubtedly be constructed parallel with each other. The same causes bring them into existence, and their relations as auxilaries of commerce are extremely close.

Some rivalry may exist in reference to a choice of this first meridian of railroad time, for it is very natural to ask our neighbors to set their watche from our clock. There can however be but little doubt as to the city to be selected as the point of departure of travelers' time. Washington, Cincinnati and Boston may boast their observatories, and their political and commercial claims New Orleans and the travel of the Mississippi urge the convenience of a starting point just six hours west of Greenwich; but New York and the Hudson, on whose shores, the trade and the travel of the west and south centres, or at all events pauses, with her overwhelming foreign and domestic commerce, ought to be, and will be chosen, and before many years the beats of the great regulating clock in the heart of New York, will pulsate with the vibrations of its pendulum on the clock escapements from Halifax to New Orleans.

Kentucky.

Maysville and Lexington Railroad.—The second annual report of the directors of the Maysville and Lexington railroad contains the following important statements. About the time of the annual meeting of the stockholders in May, 1851, the subscription of $150,000 by the county of Bourbon was pending; this was subsequently ordered by a heavy majority of votes, on the single condition, that the town of Paris should be a point on the road. At this time no location had been made. Soon after the citizens of Fayette county expressed a strong feeling in favor of the eastern route, passing thro' the town of North Middleton, in Bourbon county, and held meetings for the expression of this preference. In this conflict of opinion, the board of directors felt it to be their duty, to lay before the citizens of Fayette county ,at a public meeting, called for the purpose, all the information they possessed on the subject. The statistics in favor of the Paris line were unanswerable, and the meeting consented to that location ,upon the condition, that the Maysville and Covington companies should unite in the construction of a common stem between Paris and Lexington. Negotiations were entered into, with the Covington company in reference to this object, and a difficulty as to the grades, on the part of that company, led to a re-survey of the route, and retardation of the work, in Fayette county, for at least eight or nine months. The attitude of hostility of a minority of the tax payers in Mason county, terminated at length in a legal issue, in which the constitutionality of the company's charter, and the validity of the bonds issued by Mason county, were affirmed successively by the Circuit Court and the Court of Appeals of the State.

The report alludes to the favorable disposition of the county bonds, and the rapid progress now making on the work, with a force of nine hundred hands at present employed. The location from Maysville to Carlisle, by the eastern route, was unanimously determined by the board on the 21st June, 1851. The line between Carlisle and Paris was also located.

Regarding the whole line as it is now located, the board are impressed with the belief that the best selection, under all the circumstances possible, has been made. The experimental surveys ascertained the length of the road to be from 69 to 70 miles; the distance, by subsequent and more accurate surveys, has been reduced to 67 miles and some poles; and in other respects the line has been much improved. The great number of experimental lines run has certainly increased considerably the expenses of the engineering department; but the board are convinced that it was true economy, that a far better road has been secured, and that in distance and cost the company has saved many thousands of dollars. It is with pleasure they take this opportunity of testifying their high sense of the distinguished ability and services of the Chief Engineer, L. L. Robinson, Esq., and their regret that the connection which has so pleasantly subsisted from the initiation of the enterprise between him and the board, so much to the advantage of the company, is about to cease, by his acceptance of the chief-engineership of the Louisville and Nashville railroad. The duties devolving upon the corps of engineers under his direction, necessarily arduous, have been discharged, as the board confidently believe, with great fidelity, energy and skill.

The accompanying report of the Chief Engineer fully exhibits, in detail, the condition of the road, and the character and progress of the work. Considering the difficulties with which we have had to contend at every step, the present progress and prospects of the enterprise are remarkable. All the heaviest sections between Maysville and Carlisle have been commenced, and on several of them much work has already been done, so that it is confidently calculated that the cars will be running on that portion of the road between Maysville and the Licking summit by the first day of July, 1853, and from Licking to Carlisle by the fall of that year; and as the work is generally light, comparatively at least, between Carlisle and Paris, it is believed that the line between those two points can be opened at the same time. From the present unsettled state of the negotiations as to the line between Paris and Lexington, it is impossible to say when that division can be opened. It is hoped, however, that a speedy adjustment will be effected, and that the work there will be accomplished as rapidly and successfully as on other portions of the road.

The report of the Treasurer exhibits in detail the state of the accounts of the company; from which it appears that the total amount expended for grading, land damages, engineering, office expenses, instruments, and contingencies of all kinds, from the organization of the company to the present time, is $102,000, and that the unexpended available means now in the hands of the company amount to $142 973 46. Independent of this sum, and of the voluntary subscriptions already due by call, there will be due to the company on the first July next—from the county of Bourbon, $50,000; from the county of Fayette, $66,000; from the county of Mason, $50 000; and from the city of Maysville, $50,000. One-fourth of the whole cost of grading is paid for by stock issued to the contractors on their subscription, as the work progresses.

The entire amount of subscriptions of stock is $1,033,511; the total cost of the road, including grading, superstructure, land damages, stations, depots, engines, cars, and every necessary outfit, after allowing for the portion of expense to be borne by the Covington company for the line between Paris and Lexington, is estimated at $1,440,000. By the charter, the company is authorised to issue its own bonds to the amount of $500,000.

With such an amount of subscriptions expended upon a road only 67 miles long, running through one of the richest regions in the world, and forming connections which will reach from one extremity of the Union to the other by the shortest lines, and thus ensuring a full and constantly swelling tide of travel and transportation, flowing at once from the fertile lands through which it runs and from the vast regions it connects—there can be no difficulty or doubt as to a negotiation for the small sum necessary to complete it. In roads of ordinary promise, the grading alone, paid for, secures the iron and outfit; how certainly, then, can the requisite means be commanded in this case, where there is a surplus at least of $150,000 over the cost of graduation, and where the road intrinsically is of such importance, and in its connections is of such acknowledged and imposing value.

The board are gratified in being able, notwithstanding all the depressing and disheartening influences which beset them from the very inception of the enterprise, and which have surrounded them in different forms almost to the present hour, but which have been successfully and triumphantly overcome, to announce, as they do with the fullest confidence, that *the speedy completion of the* Maysville and Lexington Railroad *is now certainly secured.* Its great connections are also certain. At Lexington, it meets a line in operation to Louisville, and a line in course of construction to Danville. The Louisville line running to Bowling-green, thence diverging to Nashville and Memphis, and thus connecting with the entire system of southern railways, is already placed beyond any reasonable doubt. The Danville line will, by the very force of its geographical position, and the necessities of the intervening country, be extended into Tennessee, and also to intersect the Louisville and Nashville line, and thus form the most direct practicable route from that region to the north. At this extremity of the line, a short link through Hillsboro' to Columbus will unite us with the entire north; and the Maysville and Big Sandy railroad, connecting at Portsmouth with the Scioto and Hocking Valley railroad, and through that road with the Baltimore and Ohio railroad, and also with the Pennsylvania Central, and at the mouth of the Big Sandy with the Virginia Central line, establishes the cheapest, speediest and most direct connections with the Atlantic cities. Portsmouth will be connected during the present year by railroad with the east. And already an offer of subscription to the Big Sandy railroad to the amount requisite to the organization of the company has, we understand, been made; and heavy capitalists at the east are ready, as this board are informed, as soon as the company is organised, to subscribe the entire amount necessary to its completion. The commissioners of that road, with an energy worthy of all praise, have already had the line surveyed and the estimates made by a competent and reliable engineer, and the detailed results of that survey published in pamphlet form. By that publication it is demonstrated that a railroad can be run from Maysville to Big Sandy, by Portsmouth, 88 miles only in length, at a cost of $18,000 per mile, with outfit complete, in a great measure level, never exceeding in grade 15 feet to the mile, with unusually easy curves, and through a region of great fertility and mineral wealth, and abounding in all the best materials requisite to the construction of a railroad of the first class. This exposition is the guaranty of its construction. There is no heavy work of any consequence on the line, and there is no good reason why this road should not be completed and in running order in three years from this time. This line from Lexington via Maysville to Big Sandy, is unquestionably the most practicable, and according to all reasonable estimates that can now be made, having regard to cost, grade, curvature and running time, the cheapest, safest, speediest and best line, by which the Kentucky system of railroads can be connected with the systems of the north and east. This line extended through Lexington to Danville, and from Danville direct to the Tennessee line to meet the great southern line passing through McMinnville, and branching also to intersect the Louisville and Nashville road so as to connect with Nashville and Memphis, must ultimately be *the great central railway of Kentucky*, from which shall diverge the various lateral lines ramifying in all directions to the borders of the State, and through which, as a great artery, shall circulate the teeming productions not only of Kentucky, but of the north and south.

Henry Waller,
President.

The report of L. L. Robinson. Esq., of the Maysville and Lexington railroad, dated 1st May, 1852, presents the progress of the work in detail. On the 17th of July 1851, ground was broke, and the heavy work on the Limestone creek and across the Licking valley was soon after undertaken. The engineer expresses an opinion that the road between Maysville and Licking summit will be completed for the running of the cars by the 1st of July 1853. From the Licking summit to the Licking river, the work has been steadily prosecuted. Here the succession of deep rock cuts and high embankments, varying from 30 to 75 ft. in height and depth, and also two tunnels, one of 400 feet and the other 1100 feet in length presented a series of heavy work rarely seen. Mr. B. thinks that the line will be finished as far as Carlisle from Maysville in the fall of 1853.

The line as located intersects the town of Paris near the southern corner of its boundary, and leaves the depot building fronting on the Paris and Winchester turnpike. This situation for the depot it is believed will offer peculiar facilities to the farming community and the citizens of Paris. The line between Paris and Lexington is yet unsettled, as to whether it is to be constructed with a single or double track, the contractors have made arrangements for pushing it along with vigor as soon as this question is decided.

The following is the concluding portion of the report.

It will be necessary this season, to purchase $5000 tons of iron, to be delivered during the winter and spring of 1852 and 3, and 2000 tons to be delivered early in the summer of '53. It will also be necessary in August or September next, to contract for the locomotives and cars, necessary to open the 1st division of the road, to be delivered in the spring of '53.

The operations of the engineer department of your road, have been uniformly conducted with as great a regard to economy as circumstances would admit.

A large amount of difficult work has been performed during the past year, and I have reason to congratulate the company upon the faithful and professional manner, in which all the assistants on the line have performed their duties. For the expense of this department, I refer you to the detailed vouchers, filed with the secretary of your company.

The physical obstacles it became necessary to overcome to construct your road were very great, and it is only by the great and untiring energy and vigilance that has throughout characterized your board that the completion of the great work is now placed beyond a doubt.

I have, for the past two years and more, closely examined the wants and resources of the section of country traversed by your road, and for the past year, owing to my connection with other important roads in this state and Tennessee, have closely examined the future connections of your road with reference to the through trade and travel; and it is with a sincere belief that you have overcome the greatest obstacles to the speedy completion of the road, and with my confidence still unshaken as to its being a large dividend paying road when completed, that I subscribe myself,

Your ob't serv't, L. L. ROBINSON, Chief Eng'r.

Expulsion from Cars.

In the Boston court of Common Pleas, on Tuesday, the Jury in the case of Simeon Gilbert, *vs.* the Boston and Maine railroad corporation, gave a verdict for plaintiff, with nominal damages of $1. Gilbert, the plaintiff, was expelled from the train, in consequence of having refused to pay extra fare in accordance with the rules of the road, he not having procured a ticket. The case has once before been tried, the jury then not being able to agree.

Maine.

York and Cumberland Railroad.—The annual report of the directors of the York and Cumberland railroad is encouraging to the friends of the work. The road was so far completed to Gorham, as to allow, since the 8th of February, 1851, the running of trains between that place and Portland. The amount expended including depot grounds, depot and engine accommodations, in Portland, engineering, etc., is $449,424·81.

The number of shares of capital stock on the books of the company, is 6,117, of which $86 885,-26 is still to be collected.

The earnings of the road, up to July 1, 1852, is	$15,637·98
Running expenses	14,132·76
	$1,505·22

A large proportion of the expenses have been incurred in running gravel trains, in conjunction with the passenger trains; by this means the road has been improved many thousand dollars, and a large credit is due from the construction account as "net earnings." The working expense account contains items of repairs to the locomotives furnished by the contractor amounting to over $1,200. From the opening of the road until July, 1852, 68,-056 passengers have been carried over it without the occurrence of a single accident. The road, from its direction coinciding with that of the prevailing winds, is very little obstructed by snow in winter.

The difficulties between the contractor, Mr. John G. Myers, and the company, have been settled by judicial determinations in favor of the company.

The contract for building the road has been assumed on very favorable terms for the company, by John M. Wood, Esq., and the ability and success displayed by him, in carrying forward the Atlantic and St. Lawrence railroad, have added materially to the credit of the company. The work of grading is in progress over the whole line between Gorham and Saco river, the iron purchased, and the opening of the road to that point before the setting in of winter is rendered secure.

The business prospects of no road in Maine is more promising than those of the York and Cumberland. Mr. Morton, in 1849, estimated, that the number of way passengers would reach 75,000, and the through passengers 45,000, immediately after the completion of the entire road.

The return of the Superintendant shows, that on this short section of 10·73 miles, or one fifth of its length, the road has already carried 50,322 passengers during the last year, or at the rate of over 4,-995 passengers per mile of road run.

The following table exhibits the comparative amount of travel on the leading railways in Maine, and the average number of passengers per mile of road in operation:

Name of road.	Length of line.	No pass. last year.	Average No. per mile.
York and Cumberland	10¼	50,322	4995
Atlantic and St. Law.	91	124,825	1372
Kennebec & Portland	52	93,943	1803
Androscoggin and Ken.	55	80,925	1524
Port. Saco & Portsmouth	51	216,869	3943

The line penetrates the most densely populated agricultural portion of the State, and no line in the country touches the same amount of available water-power, in proximity to a good seaport and large market. Almost the whole water power of the Presumpscot, with its 15 falls, is within reach, and on the Saco, from Bar Mills, where the road crosses that river, for the next 20 miles a succession of falls is met, greater than the entire water power of the Merrimac, between lake Winnepisogee and tide water.

The ice trade has just been commenced in Portland, and those interested say, that no point affords such facilities and superior quality as Sebago Lake. At the last session of the Legislature a branch was authorised to be made to Sebago Lake. Ice can be brought down the level or descending grades of this road to the wharf at Portland, at the rate of 5 3-10 mills per ton, per mile.

The export of ice from the port of Boston has been as follows:

Years.	Tons exported.	Years.	Tons exported.
1845	48,422	1849	66,308
1846	57,293	1850	69 623
1847	54,625	1851	99.578
1848	57,507	1852 to July 1	60,411

The time for completing the location of the line has been extended, till the end of December, 1853.

The division from Portland to Saco river 18¼ miles of road, cost, including engineering, land damages, depots and equipments, about $600,000.

Which will be paid for by—

Amount received on capital stock	$275,000 00
Ken. and Portland railroad	28,220 93
Rents	235 87
Property sold	967 25
Interest	330 81
Bonds sold	144,960 00
Bonds to be sold	'30,000 00
Bills payable, say	20,000 00
	$600,000 00

This estimate covers the expenditures for depot grounds, the building of the new and elegant depot in Portland, etc., so that the cost of the road will not exceed, when completed, $30,000 per mile.

The report then discusses the claims of the road as a *through* line between Boston and Portland.—The original charter held by the Boston and Maine company of March 30, 1836, authorised the building of a road from Portland through the villages of Saccarappa, Gorham, Alfred, etc., to Great Falls. It was to have been located before the end of 1839, and built before the end of 1846, and in case of a failure in either case, the charter was declared *null and void*. The act allowing the company to connect with the Portland, Saco and Portsmouth railroad, required them to build this line. While they held the right to build, the Boston and Maine company constantly threatened the Saco and Portsmouth railroad with a competing line. Desirous of obtaining a more liberal charter, that company induced certain parties in York and Cumberland counties to obtain a charter, under which they promised to build a road into Portland. The Saco and Portsmouth company vainly resisted the grant of this charter, which was urged and finally granted as a renewal of the original charter of 1836. With this charter under their control, the Boston and Maine company, after paying for the expense of a survey, forced the Portland, Saco and Portsmouth company into a contract for a perpetual lease of that road, forfeiting their plighted faith to the corporators of the York and Cumberland road. This measure excited much feeling through the counties of York and Cumberland. Hitherto the Boston and Maine company have refused, to enter into any contract, to pass the passengers over the York and Cumberland, on the same terms, as those over the Portland, Saco and Portsmouth road, to Boston. A law of the legislature of the State of Maine has however been passed, calculated to remedy this evil. The number of passengers during the year ending 1st June, 1852, over the Portland, Saco and

Portsmouth, was 216,869, of those 117,370 were *through*, and 99,499 *way* passengers. Of the thro' passengers, 83,135 came over the Boston and Maine, 34,225 over the Eastern railroad. It is believed that the York and Cumberland road will command the same proportion of the through passengers and affect the Portland, Saco and Portsmouth road to the same extent as the Boston and Maine railroad does the Eastern road. The way business is however the chief dependence, by extending a line to the Cocheco road the whole dependent region will be brought 50 miles by railroad nearer to Portland than Boston. When the Cocheco road is extended to connect with the Boston, Concord and Montreal railroad and its dependent lines towards Montpelier, the whole of northern New Hampshire and Vermont will find their natural and cheapest market in Portland. All articles of consumption are 50 per cent. cheaper in Portland than in Boston, her facilities for shipping are unequalled, and her *seven miles* of wharf accommodations and lines of railroad extending on a level around the city, make her able to transact business as cheaply as any other port on the continent. Nothing can so strikingly display the influence of railroads in the growth of population and wealth, as a simple comparison of the progress of Maine and Massachusetts for the last fifty years.

POPULATION.

	Maine.	Massachusetts.
1800	153,719	423,245
1810	228,705	472,040
1820	298,335	523,287
1830	399,455	610,408
1840	501,793	737,699
1850	583,626	994,271

DECENNIAL INCREASE RATIO PER CENT.

	Maine.	Massachusetts.
1800	57·1	11·7
1810	50·7	11·5
1820	30·4	10 9
1830	33·9	16·6
1840	26·2	20·8
1850	16·6	34·8

Up to the year 1835, there was a large immigration into Maine, from other portions of New England. From 1835 to 1840 the tide of immigration was turned, and a very large and most valuable portion of our population emigrated between 1840 and 1845. This was clearly the result of railway improvements in Massachusetts, and the absence of similar exertions in Maine.

Three hundred and twenty-eight miles of railroad built by the capital of the State, radiate from Portland. The great line to Montreal will be opened next June, bringing Portland into communication with the St. Lawrence and the great lakes. The government of Canada, induced by the opening of these roads, has just consummated a contract, for a line of Ocean Steamers, between Portland and Liverpool, adopting the former as the Atlantic seaport for the Canadas. An extension of the road will also open communication, by a direct line, between Concord and Portland, bringing the latter city, by a shorter route than Boston, into connection with the trade of the basin of Lake Champlain.

The steamboat competition, along the coast of Maine, is a formidable one, no less than 9 steamers are employed directly between Boston, Eastport, Bangor, Bath and Portland, carrying more passengers than the Portland, Saco and Portsmouth railway. The entire number is estimated at 250,000 annually. Four fifths of these would be carried by railroad, as soon as lines are extended as far as Bangor and Calais. The steamboat line between Portland and Boston carry but one fifth of the travel, between the two places. The superior safety of railroads over steamboats, is shown by the fact, that the burning of the Henry Clay, alone, caused more loss of life, than all the railroads of the country during the year with an aggregate of fifty million passengers. The extension of railroads, from Boston to St. John, will drive the steamboats as effectually from the coast of Maine, as they were driven from the Sound, between New York and New Haven, by the opening of the railroad between those places.

A subscription of but $250,000, the directors state will enable them, to celebrate the opening of the entire line at the next annual meeting, and they urge the effort on the stockholders, as justified fully by the promise held out by the 18½ miles of first-class road, already in operation, including over two fifths of the total cost of the road.

Ohio and Pennsylvania Railroad.

The opening of the Ohio and Pennsylvania railroad to Wooster, the county seat of Wayne county, Ohio, took place on the 10th inst. This town is 133 miles from Pittsburgh, making a distance of over a hundred miles, completed during the year. The hills and grounds in the neighborhood of the Wooster depot, were thronged with spectators. The directors and invited guests dined in a beautiful grove in the vicinity of the town. The Hon. E. Dean, of Wooster, presided and welcomed the visitors in a neat speech. Gen. Robinson, the President of the company, responded, and expressed the hope, that by the 1st of January next, a continuous railroad would be opened from Philadelphia to the Wabash river at Terre Haute. In answer to a complimentary toast, S. W. Roberts, Esq., the Chief Engineer of the road, gave a sketch of its history and prospects. He stated that the heavy work was over, and that what remains to do, is comparatively easy. The Pennsylvania road was practically extended to Terre Haute, and it soon will be, to St. Louis and Chicago. Even in its incomplete condition, the road is averaging *nine hundred passengers per day*. We quote the following passages from Mr. Robert's very animated speech.

We have met to celebrate the public opening of the Ohio and Pennsylvania railroad from Pittsburgh to Wooster. It is no idle pageant of a day that has brought us together; nor is it the commemoration of a past era, or a bygone event. The heavy work of our railroad is now done, and the difficult country is passed, and we may well congratulate one another; for what remains for us to do is comparatively easy.

Already our western terminus seems within our reach, and every day seems to bring me nearer to the time when I can retire from this scene of labor, and return to Philadelphia, with the satisfaction of knowing that the Pennsylvania railroad is practically extended from Pittsburgh to Terre Haute, and that it soon will be to St. Louis and Chicago.

In its incomplete state our road is doing well, and it is paying a fair interest on its cost. We carried, last month, an average number of almost *nine hundred passengers per day*. Our stockholders may well confide in the future prosperity of the work, which owes its existence to their enterprize and public spirit. It originated in no stockjobbing scheme, and it never was based on a town lot speculation. Four years ago the great outlines of the work were determined upon, and they have been steadily pursued ever since.

When I commenced the surveys, all the cash in the treasury of the company was the sum of sixty dollars, paid in by one of the oldest citizens of the town of Wooster, where we are now assembled.—In the Court house here I first addressed a public meeting to solicit subscriptions of stock, in aid of the enterprise. The cultivators of the rich wheat fields of Wayne county; many of them emigrants or the sons of emigrants from Pennsylvania, nobly responded to the appeal in aid of the infant undertaking. Since then it has gone on and prospered. The President and directors have labored unceasingly to promote its success. Large subscriptions have been made in Pennsylvania, and the great bulk of the stock is now held in that State. One hundred and thirty-three miles of the road are now opened for public use, and fifty-three miles remain to be completed, the work upon which is comparatively light.

In the space of twelve months the track has been extended westward one hundred and four miles, being at the average rate of two miles per week.—Our line touches and accommodates the towns named in the charter, and all of its grades are under fifty feet to the mile. In January next we hope to reach Crestline, and to intersect the Cincinnati road; passengers can then be carried from Cincinnati to Pittsburgh in about sixteen hours, or between six in the morning and ten at night of the same day. The quickest trip up the river ever made by steamboat was, I believe, forty-three hours, whilst sixty hours is a fair average trip when the packets are running. The railroad fare will, no doubt, be higher than that charged by the boats, but the new route will divide the through business with them on account of the great saving of time. In the summer and autumn when the good boats are laid up, and the small ones can scarcely run, because of low water, the importance of the railroad connection will be still more sensibly felt. When the route through Mount Vernon, Delaware, and Springfield, is completed, the time of the trip will be materially shortened. That important work is progressing rapidly under the auspices of General Anthony.

Good as our line will be to Cincinnati, we look to other connections as being more important to us in the future. The Cincinnati travel now poured over one road to Cleveland, is a magnificent business, but when it comes to be divided among the seven lines that propose to compete for it, the state of the case will be very much changed. We are aiming for Indianapolis, Terre Haute, and St. Louis; stretching out one arm through Central Indiana and Illinois, while the other will reach to Fort Wayne and Chicago. Last week I went to Indianapolis, between green walls of standing corn ten feet high; and, thanks to the energy of Oliver H. Smith, of Indianapolis, and Chauncey Rose, of Terre Haute, the extension of our line across the State of Indiana is nearly completed. The link across Illinois has lately been undertaken by John Brough, whose name is synonymous with success. The Bellefontaine division, in charge of our friend, James H. Goodman, of Marion, and W. Milnor Roberts, will be finished in a few months. The Ohio and Indiana road from Crestline to Fort Wayne is all under contract, and Dr. Merriman and J. B. Straughan are pressing it forward as fast as possible.

When these roads, and others that I might name, are completed, and connected with ours, and we have a first class continuous railroad communication from Pittsburgh to Philadelphia, without a broken link in the chain, and all of it worked as a commercial, and no part of it as a political machine, the wisdom of the plan of the Ohio and Pennsylvania railroad will be amply demonstrated.

In the speech which I made on the 4th of July, 1849, when ground was first broken for this road, I avowed the opinion that the Lake shore line would be built, and that the Pennsylvania Central railroad would have to meet that competition. The Lake Shore road is now nearly finished. As a Philadelphian, and as a stockholder in the Pennsylvania railroad, I should regret this very much, if it were not that I am reluctantly convinced that nothing short of such a competition will force our people to make the line through Pennsylvania what it ought to be.

Unless our line from Pittsburg to Philadelphia can be worked under one management, as the New York and Erie railroad is worked, it cannot in my opinion compete successfully with its northern rival, notwithstanding our great saving in distance. It is no part of a wise policy to underrate our adversaries. We have the shortest course to run, but we cannot win the race if we are overloaded with burdens.—Sooner or later, the geographical

superiority of our route over its northern rivals to New York, and its topographical superiority over its southern rival to Baltimore, must vindicate its advantages, but we must be first freed from legislative restrictions. New York has taken the tax off her roads to strip them for the race, and Maryland urges her road to the Ohio river by the aid of the state credit. It is a striking instance of the power of local interests to influence the opinions of men, that those members of the legislature of Pennsylvania from the northern tier of counties, who did the most to force the Lake Shore line through the state free of taxation, were the very men who strove the hardest to load down the Pennsylvania Central railroad with restrictions. They contended that the Central railroad would injure the state canal, but that the New York and Erie railroad would not injure it. Their argument was that we should treat our neighbors better than ourselves. For one I deny both the premises and the conclusion. It is not a contest between the Pennsylvania railroad and the Penhsylvania canal; it is a contest between our old Keystone state, rich in her position and her natural advantages, (which has been called by some one "a blind giant,") and the Empire state of New York, with which she is contending on the one hand, while with the other she struggles with the restless commercial activity of Maryland.

I am a Pennsylvanian by birth and education. My home is in Philadelphia and my interests are concentrated there. For twenty-five years I have labored as a civil engineer to aid in improving our internal communications. Nothing short of thorough work will now answer the purpose, and the very competition that renders it necessary will compel its accomplishment. I saw the first railroad made in the state, and I hope before long to see such a line completed from one end of her territory to the other, as may challenge competition with any other in the Union.

I know what an interest this question excites in Ohio, for Ohio is the battle ground on which the eastern cities contend for the trade of the west. I know that I am addressing an intelligent audience and that there is no use in endeavoring to evade the question or to conceal the facts. We know that you are wide awake, and we are striving to arouse our citizens and to make them equally vigilant. We know that the railroads running from the Lake shore already reach to Cincinnati in south-western Ohio, and to Zanesville and Wellsville in the south-eastern part of the state. Go where we will on your broad plains we must meet northern competition, and my opinion is that it can best be done by perfecting the line from Pittsburg to Philadelphia.

The invited guests appointed a committee to express their opinion on the road, which duty they performed in a series of resolutions—of which the first is as follows:

"That we regard the Ohio and Pennsylvania railroad as a *golden link* in the chain of internal improvements, which binds the agricultural industry and enterprise of the west with an eastern home market of consumption—a union of interests, both agricultural and commercial, alike sources of national prosperity."

Animals on Railroads.

An important decision was recently made in the Circuit court at Montreal, in an action brought against the St. Lawrence and Atlantic railroad Co. to recover the value of a cow killed on the track. The judgment was based on grounds that the company are not compelled to keep up fences to prevent intrusion of animals, and that all they are required to do, is, to give warning by means of the whistle or ringing a bell, when ever the cars cross a public road. The court also observed, that it would be most unreasonable to expect the railway cars to check their speed at each time an animal was found on the track; and that the public interest, as well as the law, required that parties residing on the line of road should keep their cattle from going on the track at all; and, if they did not hold them liable for damages.

Georgia.

Savannah and Albany Railroad.—This company was organized on Tuesday, the 10th inst., at Savannah, under a charter, granted by the state of Georgia in 1849, together with the amendments at the two succeeding sessions of the legislature.

The leading features of the charter are contained in the following extracts from the original charter and the amendments passed at the last session of the legislature.

By the first section of the act of incorporation, the company are "invested with all rights, privileges and immunities which by the laws of Georgia are held or enjoyed by any other incorporated railroad company or companies, subject to the restrictions connected with and necessarily consequent upon such rights, privileges and immunities for the purposes hereinafter specified.

* * * * "The object of the company shall be to construct a railroad communication between Savannah or the Central railroad near Savannah, if the respective companies shall agree upon a junction of roads, and Albany on the Flint river, by such route as the said company shall select, with such branch roads towards the north and towards the south from said road to such point or points as they may deem requisite; and the said company may at any time extend the said road to any point or points on or across the Chattahoochee river, provided they shall not obstruct the free navigation of that or any other river which they may cross; and provided further that they shall not by such extension violate the chartered and vested rights of the South Western railroad company."

By an amendment passed at the last session of the legislature, it is provided that—"The Savannah and Albany railroad company shall have authority to construct macadamized, graded, or plank roads in connection with their railroad and branches, or in lieu thereof, as the said company shall deem expedient.

The provisions for the right of way, the protection of the road and property of the company from injury, and the amount of taxation to be paid, are taken from the law authorizing the construction of macadamized, graded or plank roads, passed in 1849, and which were made a part of the Savannah and Albany railroad charter, at the last session of the legislature. They provide, in substance, that in assessing damages for the right of way, the parties shall be sworn to take into consideration the *advantages* as well as the *disadvantages* of the road to the property.

The provision for the protection of the property of the road is ample. "The said road, and the appurtenances thereto, shall not be subject to be taxed higher than one per cent on its net annual income."

The following gentlemen were elected directors:—James P. Screven, William Duncan, John W. Anderson, and Hiram Roberts, of Savannah, Ga.; Abbott H. Brisbane, of Charleston, *S.* C.; James M. Mercer, and Nelson Tift, of Albany, Ga.

J. P. Screven, was unanimously elected president, and John. W. Anderson secretary and treasurer.

Under this charter, it is proposed to reach the rich lands of southern and south-western Georgia, and ultimately to extend to the waters of Mobile bay, and probably still further, with the view of striking the line of improvements to be made, in the direction of California, through the *Paso del Norte.* With these objects, the company at once entered in negotiations with Richard Keily, Esq., the agent of the Belgic American company, who gives assurances, that he represents parties abroad interested in the completion of the work, and that they stand ready to advance a bona fide subscription of two millions of dollars for its accomplishment.

The city council of Savannah have also passed a preamble and resolution promising their co-operation in the projected work, and the contemplated union of that city with the southern and south-western counties of Georgia, and with Mobile bay adn the Mississippi.

The parties abroad are owners of large tracts of land, along the projected line of the railroad and its extensions.

Trouble on the Pennsylvania Line of Railroad.

The Philadelphia News of yesterday has the following in relation to a difficulty which has arisen between the Canal Commissioners of that State and the Pennsylvania railroad company, in consequence of a contract between the former and Messrs. Bingham & Dock, giving them the control over the passenger travel on the Columbia railroad.—The News says:

We learn that all efforts toward an accommodation between the Canal Commissioners and the Pennsylvania railroad company have failed, and that a legal contest between the parties is inevitable. To-day is the time fixed at which the arrangement between the Commissioners and Bingham & Dock will go into operation, and the last named parties will, we understand, claim under the Commissioners the exclusive control of the road between this city and Columbia. The Pennsylvania company will send their cars out as usual, and the new lessees or contractors will, we understand, refuse to take them in the train. This will be but the commencement of the difficulty. It is understood that Messrs. B. & D. will take the trains to Columbia without stopping at Dillerville. and that the Pennsylvania railroad company will make no connection at that point. It will therefore be necessary for passengers bound west of Lancaster and Columbia to leave the train at the former place, and make their way as best they can, on foot or otherwise, to Dillerville, a distance of about a mile and a half, where the Pennsylvania company's road begins.

We believe, however, that it is expected that the company will provide omnibuses at Lancaster to convey passengers to Dillerville, where they can again take the cars. No one, we presume, will fail to regret the existence of this difficulty. It is not simply a question between the parties now at issue, but is one fraught with very important consequences to our city and the State. It cannot but be seen that the Canal Commissioners are putting in jeopardy the best interests of the Commonwealth. None will deny but that there are rights to be respected belonging to the Pennsylvania railroad company, and if these rights are not regarded, the company must protect itself as best it can. Already, we understand, that ways and means are being looked after, with a view to abandon the Columbia road entirely, and this is entirely a feasible project. Within a very short time, we learn, the active and able President of the Reading railroad has proposed to the Pennsylvania company to carry their passengers and mails to Harrisburg, within the time now occupied over the Columbia road—to many of our readers this suggestion will appear strange—but to enable them to understand it, it is only necessary to inform them that there is a perfect railroad connexion between this city and Harrisburg by the Reading road, with the exception of ten miles, which distance can be run by stages in an hour.

The Philadelphia Bulletin of yesterday afternoon says:—At 8 o'clock this morning, the cars left their new depot, corner of Schuylkill Fifth and Market streets, and proceeded to West Philadelphia. Here a large crowd, anticipating a disturbance, on account of the advertisements lately published, had assembled, and when the cars of the Pennsylvania railroad company came over, there was a rush towards them, to see whatever was to be seen, but there was no disturbance, and if there had been, a large force was present to suppress it. The cars of the Pennsylvania railroad company ran along side those of Messrs. Bingham & Dock, and the passengers and mails were very quietly transferred to the latter and they soon proceeded on their way. We understand that some further difficulty was anticipated at Dillerville. While this excitement has been got up, travellers for the West are show-

ing what they think of it, by quietly taking other routes.

Tennessee.

Nashville and Tennessee Railroad.—This company has been organized, and the following gentlemen elected directors for the ensuing year:—John S. Claybrooke, Jas. H. Wilson, M. G. L. Claiborne, Thomas Parkes, Peter A. Perkins, Johnson Jordan, Frank Hardeman, C. H. Kinnard, T. F. Perkins, H. G. W. Mayberry, W. P. Cannon, E. Thompson, Samuel Henderson, Jef. Martin, John McGavock.

John S. Claybrooke, Esq., was chosen President of the company, Frank Hardeman, Esq., Secretary, and W. O. N. Perkins, Esq., Treasurer.

Seven hundred thousand dollars of the stock has been already taken. The county of Williamson alone takes $675,000, the balance was subscribed in Lawrence county. Mr. Claybrooke, the President of the company, is not only a man of large wealth, but he is recognized as one of the most sagacious and reliable business men in the county.—The road connects with the New Orleans and Great Western railroad, at the Alabama line, and is exceedingly important in its bearings on the interests of that section of Tennessee through which it is constructed.

Railroad System of the West.

Under this title, a writer in the Toledo Republican in an interesting article, considers what outlets the new system of railroads in the Western States will have towards the east, and in which direction their freights will most profitably be carried. The railroads now projected in the Western States amount to nearly ten thousand miles, 2,000 of which are already finished, and the remainder will probably be so, before the end of 1853. At about the same time Baltimore and Philadelphia will each have completed a single line railroad to the Ohio. The New York and Erie railroad will probably then be double tracked, as well as the roads between Buffalo and Albany.

The side roads in New York, together with the Ogdensburg, may be considered equivalent to a continuous single track. This would give the Northern route, five tracks of railroad besides the Erie canal; leaving to the Southern route, two tracks of railroad and the Pennsylvania canal.

The following Western roads are considered as depending on the "Pennsylvania Central" and the "Baltimore and Ohio" roads for an outlet.

IN WESTERN PENNSYLVANIA.

	Miles.
The Hempfield road, Greenburg to Wheeling.	78
Penn. and Ohio road from Pittsburgh west...	44
Pittsburgh and Steubenville road.....	35
Total in Pennsylvania.....	157

IN OHIO.

The Ohio and Penn. State line to Crestline..	136
Cleveland and Pittsburg.....	99
Columbus and Wheeling.....	150
Cincinnati, Circleville and Zanesville.....	130
Little Miami, Cincinnati to Springfield.....	84
Columbus and Xenia.....	55
Cincinnati and Dayton.....	60
Cincinnati, Belpre and Wheeling.....	250
Central Ohio, Columbus to Steubenville.....	175
Dayton and Western.....	40
Bellefontaine and Indianapolis.....	118
Ohio and Indiana, Crestline to State line....	113
Greenville and Miami.....	30
Eaton and Hamilton.....	27
Cincinnati to St. Louis.....	22
Springfield and Columbus.....	35
Total in Ohio.....	1,524

IN INDIANA.

The Indianapolis and Lawrenceburg.....	90
Indianapolis and Bellefontaine.....	83
Indianapolis and Terre Haute.....	72
Lafayette and Indianapolis.....	70
Central Indiana, Dayton to Indianapolis.....	72
Madison and Indianapolis.....	86
Cincinnati and St. Louis.....	163
Hamilton and New Castle.....	40
New Castle, Logansport and Chicago.....	174
Ohio and Indiana, state line to Ft. Wayne..	18
Shelbyville, Knightstown and Municetown..	73
Total in Indiana.....	941

IN ILLINOIS.

The Sangamon and Morgan.....	54
Cincinnati and St. Louis.....	150
Terre Haute and Alton.....	160
Terre Haute and Springfield.....	150
Total in Illinois.....	514

IN MISSOURI.

The Pacific railroad, St. Louis to Independence.....	300
Hannibal and St. Joseph.....	300
Total in Missouri.....	600

IN KENTUCKY AND TENNESSEE.

About.....	800

RECAPITULATION.

Western Pennsylvania.....	157
Ohio.....	1,524
Indiana.....	941
Illinois.....	514
Missouri.....	600
Kentucky and Tennessee.....	800
Total.....	4,536

This is the superstructure of the two single tracks from Philadelphia and Baltimore.

Depending on the New York channel there will be,

IN CANADA.

The Great Western railroad.....	270

IN MICHIGAN.

The Michigan Central.....	228
Michigan Southern.....	133
Michigan Southern branches.....	45
Detroit and Pontiac.....	25
Total.....	431

IN OHIO.

The Cleveland, Painesville and Ashtabula..	75
Cleveland, Columbus and Cincinnati.....	135
Toledo, Norwalk and Cleveland.....	96
Junction railroad, Cleveland to Maumee....	120
Erie and Kalamazoo, Toledo to Adrian.....	33
Northern Ohio, Toledo to state line.....	70
Total.....	529

IN INDIANA.

The Northern Indiana.....	165

IN ILLINOIS.

The Galena and Chicago.....	132
Aurora Branch and Extension.....	60
Rock Island and Chicago.....	180
Central Military track.....	84
Jonesville and Chicago.....	78
Lake Shore.....	40
Total.....	574

IN WISCONSIN.

The Lake Shore.....	40
Janesville and Fon du Lac.....	90
Milwaukee and Mississippi.....	170
Total.....	300

RECAPITULATION.

Canada.....	270
Michigan.....	431
Ohio.....	529
Indiana.....	165
Illinois.....	574
Wisconsin.....	300
Total.....	2,269

This is the extension of the five New York tracks. In addition to these, there are the following North and South roads:

IN OHIO.

Columbus and Lake Erie, Newark to Mansfield.....	64
Mansfield and Sandusky.....	56
Mad River and Lake Erie, Dayton to Sandusky.....	181
Dayton and Michigan, Dayton to Toledo....	150
Portsmouth and Chilicothe.....	45
Scioto and Hocking Valley, Portsmouth to Newark.....	110
Total.....	603

IN INDIANA.

Indianapolis and Peru.....	78
New Albany and Salem.....	345
Jeffersonville and Columbus.....	68
Evansville and Vincennes.....	50
Vincennes and Terre Haute.....	56
Fort Wayne and Municetown.....	65
Goshen and Peru.....	65
Total.....	727

IN ILLINOIS.

Illinois Central.....	640
Springfield and Alton.....	72
Fox River railroad.....	45
Total.....	757

RECAPITULATION.

Ohio.....	603
Indiana.....	727
Illinois.....	757
Total..... miles	2,087

The writer in the Republican considers, that the Philadelphia and Baltimore works are incapable of accommodating the enormous trade of the west, and what is even equally fatal, denies, that when the products of the west are there, that they have reached their natural market. It is asserted, that the principal home market of the United States may be found within a circle of which Albany is the pole; to include Lake Champlain on the north, Boston on the east, New York on the south, and Syracuse on the west. Here are found the consumers,—those who consume and fashion the products of the west; those who in return furnish the west with clothing, tools, and manufactured articles.—Here are the workshops and manufactories of the Union, and here the raw materials tend.

Examine the great courses of trade, and it will be found they all point to this vortex. The cotton of the South goes there to be manufactured. The products of the West go there to be consumed. The lumber and grain of Canada, and the commerce of Oceans, all face this common centre. If northern Canada and the great northwest were as well settled as our Southern States, and if state governments permitted trade to pursue an untrammelled course, then, we would see great thoroughfares radiating from this circle; a northern one through Montreal and Quebec; a northwestern one through Lake Ontario, and by the north shores of Huron and Superior; the western, through Canada, Michigan, Wisconsin, and Iowa; the southwestern, through Ohio, Indiana, Illinois and Missouri; and the southern, through Philadelphia, Virginia, Carolina and Georgia.

All this is very forcible, and the further argument, that the natural tendency is to try the home market before attempting the foreign, is undeniable. This accounts for some of those trade currents, that otherwise seem inexplicable. The fact is, that industrial wants and the laws of economical science, govern more potently than any others, the movements of production. The bulkiest articles will climb mountains to reach a market, while a diamond will hardly tumble to the foot of a hill, if there is no one there to purchase it. The capital-

ists of New York are reminded, not to waste their money on lines, that will not even enrich their rivals, while they strip themselves of the means to open up the communieations between the teeming west and the home of the consumers, so much of which lies territorially within their borders, and all the approaches to which must traverse their State. The particular plan recommended as best calculated for the present to accommodate the freights of the west is, the construction of an angling road from the vicinity of Erie, Penn., towards Zanesville, Ohio; to interest the trade of the Penn. and Ohio railroad, the Ohio Central, the Columbus and Wheeling, and the Cincinnati and Belpre roads.—The importance of the St. Louis and Erie road is also strongly insisted on.

Such is a brief sketch of the views of the writer referred to. We do not think there is any necessity of constructing further lines of railroad in Ohio, for the purpose of throwing the business of the State upon the northern route. There is no question but that *markets* must control the *direction* of trade. We do not think the classification into Northern and Southern routes to be by any means correct, but we give the substance of his article without assenting to its conclusions.

Illinois.

Galena and Chicago Railroad.—On Wednesday, 4th inst., the board of directors of the Galena and Chicago Union railroad consolidated the first and second divisions of the road. After allowing to stockholders of the second division between $30,000 and $40.000 for depreciation of the road from this city to Fox river at Elgin, a special dividend of 12 per cent was declared from the surplus revenue of the road, to the stockholders of the first division, payable in cash or stock dividend certificates, leaving a surplus of the joint earnings of the first and second divisions, estimated at rising of $14,-000. We understand, also, that provision was made by the directory for relaying the track of the first division of the road with heavy T rail. About half of it will be relaid this season. The whole of it would be, but for the difficulty in obtaining the iron.

The dividends of the Galena and Chicago Union railroad are nearly double those of any other road in the United States. Fifteen per cent was divided for the year ending May last, and now a dividend of twelve per cent more, make twenty-seven per cent for one year and three months. In regard to the Beloit branch, we understand the board took no action, as the surveys are not yet completed. The consolidation of the two divisions changes the fiscal year of the company, and hereafter the semi-annual dividends will be declared on the first of August and February, instead of May and November.

The opening of the road to Rock river is an important era in its history. We recollect when, in 1848, the hopes and fears of the present worthy president and his coadjutors in the financial and construction departments, were excited to an intense degree; the day when the locomotive would run into the valley of the Rock river, was looked forward to as a consummation, a day of triumph, and almost too great to be hoped for. But years of untiring and faithful labor have done the work, and if the road were not to run beyond its present western terminus, it would be a monument of honor to those who have built it, and a source of profit to the stockholders and prosperity to the city. Now, indeed, will the rich and comparatively unbroken prairies of the valley be developed, and pour their inexhaustible wealth into the lap of Chicago, and enrich the State.

To the Galena railroad, the city of Chicago and the State of Illinois are indebted for more of the present prosperity which they enjoy, than to all other extraneous causes. It is the pioneer railroad, and its success first opened the understanding of the people of the State to the fact, that they could build railroads themselves, and make them profitable, not only in developing the resources of their farms, but also in the shape of dividends. We recollect that in 1849, when attending the Pacific railroad convention at St. Louis, the success of the Galena and Chicago road was as well known to every individual as the most ordinary political matter, and it was brought forward on every occasion, as indisputable evidence of the expediency of a system of railroads in the State, and the ability of the people to build them. In bar rooms, on steamboats, and in public assemblies, the Galena railroad was the instrument which cleared up all doubts, and gave new courage to the faltering and less hopeful. It aroused the people to action. The Naples and Springfield, the Alton and Sangamon, the Aurora and St. Charles, and even the great Central and its branches, owe their present existance to the enterprise of those gentlemen who started the Chicago and Galena road, and carried it forward under the discouragements that met them wherever they turned.—*Chicago Tribune.*

The Agriculture and Manufactures of the United States

The Hon. Hiram Bell, in a speech recently made in Congress, grouped many interesting facts in relation to the agricultural and manufacturing productions of the country. The amount of capital employed in agriculture in the United States he stated at $1,281,329,919. Thus:—

Acres of land improved	$1,120,420,000
Value of farming implements	151,820,273
Value of live stock	525,705,238
Bushels of wheat	83,839,384
Bushels of corn	147,896,513
Tobacco, pounds of	41,971,940
Ginned cotton, bales, 400 lbs. each.	49,484,280
Wool, pounds of	15,726,839
Wine, gallons of	141,225
Butter, pounds of	31,220,228
Cheese, pounds of	6,192,075
Hay, tons of	68,026,920
Hemp, water rotted, tons	2,084,440
Flax-seed, bushels of	454,203
Maple sugar, pounds of	1,965,555
Cane sugar, hhds. of 1,000 lbs	15,932,200
Value of home manufact's	27,525,545
Hemp, dew rotted	9,949,120
Total	$1,281,329,919

In this calculation he estimated the improved land at $10 per acre, the wheat at 80 cents per bu., the corn at 25 cents, the tobacco at 6 cents a pound, the cotton at 5 cents, the wool at 30 cents, the wine at $1 per gallon, the butter at 10 cents a pound, the cheese at 6 cents, the hay at $5 a ton, the water-rotted hemp at 8 cents a pound, the flaxseed at 80 cents per bushel, the maple sugar at 6 cents per pound, the cane sugar at 5 cents, and the dew rotted hemp at 8 cents. Some of the items are curious, thus:—

The number of bushels of wheat is given at 104,-799,530; do of corn, 501,586,053. The pounds of tobacco at 199,532,697. Gin cotton, 2,475,214 bales. Pounds of wool, 52,422,797. Pounds of butter, 312,202,286. Pounds of cheese, 103,184,585. The largest crop in the aggregate, as will be seen, is corn. It yields upwards of $147,000,000.

With regard to manufactures we have this information:—Entire capital invested in the various manufactures of the United States on the 1st of June, 1850, not including establishments producing the annual value of less than $500—$530,000,000.

Value of raw material	$550,000,000
Amount paid for labor	240,000,000
	$1,320,000,000
Value of manufactures	1,320,000,000
Number of hands employed	1,020,300,000
Manufactured by each person	$971

These figures of course are not strictly accurate, but they are probably as nearly so as possible.

Missouri.

Marias Croche Road.—The contract for the grading, masonry, and macadamizing of the Marias Croche road, has been let to Mr. John Mullady of Alton, Ill. The work is to be commenced by the middle of next month and to be completed by the 1st of May next,—*St. Charles Chronotype.*

Indiana.

Indiana and Bellefontaine Railroad.—We feel happy in announcrng to the citizens of Marion Co., and all "the rest of mankind" that the track upon the Bellefontaine and Indiana railroad has been completed to this place. The citizens of our usually quiet village are startled by the shrill whistle of the old iron horse, as he comes booming over the plains into their very midst.

This is a result, which three years ago would have been considered fanciful in the highest degree. The warmest friend of the enterprise could scarcely venture the hope of that, which has so truly come to pass. We have now a speedy and cheap way of getting our surplus produce to market, and with our increased facilities, we expect to see a corresponding increase in the business of our town.

But we shoulh not relax our exertions, until the last bar of iron is laid upon the entire track. The prompt and punctual payment of subscription will secure the construction of the remainder of the track, as fast as energy and labor can accomplish it.

We understand, that thirty-five miles are nearly ready for the superstructure (west of Bellefontaine) which will be laid during the coming fall.—*Marion [O.] Mirror.*

Memphis and Charleston Railroad.

The work of relaying the Tennessee valley road has been progressing for some time past, and the tract from Tuscumbia landing is nearly completed, including a bridge over a deep ravine. We learn that only iron enough to reach about to Courtland, was received at Tuscumbia landing before the closing of river navigation by low water. This is unfortunate, as it will delay the completion of the road to Decatur in time for the next seasons business.

We notice that Messrs. Prall and Bradley, the contractors west of Tuscumbia, are here making preparations for a vigorous prosecution of the work.—They have advertised for 100 hands, to whom they will give constant employment and good wages for the next eighteen months.—*Tuscumbia Alabamian.*

Curious Fact.

If drift wood from the Andes, in the interior of South America, be set afloat upon the head waters of the Amazon, and if another log be felled from the Rocky mountains, in the interior of North America, and cast upon the head waters of the Missouri, these two pieces of drift, taken to represent the currents of their rivers, and of the seas into which they empty, will, each obeying the force of the winds and set of the currents, be driven out upon the broad ocean through the Florida Pass.—*Lieut. Maury.*

Rhode Island.

The Bristol Railroad.—The subscription to this road has reached $175,000. Offers have been received from contractors to build the road and take the balance of the stock, but other propositions have been considered for either filling up the stock by other subscriptions or for issuing bonds for about $50,000. The Boston railroad company offer to equip the road, and also offer important aid towards its construction.—*Providence Journal.*

Maine.

Eastern railroad.—The engineers and workmen are very actively engaged in constructing that part of this road, which is on the line through the Carey e tate in Chelsea, and thence into Boston. Some three or four parties are at work on the section between the crossing under the Chelsea Beach road, and Broadway near the foot of Mount Bellingham.

They are making the road bed in the most thorough and substantial manner, and will probably have the whole finished in October, or November next.—*Transcript.*

Indiana.

Madison and Beloit Railroad.—At the meeting of the board of directors of the Madison and Beloit railroad company, held at Chicago last week, J. M. Keep, Esq., one of the directors from this place, resigned, and John Hackett, Esq., also of this place, was elected to fill the vacancy. The board of this

company is composed of first class business men, and for prudence, energy, and sagacity, the organization is unsurpassed, and hardly equalled, by any similar board in this region.—*Beloit Journal.*

American Railroad Journal.

Saturday, August 21, 1852.

Ohio.

Springfield, Mount Vernon and Pittsburg Railroad.—This line of road now ranks as one of the most important projects in Ohio. It possesses all the advantages of commanding a fine local, and the additional one, of occupying one of the best routes in the State for through business. In both of these respects, it is hardly second to any line in the State. While various local considerations have given the course and direction of the links that make up the lines between Cincinnati and Lake Erie, the above road steps in and makes the short cut between the two, and also between Cincinnati and the Ohio and Pennsylvania railroad running to Pittsburg. The amount saved by this line will be so great as always to secure to it the through travel thrown upon it by the Cleveland and Columbus and the Ohio and Pennsylvania railroads. It is difficult to foresee the construction of any work that can interfere with the above railroad.

The construction of this road is progressing in two divisions, viz: the first from Springfield to Delaware, 48 miles; and the second from Delaware to Loudonville, on the Ohio and Pennsylvania railroad, a distance of 64 miles; making the entire length to be built 112 miles. The work on the first division is now well under weigh, and this portion of the road is estimated to cost $890,000. The cost is largely increased by two heavy bridges over the branches of the Scioto river. The means applicable to this division are—

Municipal bonds	$245,000
Individual subscriptions	205,500
To be raised by bonds	439,000
	$890,000

It is believed that the bonds to be issued upon the first division will find a ready sale, and that consequently sufficient means are provided for the rapid progress of this portion of the line.

The estimated cost of the second division of the road is $840,810. Toward this, there has been raised the sums of $100,000 in private, and $175,000 in municipal subscriptions. But as the completion of the *first* division will favor any important connections which promise a remunerative traffic, the company will not, we understand, proceed with the construction of the *second*, without receiving some aid from the interests immediately to be benefitted by it; and those are the cities of Pittsburg and Philadelphia, and their great line of road running *west*. Similar objects and common policy have led to the construction of this line of road from Philadelphia to Loudonville, a distance of about 520 miles. This great line of road will be carried west by two important roads, the Indiana and Bellefontaine, and the Ohio and Indiana, roads. It must have the Springfield, Mount Vernon and Pittsburg road to carry it to Cincinnati, the great city of Ohio. With these, the connections of the above line will be complete, and its position secured. After running over 500 miles in a very nearly direct western course, till the heart of Ohio is reached, it will then throw out its grand feeders in every important direction, realizing the original plan of its projectors, and rendering the success of this great line complete.

As already stated, means for the first division are *secured*. For the second, we understand that its construction will be made to depend upon the aid it will receive from foreign sources, principally Pittsburg and Philadelphia. From these cities $250,000 is expected. It is asked on the ground that the above is the direct, and one of the most important extensions of their great avenue *west*. It is a Philadelphia and Pittsburg road, and as they will be the communities chiefly to be benefitted by its construction, it is perfectly just that they should contribute what is asked of them toward its construction. With the above subscriptions, say $100,000 from Pittsburg, and $150,000 from Philadelphia, a road tributary to their interest, and costing about $2,000,000, can be built. Of this sum, the city of New York will furnish *one-half*. If, upon this basis, the above cities will not contribute the paltry sum of $250,000, to secure the outlay in their favor of nearly ten times that sum, they certainly do not deserve the advantages to result from it. We think the Springfield, Mt. Vernon and Pittsburg company are fully justified in declining to proceed with their road, except upon the conditions proposed.

We understand that the efficient President of this company, Gen. Anthony, is about to visit Philadelphia for the purpose of securing the sum expected from that city. We have no doubt he will meet with the reception his project deserves. It has the public confidence, and can, upon a proper basis, command money in this city. The company can raise in New York six dollars for every one required of Philadelphia. Such being the fact, we believe that the latter will not be slow to avail herself of the capital of her rival, to build up a project which must be tributary to her. Any other policy would indicate a degree of stupidity, and an utter inattention to her best interests, that we will not believe of Philadelphia, till we see it. Were her enterprise equal to her real strength, a number of projects absolutely essential to the maintenance of her position, now calling for aid, would not be treated with so much coolness and neglect as she is showing toward them. She should do something, if only to conciliate the good will of those portions of the west upon which she has been accustomed, and must depend for support.

We also learn that the Springfield and Pittsburg look to the roads that make up the line from Springfield to Cincinnati, for aid. This road is of especial importance to the Cincinnati, Hamilton and Dayton, threatened as it is with the *short cut* from Dayton to Cincinnati. To guard against such an event, the Cincinnati, Hamilton and Dayton should make sure its eastern as well as its western connections, and concentrate in herself the strength which might otherwise be used to hold up a rival road.

Tennessee.

Nashville and Chattanooga Railroad.—The tunnel through the Cumberland mountains, in east Tennessee, on the line of this road is completed and the passage of the cars through was celebrated by a festival on the 3rd inst. The tunnel is about one hundred miles from Nashville, and its completion forms an important era in the history of trade and the steam engine.

☞ Charles B. Childe Esq., has accepted the appointment of chief engineer of the Maysville and Big Sandy railroad.

Illinois.

Terre Haute and Alton Railroad.—Active operations have been commenced upon this road, and we are assured that it will be completed in two years from January next. The work is in the hands of experienced, able and efficient railroad men, who have given good evidence of their competency for such enterprises, by their success in similar undertakings.

We have been very desirous of seeing this road constructed, as we have the line extending from Terre Haute to St. Louis. We go for the greatest liberty in the construction of railroads, believing that, on the whole, to be the wisest policy.

The State of Illinois thinks differently. Her people say, "if we build our own roads, we must construct such lines as will be of the greatest advantage to us, and they must take such a direction as shall secure the greatest good to the whole State. Railroads build up cities, those cities collect capital, which again reacts upon, and benefits the country." This feeling has given birth to what is termed the State policy, in obedience to which, a charter to the Terre Haute and St. Louis road was refused, on the ground that the tendency of the road would be to build up St. Louis a town in another State. Whereas the Terre Haute and Alton railroad would build up Alton, and secure the trade of the State to a town within her own limits.

The State having thus determined to have but one line from Terre Haute to the Mississippi, it is of the utmost importance that this line should receive every encouragement possible. It will sufficiently accommodate the trade and travel concentrating at Terre Haute, and will form a convenient extension of the Terre Haute, Central, and other Indiana lines of road centering at Indianapolis. It is of the utmost importance that this road should be carried forward with the least possible delay to the Mississippi river. The Alton line will have one great advantage over the lower one, by having a terminus upon the river above high water mark.

The route of the Terre Haute and Alton road, as already stated, constitutes a convenient extension of the Eastern lines of railroad to the Mississippi. It will traverse a country of inexhaustible fertility, and one too that is well settled. Its local traffic must be immense, as will be the case of all the Illinois roads. The enterprize is a good one, and the road is indispensible, both to connecting lines, and to the country traversed, and its early completion is of the utmost consequence.

There has been some talk about commencing the construction of the line from Terre Haute to St. Louis, under the authority of a clause in the charter of the St. Louis and Belleville railroad company, which gives that company the right "to connect with any other railroad within the State."—We presume such reports to be premature. The State would not give, *indirectly*, what she refused, *directly*. The clause in the Belleville charter certainly did not contemplate any such authority claimed for it, and we presume the act will be construed according to the *known intention* of the Legislature. But we understand there are other objections to the construction claimed, which are fatal to such interpretation. The Constitution of the State provides, that *two* distinct matters shall not be embraced in *one* act, and further, that the title of each act shall state the substance of it; both of which provisions appear fatal to any authority in the Belleville charter, which contemplates a road of only a few miles in length, to authorize a road of 160 miles. If no such authority does exist, we

should be sorry to see a merely impotent assumption used to prejudice a work, which has an undoubted charter, which the public interest requires to be built with all possible dispatch.

New Railroad Car Seat.

We have had the opportunity of examining a newly invented seat for railroad cars (as well as for other purposes) which we believe to be a great improvement upon the one now in use. Each seat has a separate back, which is so arranged as to allow it to be turned in the direction of the train, without any change of the *seat*. By this means each seat is equivalent to a well stuffed easy chair, turning upon a pivot, and capable of fronting in any direction. By changing the back, it may be made into a most capital night seat, in which a passenger could sleep almost as comfortably as in bed. The seat occupies no greater room than the common one in use, and may be made as comfortable and easy as the most luxurious parlor chair. The frame of it can be constituted entirely of iron, and be made at a less cost than the ordinary one. We believe that no company would hesitate a moment to adopt it, upon examining its merits. As journeys are now undertaken in railroads, lasting several days, some substitute must be adopted for the inconvenient and uncomfortable seat now in use, which is just the worst contrivance in the world, and to remedy which the above invention seems exactly adopted.

Louisville and Nashville Railroad.

The people of Grayson county have by a majority of 127, voted $100,000 to this road. In Sumner county Tennessee, a vote was taken and decided by 130 majority in favor of a subscription by the county of $300,000, to the Louisville and Nashville railroad, provided its road runs through that county.

Stock and Money Market.

The stock and money market continues to present the same uniform character noted for weeks. Money remains abundant, and speculation in fancy stocks continues active. In permanent investments there is not much doing. Foreign orders per several of the late steamers have been light, and this, added to the absence of so large a class of our active men from the city, renders the market for bonds of new works, dull. An increase of foreign orders is anticipated, and there seems to be no reason to doubt that money will be abundant for all such projects as are entitled to borrow, though we do not expect to see much activity before the middle of September.

Thursday, 12th August.—The stock market was active to-day, and prices advanced. Erie closed at 88¼. Harlem 73. Stonington 59½. Long Island 22½. Hudson Rivvr 69. Reading 92¼. Michigan Central 114. N. Indiana 119. Michigan Southern 118¼. Madison and Ind. 107¼.

The sale of bonds by Mr. S. Draper, went off slowly. $50,000 bonds of the city of Memphis at 81½ *a* 79. $22000 Sandusky city at 82½ *a* 80½. $3000 Huron at 79 *a* 78.

Friday, 13th August.—Confidence and activity are the leading characteristics of the market to-day. Government stocks were eagerly sought for. New York 6's, 1865, sold at 121. The leading fancies went up strongly. Harlem rose to 74½, a rise of 1½. Stonington advanced to 60, and Norwich to 56½; Erie closed at 89½. An equally strong improvement was felt on the western stocks, Madison sold at 109. Michigan Central 115. 119½ was bid for Northern Indiana.

Saturday, 14th August.—The activity and advance noted on Saturday received a decided check. To-day Erie stock closed at 88¾. Stonington 59½. Norwich 56. Harlem 74½. Reading 92. Hudson R. 69½. Madison and Indiana sold at 109. Mich. Southern 119¾. Michigan Central 114¾. Rochester and Niagara 110. Northern Ind. 119½, and Rochester and Syracuse 122½. Government and State stocks were firm.

Monday, 16th August.—The depression of Saturday gave place to a different feeling to-day, under which most of the fancies advanced.

A rise of from one-half to one per cent was felt. 3000 shares of Harlem were sold at 75¾. Reading 92½. Stonington 60½. Norwich 56½. Hudson R. 60. Dividend stocks rose at least one-half per cent.

Tuesday, 17th August.—The general animation and confidence continues in the stock market. U. S. 6s of 1867 sold at an advance of ¼. Erie convertibles of 1871 at 99, and '62 at 98¾. The fancy stocks remained steady. Western stocks in demand. Southern Michigan went up to 121½, and Northern Indiana to 120.

Wednesday, 18th August.—An active market today, with a decided advance in some leading stocks. Stonington went up to 62¼. Norwich, 56¼. N.Y. and N. Haven, 115. Hudson River, 70½. Erie receded ¼. Harlem sold at 74½. A decided advance took place in the Cumberland Coal Co. Madison and Ind. sold at 109½; Mich. Cent. 114½; Mich. S. 122; N. Ind., 121—a rise of ¼ per cent on the average of the western railroads.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, AUGUST 21, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¾
U. S. 6's, 1856	108
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¾
U. S. 6's, 1868	118¾
U. S. 6's, 1868—coupon	119¼
Indiana 5's	95
Indiana 2½	53½
" Canal loan 6's	95½
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	82½
Illinois 6's—interest	52½
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	108
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	119
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	111
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	107
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101½
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	106
Ohio 6's, 1860	109¾
Ohio 6's, 1870	115
Ohio 6's, 1875	116½
Ohio 5's, 1865	105½
Ohio 7's, 1851	105½
Pennsylvania 5's	97½
Pennsylvania 6's, 1847,-'53	99½
Pennsylvania 6's, 1879	100
Tennessee 5's	——
Tennessee 6's, 1880	107
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	105
Cincinnati 6's	100
St. Louis	96¾
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	101
New York 7's, 1857	110
New York 5's, 1858-'60	103
New York 5's, 1870-'75	106¾
New York 5's, 1890	106¾
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	108½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	114
Erie 2d mortgage, 7's, 1859	109
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	98½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	106
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	95
Michigan Central, convertible, 8's, 1860	111
Michigan Southern, 7's, 1860	101
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Aug. 19.	Aug. 12.
Albany and Schenectady	107	106
Boston and Maine	106¾	106¾
Boston and Lowell	—	109½
Boston and Worcester	104	104½
Boston and Providence	89	89
Baltimore and Ohio	82½	82½
Baltimore and Susquehanna	29½	29½
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126½	126½
Eastern	96	97½
Erie	88½	89½
Fall River	—	—
Fitchburgh	103	103½
Georgia	—	—
Georgia Central	—	—
Harlem	75½	72
" preferred	111½	110½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	69½	68½
Little Miami	—	—
Long Island	22½	20½
Mad River	—	99
Madison and Indianapolis	112½	—
Michigan Central	114½	113½
Michigan Southern	119½	118½
New York and New Haven	113	111
New Jersey	134	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	56	53½
Ogdensburgh	26	26½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	92½	92½
Rochester and Syracuse	—	119
Stonington	62	55½
South Carolina	—	—
Syracuse and Utica	132	136
Taunton Branch	115	115
Utica and Schenectady	136½	135
Vermont Central	14½	15½
Vermont and Massachusetts	20	22
Virginia Central	—	—
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Pennsylvania.

Hempfield, vs. Ohio and Pennsylvania Railroad. —Our neighbors in Pennsylvania have a sad tendency to get at loggerheads whenever two projects are proposed that at all come in contact with each other. An apt illustration of this is furnished, in the position that the Hempfield and the Ohio and Pennsylvania railroads occupy toward each other. We doubt the policy of interfering, but for once we will make the trial of stepping between two neighbors, at the risk of making the matter worse, as is usual in all cases of interference by third parties.

The ground of the quarrel we understand to be this: the Hempfield railroad, which leaves the Pennsylvania railroad at Greensburg, near Pittsburg, and proposes to take rather a shorter cut to central Ohio, than the line by way of Pittsburg, asks the Pennsylvania company to aid it by a subscription to its stock. To this the city of Pittsburg and the county of Allegheny, which own $1,000,000 of stock in the Pennsylvania road, object most decidedly; especially as the Hempfield people claim that their project is to *use up* that city. Gen. Robinson, President of the Ohio and Pennsylvania railroad, holds the proxies, and represents this stock, and makes, as might be expected, the most strenuous opposition to an act by which, if the friends of the Hempfield road are correct in the position they have assumed, the prosperity of the city in which he lives, and the company of which he is at the head, are to be destroyed. He says that the amount contributed by Pittsburg toward the Pennsylvania road shall not be used to the injury of that city, and being a director in the Pennsylvania company, he is in a position to make his word good to a certain extent. Upon this, Mr. Ellet, the Chief Engineer of the Hempfield, attacks the Ohio and Pennsylvania, and takes the ground that the Hempfield road is the only legitimate extension of the Pennsylvania railroad west; that it is the only road that can save the trade of that section from being diverted on the one hand to Baltimore, and on the other to New York; and charges the hostility of Gen. Robinson to the Hempfield road as hostility to the interest of the Pennsylvania railroad, and to Philadelphia. This we believe to be a correct statement of the points of difference. The quarrel has given rise to the publication of a number of articles on each side, in which personalities take the place of argument; Mr. Ellet fights his side of the battle by running down the Ohio and Pennsylvania railroad, and Gen. Robinson, by attacking the professional character of Mr. Ellet.

Now we think that there is no good ground for any ill-feeling in the case. The city of Pittsburg naturally feels jealous of the Hempfield road, and its opposition to extending aid to it by the Pennsylvania company is to be expected. This opposition is no ground for surprise, nor complaint. A community cannot be expected to sit quietly down and see its own means used in a manner prejudicial to its interest. This is not to be expected. On the other hand, should a majority of the stockholders in the Pennsylvania railroad deem it for their advantage to aid in the construction of the Hempfield railroad, the minority are bound to submit with as good grace as they can. Similar cases are coming up every day, that excite great interests, but create no bad blood. After resistance is hopeless, submission is a matter of course.

We have always thought the people of Pittsburg altogether too sensitive in reference to the Hempfield project. We really do not think that its construction is to be feared. We believe a person residing in New York to be a better judge upon this point than a citizen of the former. Suppose a New Yorker to be going west over the Pennsylvania line; would he avoid Pittsburg? By no means. If on a business tour, he could not. If on one of pleasure or recreation, he certainly would not fail to inspect a city of such marked peculiarities as Pittsburg. A city of the magnitude and importance of this, commands her own terms. Travel cannot be drawn from her by any contiguous and rival line of road. A traveller might as well avoid Philadelphia or New York. Pittsburg is one of the great cities of the country, and it would have comported much better with her dignity, and with her real strength, to have regarded the Hempfield project with comparative indifference. Her position is too firmly secured to be effected by the construction of a few miles of new road. So extended has become the sphere of her influence, we do not believe that the construction of *any* road in western Pennsylvania, *in whatever* direction, can be of real injury to her.

This mistake of both parties lies in over estimating the importance of the Hempfield road. Unless it be built, Mr. Ellet predicts that the city of Baltimore will, through the Baltimore and Ohio railroad, sweep from Philadelphia the whole trade of the west, and leave the latter a barren waste. He has pretty nearly frightened the people of Pittsburg into the same opinion. There never was a greater absurdity than this idea. Just as if the salvation of a city of 500,000 depended upon the construction of a single track railroad, some seventy-five miles long, and that, too, parallel to, and a few miles severed from, a road following the same general direction. One would think from the extravagant assertions of Mr. Ellet, that this Hempfield route occupied the very Thermopyle of this continent; that it is the great key to its commerce, and that whoever holds it, holds the commercial destinies of this country in his hand!!

We appeal to the columns of our paper for our opinion of the Hempfield road. It is well known to be very favorable to this project. We have done all in our power to favor its construction. But we have no idea that the salvation of Philadelphia, or the Penn. railroad depends upon it, or that the business of the former will be perceptibly affected by such a road. The prosperity of such a city as Philadelphia does not rest upon the accident of a railroad like the Hempfield. This work is a mere fly upon the wheel of the coach. Fifty such would not suffice to secure to Philadelphia the amount of business necessary to her support. The same thing may be said of the Ohio and Pennsylvania railroad, making due allowance for its greater length. Philadelphia has reached its present growth almost without the use of railroads. Her position secures to her, and always must, the trade of an important section of the country. Railroads develop her strength but do not create it. The Hempfield road will add to her business, but the amount that this work will contribute, will be hardly felt in the great mass. The same may be said of all her tributaries of similar magnitude.

We do not mean to underrate the value of the Hempfield road, we regard it of an importance that entitles it to the hearty support of Philadelphia, which it will no doubt receive.

In the rapid multiplication of lines of railroads, what were considered routes of preeminent importance, are fast losing their relative consequence. The trade of some of our great cities are to depend on *one* line. Railroads will be built in whatever direction the convenience of commerce calls. We shall soon have no monopolies of this kind. The Hempfield will have a rival in the Pittsburg and Steubenville road, which, we believe, will be the first road of the two to be completed. What if Virginia has refused a charter, did she not for a long time refuse the same thing to the Parkersburg road? No state will long refuse to grant the right to build railroads wherever they are wanted. Those who are trusting upon the continuance of such an illiberal policy for the support of a favorite project, are leaning upon a broken reed. With the Pittsburgh and Steubenville, Philadelphia can reach central Ohio, as well as through the Hempfield road. As far as the trade of the west is concerned, either one is equally well adapted to the wants of that city.

If our Pennsylvania friends would take this liberal and correct view of things, they would get along much more harmoniously. They would see that no one project is of such preeminent importance as to entitle these at the head of it to assume any extravagant airs towards their equals. The trade of the United States is not to be monopolized by one road, and the consequence of such as have ranked among our leading projects, is every day being diminished by rival lines, which are equally adapted to the wants of commerce and travel.

In one respect, we think, Mr. Ellet has travelled entirely beyond the legitimate bounds of the controversy. The great burden of his argument is to show that the Ohio and Pennsylvania railroad is improperly located; and that the road does not pay running expenses. He calls the Engineer of this road, "A Travelling Lecturer;" and the President still harder names. His mode of discrediting the Ohio and Pennsylvania railroad is most unfair, and taints with suspicion his whole argument. This road is not yet completed. The connections contemplated are not formed. The portion in operation is but partially equipped, and the whole line may be stated to be still in progress. Yet Mr. Ellet takes the June earnings of this road, and compares them with some of the largest monthly earnings of well *completed* and well established roads; and because the former does not come up to the earnings of the latter, attempts to prove it a failure. He might with the same justice institute the same comparison before a foot of the Ohio and Pennsylvania railroad was opened. If he had taken for comparison, roads in a similar stage of progress, the result would have been most flattering to the Ohio and Pennsylvania line. This mode of argument, instead of accomplishing its object, will react with double force upon the party using it. The Ohio and Pennsylvania railroad has made a good show of earnings since its opening, and has justified the representations of its friends. Neither have we any doubt that it will prove a successful and profitable enterprise. It is a bad sign to see a man abusing his neighbors. It indicates something wrong at home.

Again, we think it presumption in Mr. Ellet to attack the location of the Ohio and Pennsylvania railroad. Let him wait till he gets out of the woods. The road has been located by men having a great interest at stake, and who are better competent to decide this point than Mr. Ellet. Their only object was to get the best line. Let him wait till the road is opened, till experience settles this point.—We wont believe that an engineer possessing the reputation of Mr. Roberts, has duped himself, and the company over which he exerts such a controlling influence. We believe that experience will vindicate his sagacity, instead of proving his in-

competence. Until time has demonstrated the fact, Mr. Ellet is bound, not only by the courtesy due from one engineer to another, but by the most obvious principles of justice to wait for this evidence, before volunteering his opinion.

Ohio.

Dayton and Michigan Railroad Company.—From an exhibit of this company, dated 5th June, 1852, prepared by a committee of the board of directors, we present the leading features of the work. The charter was granted by the legislature of Ohio 5th March 1851, and is perpetual. The capital stock is $800,000 with power to increase to $3,000,000, in shares of $50. County commissioners of counties through which the road runs, are authorised to subscribe not exceeding $100,000 to the stock; the corporations of Dayton, Troy, Piqua, Sidney, Lima, Perrysburg, Maumee city and Toledo, not exceeding $50,000; and townships on the route $10,000, with the concurrence of a majority of votes at any election when the question is submitted to them. The company are authorised to sell at a discount their own bonds, or those of any other corporation held by or loaned to them.

The length of the road from Dayton to the Michigan line is 140 miles; this it is proposed to build in three sections. 1st. From Dayton to Sidney, intersecting there the Indianapolis and Bellefontaine railroad 36 miles. 2nd. From Sidney to Lima, where it meets the Ohio and Indiana railroad, 28 miles. 3d. From Lima to the State line, 76 miles. Twenty miles of the grading and bridging on the first section from Dayton to Troy are under contract for $200,000. The cost of the first section is thus estimated.

Building road from Dayton to Troy	$200,000
do do Troy to Sidney	144,000
Right of way from Dayton to Sidney	11,000
Water stations, depots etc	20,000
Iron for road, side tracks, etc	240,000
Locomotive and cars	10,000
Total from Dayton to Sidney	$625,000

From Sidney the cost, exclusive of iron, it is estimated, will not exceed $5,000 per mile.

The means for building the 1st section are Miami county bonds at par, $60,000.

Stock taken by H. Doolittle, the contractor	$10,000
Pledged by Cin. Ham. and Dayton railroad	50,000
Subscribed by individuals	180,000
To be subscribed north of Troy	75,000
To be raised on 7 per cent bonds	250,000
	$625,000

The right of way from Dayton to Troy has cost in the aggregate but $8000. The work was put under contract between these points on the 5th of January last, and two-thirds of the work is already done. A contract for the delivery of 2000 tons of T rail of superior quality, American iron, before the 20th of August next, has been entered into; and it is expected that this portion of the road will be completed, early in October, in time for the fall trade; when it is proposed to put the remainder of the section under contract, to be ready for the iron at the opening of the navigation next spring. Temporarily, the Cincinnati, Hamilton and Dayton railroad company have agreed to operate the road.

It is intended that this road shall, by the Great Western road terminating at Detroit and the Cincinnati Hamilton and Dayton, form a link in a connected line of railroad, from Cincinnati, through Canada via Detroit, to New York and Boston. Lines in progress will soon connect Cincinnati with New Orleans and Mobile. A fair share of the *through travel*, from the south and south-west to the north and east, must pass over this road. The cost of transportation from Buffalo to Cleveland, Sandusky and Toledo is the same, but the distance from Toledo to Cincinnati by this road is 195 miles; while from Sandusky by the Mad river and Lake Erie road it is 218 miles, and from Cleveland by the Cleveland Columbus and Cincinnati road, it is 255 miles; this advantage joined to the level nature of the route will enable it, favorably to compete with its rivals, for the vast freight between the Lakes and the Ohio. The lake trade in 1851 amounted in value to over $326,000,000; that of the Ohio river did not fall much short of $200,000,000 and that of Cincinnati alone was about $100,000,000.

This is a north and south road, having its northern terminus on the lakes, and its southern, in effect, Cincinnati. Roads thus situated, exceed east and west roads in Ohio as it regards local business nearly as ten to one. Dayton, Troy, Sidney, Perrysburg, Maumee city and Toledo, are all flourishing places. At Toledo the aggregate imports and exports exceed $30,000,000. Six railroads concentrate at Dayton, and the road is intersected by no less than eight east and west roads in its course, all which will serve as feeders.

By means of the Indianapolis and Bellefontaine road, a continuation of the Ohio and Pennsylvania road intersecting this at Sidney, there is formed over a portion of this line, (from Dayton to Sidney) a direct and continuous railroad communication from Cincinnati by the way of Pittsburg, to Philadelphia, *without crossing the Ohio river;* and capable of being run in less time than any other continuous line between these points; and over the other portion thereof, (from Sidney to Toledo and Detroit,) a direct and continuous line from Indianapolis through Canada, by the way of Malden or Detroit, to New York and Boston.

By means of the Ohio and Indiana road, intersecting this at Lima, the entire travel and business of Fort Wayne, northeastern Indiana and south-western Michigan will find way to Cincinnati over this road, which, of itself would furnish a remunerative business for that portion of the road south of Lima.

The Junction, the southern Michigan and the central Michigan roads must also each contribute largely to the business of this road.

Nearly one-fourth of the taxable property of the state of Ohio is contained in the twelve counties through which the road passes. The exhibit contains in an appendix, the resolution of the directors authorising an issue of bonds at 7 per cent, payable at the Bank of Commerce in N. York, and convertible into stock, within ten years from 1st July, 1852, and copies of these instruments and the mortgage deed accompanying them.

New English Patent Law.

A new Patent law has just gone into operation, in England. Under its provisions, only one patent will be necessary for the United Kingdom and colonies. The expense of procuring it will be as follows: On issuing the patent, fees and stamps, £25; at the end of the third year £50; at the end of the seventh year £100. The patent is to be void at the end of the third and seventh years respectively, if the fees due at those periods are not paid. This will be some improvement, on the enormous taxes previously levied in that country on the talent of inventors.

For the American Railroad Journal.

How is it?

It is said, by a western writer on railroads, that, Philadelphia and Baltimore are to depend on single track railroads from Pittsburg and Wheeling to transport the immense aggregation of products to be concentrated on those points by the many lines of railroad from the north-western states; and that those single lines will be entirely inadequate to the performance of this service.

There are, certainly, a considerable number of railroads in progress west of the Ohio destined soon to reach Pittsburg and Wheeling. They will be roads of substantial make and easy grade, capable of doing a large business. Will they be met at their eastern termini with a railroad power equal to their own? Will the capability of railroad transport east of Pittsburg be adequate to the business required by those west of that city?

It has been stated on high authority that the business of one season on the Erie canal was eqnal to the freighting capabilities of six first class railroads with double tracks the whole year. The canal business does not decrease from railroad competition, as line after line is being completed between lake Erie and the Hudson river. The New York and Erie railroad, with double track, a second line through central New York, and two roads from the navigable waters of the St. Lawrence leading towards New York and Boston, are being prepared to meet—what? Two single lines skirting the north and south shores of the lakes.

There would seem to be inadequacy west of Erie and Toronto, and east of Pittsburg and Wheeling—How is it? There is soon to be an immense concentration of railroad power on the south-west and west shore of lake Erie, and but two lines of railroad eastward of Cleveland and Detroit to reciprocate their western railroad offerings. Are there too many western roads pointing to Pittsburg, or a deficit eastward of Cleveland? Yours,

J. W. S.

Railroads vs. Wolves.

The Chicago Tribune has the following:—It is said that since the tracks of the railroads around the lake were laid down, but one single wolf has been seen or heard of south of them, and it is tho't that he had never been north since their construction. The farmers of Twenty Mile Prairie, and adjacent country, are no longer troubled about herding their sheep in pens during each night, as they were formerly. The wolf is at all times exceedingly suspicious of traps, and is not disposed to venture near iron or steel, however tempting the bait may be that lies near it; hence their fear of crossing the railroad track to commit depredations on the flocks in the farming country south. At night, too, when they leave their dens, the locomotives pass, and their hideous noise is not calculated to inspire the varmints with any remarkable degree of confidence and security from danger.

Nashville and Alabama Railroad.

Lauderdale county, Alabama, has voted by a majority of nearly two to one, to subscribe $125,000 to aid in building the above road.

South Carolina.

Charleston Railroad.—The contract by which the Charleston railroad is permitted to cross the Savannah river and erect two depots within the corporate limits of Augusta, was finally signed and delivered on the 10th inst. Consequently the bridge is now free for all freight, merchandize and produce, passing to and from the Charleston railroad.—*Savannah Republican.*

Statistics of Anthracite and Cumberland Coal.

The statistics of the anthracits trade may well awaken surprise. This trade ts only about thirty years old. In 1820, the entire shipment was 365 tons. Think of it. In 1830, 142,734 tons. In 1840, 876,049 tons. In 1850, it reached the enormous quantity of 3,332,314 tons; and still further, to show at what a rapid ratio the demand is increasing, in 1851 the amount was 4,383,736 tons—an increase over the preceding year of more than a million of tons. Since 1820, more than thirty-three million of tons have been supplied. It has been confidently predicted, upon calculations based on the past rate of increase, that the demand for anthracite in 1860, will reach ten million of tons per annnm. What will it be in 1870? What in 1880? For the encroachments of coal upon the uses to which wood has heretofore been applied, and the new uses it has discovered, are now accruing more rapidly than before. The statistics of the Cumberland coal trade are more astonishing, and hold out yet a brighter promise. This trade is but nine years old. In 1843 the sales were 4,964 tons; aad in 1851 they were 162,500 tons; and for the current year they may be safely estimated at 450,000 tons. By the report of the Cumberland company, it appears that they send to market (which was over the railroad alone) 400 tons per diem—an amount which, by the restoration of the canal, has been increased, since the date of that report, to six and eight hundred tons; and the directors announce that they expect to transport during the ensuing season, fifteen hundred tons per day, or more.

Maine.

Portland, Saco and Portsmouth Railroad.—The report presents the following particulars: Cost to May 31, 1852, $1,301,883 49. Net income of the year, $93,088 68. Paid for damages, $4726 50, six per cent dividend $78,705—surplus of the year, $9657 18. Total surplus, $33,792 22. The expenditures of the year include $10,000 for renewal. The report states that the property on hand not required for the use of the road at $178,840 66, and and gives the account of indebtedness or floating debt at $165,724 15. The P. S. and P. is well equipped and under efficient management. 2000 new sleepers were put down last year and about the same quantity will be provided the current twelvemonth. From the amount of business and the condition of the contingent fund, the P. S. & P. cannot but take rank among our best railroad stocks.

Ohio.

Hillsboro Railroad.—The bonds of this company advertised for sale have been withdrawn, for the following reasons, assigned in a note of the president of the company—

Arrangements having been made in Cincinnati, and along the line for an increase of subscriptions to the capital stock of the Cincinnati and Hillsborough road to $800,000, the bonds of that road which have been advertised for some days past to be bid for to-morrow, have been withdrawn for cancelment, and the mortgage made to secure them will be annulled. The entire road is to be immediately put under contract from Hillsborough, to which point it is already in operation, to the coal and iron region in Vinton county, and will be pushed vigorously to completion. At some future day, new bonds will be issued, secured by a first and only mortgage on the whole road, for a sufficient sum with the above $800,000 to complete and equip the line.

JAS. M. TRIMBLE, President,
H. and C. R. R. Company.

New York, August 13.

The Mobile and Ohio Railroad.

The Paducah Democrat learns from Col. Childe, the chief engineer of that work, that negotiations are now on foot for putting the whole line of road, from Mobile to Paducah, under contract during the coming twelve months.

The Democrat says that the vote of the people of Paducah and McCracken counties in favor of the issues of $300,000 bonds, to be invested in stock in the road, already manifests itself in the increased valuation of property in Graves county. The Hon. R. K. Williams, Lucien Anderson, Esq., John Eaker, Esq., and others, have taken the stump in favor of the subscription, by the county, of $100,000 of stock in the road.

Louisiana.

The proposed constitution of this state gives to the legislature power to grant aid to companies formed for the exclusive purpose of making works of internal improvement, either wholly or partially in the state, to the extent of one-fifth of the capital stock, by subscriptions of stock, loan of money, or public bonds. The aid thus granted, to be paid to the company, in the same proportion, that the remainder of the capital is actually paid in by the stockholders. The aggregate amount of debts and liabilities thus incurred by the state is never, at any one time, to exeeed eight millions of dollars.

The constitution likewise provides for the appointment of a board of internal improvement, under whose charge the public works and lands of the state are placed.

Ohio.

Cincinnati Columbus and Cleveland Railroad.—The receipts of the C. C. and C. railroad for eight months, ending with the close of July, are as follows:

For December last		$37,654 94
For January		30,773 09
For February		29,784 48
For March		38,408 46
For April		52,554 74
For May		70,433 50
For June		73,414 00
For July part estimated		75,000 00
Total		$407,951 41
Expenses 40 per cent	$462,800	
Seven per cent dividend	140,000	
Interest on debt	48,000	350,800 00
Surplus out of earnings of last 8 months		$57,141 41

State Fairs.

We copy the following list of fairs from the Ohio Cultivator, with the date of the first day of the meeting; most of the agricultural fairs are held for three days.

Vermont, at Rutland	Sept. 1
New York, at Utica	7
Ohio, at Cleveland	15
Michigan, at Detroit	22
Canada West, at Toronto	21
Indiana, at Indianapolis	Oct. 19
Pennsylvania, at Lancaster	20
Wisconsin, at Milwankee	6
New Hampshire	6
Georgia	18
Maryland, at Baltimore	26
Amer. Pomological Congress, at Philad	Sept. 13
American Institute, New York	Oct. 5
American Institute, exhibition of stock	19

Lexington and Big Sandy Railroad.

Railroad Voting.—Lexington, Bath county Ky., has voted $150,000 and Carter county $75,000 to the Lexington and Big Sandy railroad.

Morgan county voted against a subscription of $150,000 to the same road. The resources now secured to that road exceed half a million.

New-York.

Lockport and Buffalo Railway.—At the meeting of the Lockport and Buffalo railroad company held on the 9th inst Mr. R. H. King, Joel Rathbone, and J. B. Plumb, of Albany; E. Whitehouse. N. York; A. Boody, F. Clark, Rochester; J. C. Colton, H. Walbridge, Lockport, and A. H. Tracy, William A. Bird, A. D. Patchin, and Judge John Wilson, of Buffalo—were chosen directors. J. C. Colton, Esq. was subsequently unanimously chosen president. The road will be ready in November. It leaves the Rochester road three miles east of Lockport, and for a time is to run to Buffalo from Tonawanda, on the Falls road.

Genessee Valley Railroad.—A meeting was held of the citizens of Perry on the 7th inst., at which measures were taken to secure the location of the road through that town.

Hon. R. H. Smith, D. Mitchell, Truman Benedict, L. A. Hayward and Hon. Wm. Mitchell were appointed a committee to forward this end.

South Side Railroad.—The Utica Herald states, that the engineers have commenced surveying the route of the road on the south side of the Mohawk. The intention is said to be, to lay a track from Amsterdam, 15 miles beyond Schenectady, to Fergusson's, 3 miles from Utica, a distance of about 60 miles. The following gentlemen have been elected directors to fill vacancies: Erastus Corning, John Townsend, Marcus T. Reynolds, Thomas W. Olcott, and John V. L. Pruyn, of Albany; Alonzo C. Page and Chauncey Vibbard, of Schenectady. John V. L. Pruyn was elected President of the board, in the place of Azariah C. Flagg, resigned.

Robert E. Temple, of Albany; Ward Hunt and Jos. F. Seymour, of Utica; E. Remington, of Herkimer; A. C. Flagg and Abijah Mann, jr., of New York, members of the old Board, resigned.—Mr. Payna, of Troy, member of the last board is deceased.

Maine.

York and Cumberland Railroad.—The annual meeting of the stockholders of the York and Cumberland railroad, was held at the hall over the company's office near the depot in Poriland, on the 10th inst. The attendance of stockholders was unusually large. The stock represented was 3,046 shares. The following directors were elected:

John A. Poor, C. Q. Clapp, N. L. Woodbury, of Portland; Levi Morrill, Geo. Warren, of Westbrook; Josiah Pierce, of Gorham; Rufus McIntyre, of Parsonfield; N. J. Miller, of Hollis; Geo. W. Came, of Alfred; Austin G. Fitch, of Santord; F. A. Ward, of Lebanon; Geo. W. Bashidge, of Great Falls; Timothy Farrar, of Buxton.

John A. Poor was elected President.

Railroad to Indianapolis.

The Indiana State Journal states that the last link of eleven miles between Greenville and Union, of the Cincinnati, Dayton and Greenville railway, will be in running order by the first of November, extending the line to Union, the terminus of the Bellefontaine road. The latter road is completed to the Smithfield station, six miles, leaving but 24 miles of iron to lay, which is being rapidly put down, and will be completed by the time the Greenville cars reach Union.

Kentucky.

Louisville and Frankfort Railroad.—The following persons have been chosen directors at the recent meeting: J. F. Gamble, J. S. Lithgow, J. Everett, James Guthrie, B. J. Adams, A. L. Shotwell, J. Swigert and A. Gowdy, Esquires.

Ohio.

The railroad bridge across the Muskingum river at Marietta, it is supposed, will be the largest in the state, the river is over 600 feet broad and the superstructure of the bridge will have to be placed above the reach of the highest floods.

Sciolo and Hocking Valley Railroad.—There was a meeting of the directors of this road at Portsmouth county on the 6th instant to decide upon the guage. They have adopted the wide guage of the Sandusky Mansfield and Newark railroad.

Cleveland, Wooster, and Muskingum Valley R. R.—The people of Wooster have lately held three enthusiastic meetings on the subject of railroad connection with Cleveland, and appointed a committee to organize. It is proposed to construct a road from Wooster up the valley of the Killibuck to Graftod, there to connect with the Cincinnati, Columbus and Cleveland railroad, and ultimately to extend the road from Wooster to the Muskingum valley.

The C. C. & C. company had promised to cede all their rights to the citizens of Wooster, to construct a branch to Grafton, and connect with them on favorable business terms.

Pennsylvania.

The bonds of Allegheny county, amounting to one million of dollars, have been issued to the Pennsylvania railroad company, as rapidly as they were demanded. The last instalment is now ready for delivery, which completes the subscription of this county to that company.

Allegheny Valley Railroad.—The stockholders of this company have elected Hon. Wm. F. Johnston President, and Joseph Buffington, G. W. Jackson, Thos. McCulloch, L. Wilmarth, F. R. Brunet, and Jno. T. Logan, directors for the ensuing year.

The stockholders are notified to pay up a second instalment before the first September next.

Illinois.

The Galena and Chicago railroad will be completed as far as Rockford by the middle of this month. By 1856, Illinois will be beautifully cross-barred with *chemins de fer!*

The citizens of Mt. Sterling have voted in favor of subscribing $10,000 to the Quincy and Meredosia railroad. It is proposed to submit another proposition to subscribe $50,000, and the Quincy *Herald* says it will be carriedby 500 majority.

The work on the railroad near Joliet, says the Signal of Tuesday, between that place and Chicago, is progressing rapidly. The rails have been laid down a large portion of the distance, and we understand that Mr. Matteson is using every effort to have the entire track from here to Chicago ready for the cars by the middle of September.

Pittsburg and Steubenville Railroad.

Upwards of a thousand men are now at work in the construction of this road. It is the determination of the directors to open the whole line at once, and the time is fixed at a year from the coming winter.

At that period the whole of the Steubenville and Indiana railroad will also, it is said, be completed as well as the Mountain division of the Pennsylvania railroad.

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,

31st July. 1m

"Leonard's" Patent Double Plate Car Wheel.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer and Patentee, sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.

2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.

3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.

4. It must be finished in three holes, or nearly as hard as spring-wire.

5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.

6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.

7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.

8. The wire must be drawn on blocks of no less than 2 feet diameter.

9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.

10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.

11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.

12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.

13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.

14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.

15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.

16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.

17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"

18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,

Eng. Niagara Falls R. R. Suspension Bridge.

NIAGARA FALLS, N. Y., August 5th, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work.

LEWIS TROOST,
Chief Engineer.

New York, August 3d, 1852. 5t32

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy, and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

By virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon,

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land, called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3401, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK-'IM IN," containg about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19½ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent suffieient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Brauch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000.

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do., 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Dirctors,
GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Norwich Car Manufactory.

FOR SALE.—Will be Sold at Public Auction, on the premises, on Monday, the twenty-third day of August, at 10 o'clock A. M., the entire establishment and property of the Norwich Car Manufactory, consisting of

1 Brick slate roof building, 50 by 150 feet, two stories high, used for setting up cars, cabinet work, &c.

1 Brick slate roof building, 40 by 190 feet, with two wings, 30 by 40 each, one story, used for blacksmith, machine and saw shops.

1 Brick slate roof Engine and Dry House, 30 by 40 feet.

1 Lumber House, 50 by 100 feet.

1 Barn, 18 by 28; 1 Wood Dwelling House, 21 by 28; one and a half stories high.

1 Block of Brick Tenements; several Building Lots.

Together with the Machinery, Tools and Fixtures connected with the same, consisting of a Steam Engine and Boilers; several Planeing and Sawing Machines, Turning Lathes, Boreing, Punching, Morticing, and a variety of other machines, constituting a complete and extensive establishment for the manufacture of Railroad Cars as any in the country, and capable of working one or two hundred hands, and doing a business of $200,000 per annum. It is situated on the Norwich and Worcester Railroad, half a mile from the city of Norwich, at the head of navigation on the River Thames—affording the most desirable facilities for the transportation of Cars and materials, and in the immediate vicinity of various and extensive manufacturing and mechanical establishments.

The whole, with the exception of the vacant lots, is leased on favorable terms for four years from February, 1850. For further information, application may be made to

J. G. W. TRUMBULL, Surviving Trustee.
Norwich, June 26, 1852. 6 w

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

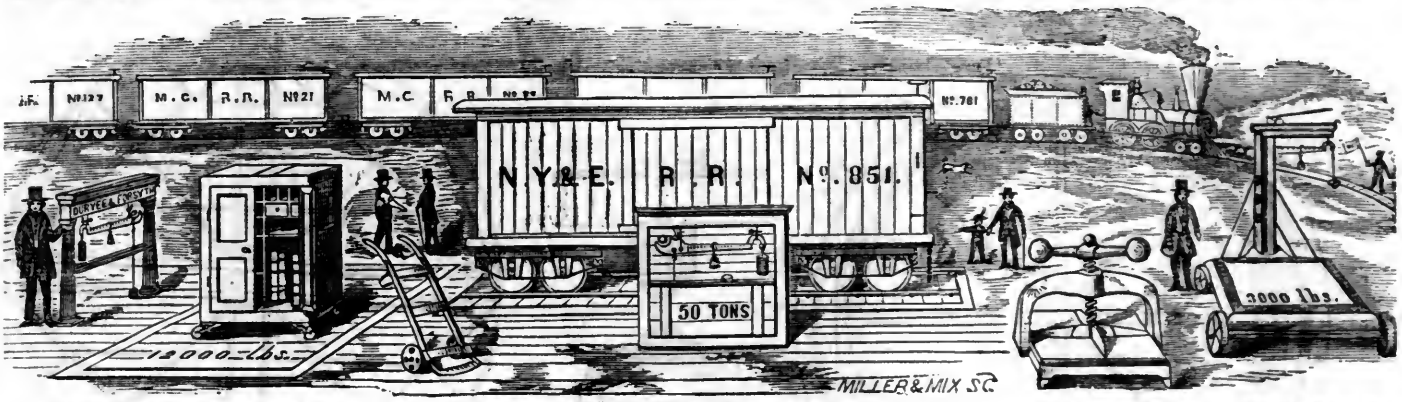
P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co., " Chicago, Ill.
Crawford & Reynolds, " Cleveland, Ohio.
Joseph E. Elder, " St. Louis, Mo.
Byram, Midlier & Shreve, " Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,
New York and Harlem,
New York and N. Haven,
Sandusky, Mansfield and Newark,
Indianapolis and Bellefontaine,
Syracuse and Utica,
Columbus and Xenia,
Lexington and Frankfort,
Hillsboro' and Cincinnati,
Greenville and Miami,
Cayuga and Susquehanna,
Rome and Watertown,
Rutland and Washington,
Erie and State Line,
Rochester, Lockport and Niagara Falls,
Cleveland and Columbus,
Michigan Central,
Mad River and Lake Erie,
Paterson and Hudson R.,
Cincinnati, Hamilton and Dayton,
Buffalo and Rochester,
Rochester and Syracuse,
Louisville and Frankfort,
Chicago and Galena,
Dayton and Western,
Central Ohio,
Chemung,
Illinois Coal Company,
Buffalo and State Line,
Cleveland and Pittsburg,
Michigan Southern,
American Express Co.,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fairin Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1.000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

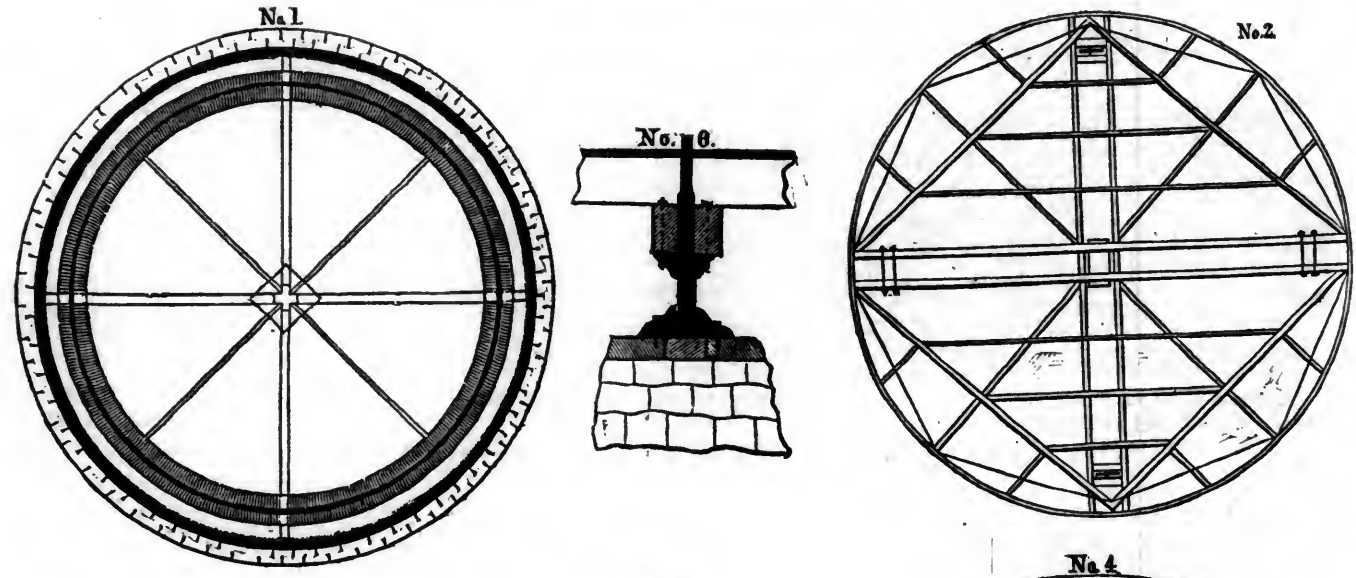
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.

Do. for Bridging, of great strength.

Flat Rock, Boiler and Flue Iron, rolled to pattern.

Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 35] SATURDAY, AUGUST 28, 1852. [WHOLE No. 854, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Importance of Natural Science to the Engineer.545
Finances of Pennsylvania.....546
Railroads in Pennsylvania.....547
Pacific Railroad.....548
Railroads in New York.....550, 548
Charlotte and Jonesboro' Railroad.....548
Ohio and Mississippi Railroad.....552, 549
Michigan Central and Canada Railroad.....549
Baltimore and Ohio Railroad.....549
Railroads in Illinois.....549
Railroads in Ohio.....549
Massachusetts Railroad Statistics.....550
New Hampshire Central Railroad.....551
Parkersburgh Railroad.....551
Mohawk Valley Railroad.....551
Michigan Central Railroad.....551
Railroads in Wisconsin.....551
Penobscot and Kennebec.....551
Railroad Investments.....552
Stock and Money Market.....553
Railroad Rivalry.....554
Peru and Indianapolis Railroad.....555
Blossburgh and Corning Railroad.....555

American Railroad Journal.

Saturday, August 28, 1852.

Importance of Natural Science to the Engineer.

The prosecution of the great improvements of the age, in machinery, whereby the products of different regions are now so cheaply interchanged, and the ease and safety of travel so wondertully increased, has raised up a profession as intellectual in its pursuits, and liberalizing in its exercise, as any of those departments in which human art has been heretofore called on, to minister to the wants physical, social or moral of the family of men.—The present is emphatically the era ot machinery, we are fed and clothed mainly by its agency, and to plan the countless details and submit to the rigid accuracy and measurement of mathematical calculations, the varied parts of this vast and growing system, demand no mean powers of mind and extensive cultivation and experience. For the protection of property and the preservation of health, there are means to be employed, and arts to be studied, and no less beautifnl and no less important are the sciences which teach the engineer to run his line or poise his bridges. We consider the profession ot an engineer, as elevated and attractive to the highest order of intellect as those of the lawyer or physician. The jurist determines the relations of property towards man, but the engineer stands at the very head of that system which creates property, to an incalculable extent. by teaching the very elements to labor for the benefit and profit of man. The physician, in discharging his duty, as the preserver and restorer of health, is entitled to our respect, but we doubt whether the application of remedial agents prove as effectual in prolonging the average of life, as the cheapened comforts and the diffusion of necessaries among the masses, brought about by the agency of the engineer and the works he plans and directs towards completion.

The high character of the profession is, acknowledged, and the genius of a Stephenson and a Brunel have already, during the thirty years that have called civil engineering into being, cast a brilliant lustre on its history. It already has its heroes and bright examples, and the youthful aspirant for its honors is required to toil as patiently and study as closely, as if devoted to any other intellectual calling. Railroads and canals, steamships and telegraphs are the common interest of mankind; and the art which constructs them has an equally wide value as the uses of the engines it calls into being. All have a stake in the intellect, which renders these works safe and efficient. It is an ambition worthy of the noblest genius, to become an accomplished engineer, and the elevation of the profession should be the aim of all its members. How shall this be effected? The only way is of course, the path of study and well directed cultivation. But like all the other professions, the complete master of it, and the man who cultivates it aright must have a wider range than that of the mere routine of its proper business. While skill and experience in the solution of the various mathematical and mechanical problems are *indispensable* to the engineer, there are requirements besides these, to enable him fully to discharge his duty as the adviser and counsellor of the company, which employs his talents and services. All the professions offer means to the accomplishment of certain needs, and the necessity for them must be felt, before it is possible, that those versed in them can receive employment. But the urgency, extent and grounds even of such necessity are problems to be judged by the professional adviser as well as the manner and method of satisfying it. The skillful engineer when called on to direct the physical accomplishment of a work, must modify it, to suit as well markets, population and production, as the nature of the soil or tne existence of streams and mountains. Social and economic science are hence as much requisites to him in the discharge of his important responsibilities as mathematical knowledge. The fact is, that the cognate and auxiliary branches in an art, sometimes are felt to be of more importance than its proper scientific basis. That accurate judgment in matters of growth and development business men acquire, may often be found more valuable to the engineer than the ability to solve a difficult but remote mathematical problem, the results of which the practical man may appropriate from and take on the authority of a text book.

We greatly desire the elevation of the profession of the engineer; it is destined to be no temporary or occasional employment, but must go forward with rapid steps. England and the United States are the only countries where the railroad system, the grand instrument of development, is to any large extent completed. But has it reached its limit in either country? No it ceaselessly grows and must continue to do so, and by the time that new works begin to halt, the old ones must be made on a new basis. The profession is necessary, not accidental or temporary, and it is worthy of the best efforts of talent and study. Among the branches which at first seem rather superfluous are those which belong to natural history—the study of organic forms and the history of the earth and its material constitution and changes. In the first place, these studies are most delightful, and exalting in themselves, and have a peculiarly happy influence on the mind. The contemplation of objects of Natural History may take the bent of each individual intellect and be cultivated in any direction as shall be most convenient, or to any extent.—Viewed in detail or broadly generalized it is equally pleasant and useful. The specimens necessary for the study are in the way of the engineer, he can pick up a flower, a mineral or a shell as they lie in his path, and examine them at his leisure. The recreation to the mind afforded by this change of employment, is of no litttle moment, at times when the engineer is removed from books and society, and when the laborious duties of calculation and drawing are over. His facilities for the collection

and observation of rare specimens must not be overlooked, and it is a waste of opportunity not to take advantage thus of the numerous out-door explorations required by his business; especially as it need not lead to any neglect of the main objects of his occupation. His travel backward and forward over long lines of country enables him to acquire a familiar geological as well as a mere topographical knowledge, of the localities and the regions he traverses not possessed by mere stationary students of geology. Again, the excavations and deep cuts which are necessary at many points on a line, enable him to study the rocks, and veins, and obtain the minerals and fossils of the country more easily than superficial observers. These are a few of the advantages which the nature of his employment gives.

We believe, however, that the interests of companies and those of the country are intimately connected with the efficiency of the great engineering corps, and this efficiency is greatly increased by their adding natural science to their indispensable mathematical and mechanical acquirements. We conceive that no company could doubt that between two engineers of equal reputation and talent, it was for their profit to secure the services of the man, who was in addition to his mechanical attainments a competent geologist. It might be that no advantage would result from his special knowledge, and again, there might be benefits derived from it of incalculable value to the owners of the road, and the public. This chance is surely not to be neglected. The mineral riches of this country are great beyond comparison, we merely at present reap the superfluous treasures, which are found on the surface, as it were. When the country is more densely populated and that diversity of employment arises, which is wont in rich and populous countries, the development of these treasures economically and scientifically, will call for engineers either to add geology to their list of necessary sciences or else demand the education of a special class of engineers of mining. In this connection, the all-important science of chemistry will find place among the auxiliaries, of the complete engineer. The observations on soil, climate, meteorology and physical geography, generally, are studies evidently cognate with geology, and at once within the scope of the engineer's profession and most probably agreeable to his tastes.

We throw out these suggestions in the hope of inducing a closer union and systematic cultivation of the natural sciences, by engineers. We know many of them are naturalists of eminence, and the geological observations of our engineers, have often been of great scientific and practical value. We think it a duty that exploring parties owe to their country and one that would be doubtless encouraged, by companies generally, to verify and add to the geological observations of the States, where surveys of this sort have been made, where none have been commenced, to contribute materials that may facilitate such an undertaking. Our geologists, from the practical character of the country, should be also engineers and engineers should be geologists; and geology in its widest significance finally brings in the whole circle of organic life, vegetable and animal—both that belonging to the antique eras of the earth and the recent. We feel that our remarks will be taken in good part, by that noble profession which is the informing intellect of the mechanical world; and it we can induce young engineers to add to their mathematical studies, those belonging to the wide field of nature, they will not regret the step, which must add to their usefulness as engineers while it will tend to make them happy and wise in the possession of truths, which if not so lofty as those, which pertain to man, are at least unsullied by crime and unalloyed by misery.

The New Suspension Bridge.

We give below, the proportions and other statistics of the Suspension bridge about to be built over the present one at the Falls. It is with great pleasure that we notice the activity which prevails, in reference to the new bridge, as also in the construction of the railroad. We have no doubt on our own mind, but that Canada is destined to take her proper position among surrounding nations, and the present railroad enterprise will hasten the consummation so devoutly to be wished. When we can travel from the eastern to the western provinces by railroad—when we can transmit our produce, through our own territory, to the English market—then, and not till then, will we be in a position to compete with our neighbors in a friendly race for travel and commerce.

The bridge will form a single span of 800 feet in length. It is to serve as a connecting link between the railroads of Canada and the state of New York and to accommodate the common travel of the two countries. It is established by ample experience, that good iron wire, if properly united into cables or ropes, is the best material for the support of loads and concussions, in virtue of its great absolute cohesion, which amounts to from 90,000 to 130,000 lbs. per quarter inch, according to quality. The bridge will form a straight hollow beam of 20 feet wide and 18 feet deep, composed of top, bottom and sides. The upper floor which supports the railroad, is 24 feet wide between the railings, and suspended to two wire cables, assisted by stays. The lower floor is 19 feet wide and 15 high in the clear, connected with the upper one by vertical trusses, forming sides, and suspended on two other cables, which have ten feet more deflection than the upper ones.

The anchorage will be formed by sinking eight shafts into the rock, 25 feet deep. The bottom of each shaft will be enlarged for the reception of cast iron anchor plates, of sixteen feet square. These chambers will have a prismatical section, which, when filled with solid masonry, cannot be drawn up without lifting the whole rock to a considerable extent.

Saddles of cast iron will support the cables on the top of the towers. They will consist of two parts—the lower one stationary, and the upper one moveable, resting upon wrought iron rollers. The saddles will have to support a pressure of 600 tons whenever the bridge is loaded with a train of maximum weight. The towers are to be 60 feet high 15 feet square at the base and at the top. The compact, hard limestone used in the masonry of the towers, will bear a pressure of 500 tons upon every foot square.

WEIGHT OF BRIDGE.

Weight of timber	910,130 lbs.
Wrought iron and suspenders	113,120
Castings	44,332
Rails	66,740
Cables between towers	535,400
	2,678,622

WEIGHT OF RAILROAD TRAINS.

One locomotive tons	25
27 double freight cars, each 25 feet long, and of 15 tons gross weight	405
Making a total gross weight of 430 tons, which will fall upon the cables when the whole bridge is covered by a train of cars from end to end: add to this 15 per cent increase of pressure as the result of a speed of 5 miles per hour, which is a very large allowance	61
Add weight of superstructure	782
Total aggregate maximum weight	1,273

The tension of the cables, which result from a weight of 1,273 tons, and an average deflection of 59 feet, is 2,240 tons. Since this assumed maximum tension can but rarely occur, it is considered ample to allow four times the strength to meet this tension—that is 8,960 tons. But assuming 2,000 tons as a tension to which the cables may be subjected, five times the strength to meet it is allowed, and an ultimate strength of 10,000 tons provided for. For this purpose, 15,000 wires of No. 10 will be required. At each end of the upper floor the upper cables will be assisted by 18 wire rope stays, and their strength will be equivalent to 1,440 wires: these deducted, leave the number of these wires in four superior cables, 13,560—the number of wires in one cable, 3,390—diameter of cable, 9¼ inches.

The railroad bridge will be elevated 18 feet on the Canadian, and 28 on the American side, above the present surface of the bank, and above the present structure. It will be the longest railroad bridge, between the points of support, in the world. —*St. Catherines Journal.*

Finances of Pennsylvania.

Mr. J. J. McCahen, now on a mission from the Executive of the state of Pennsylvania, in London, has addressed the following letter to the loanholders of the state of Pennsylvania:

The undersigned, duly appointed and commissioned by the authorities of the state of Pennsylvania, a commissioner of loans for said state, respectfully announces to the holders of the loans created by her laws, his arrival in this city with all lawful powers to negotiate an exchange of any of the existing obligations of the state, and conclude new loans for a period not exceeding thirty-five years, at a rate of interest not more than four per cent per annum, free from every kind of taxation, so expressed upon the bond, with coupons, or interest certificates attached, payable semi-annually, on the first days of February and August of each year. The bonds to be issued in the sums of one, five, or ten thousand dollars each, according to agreement.

The whole debt of Pennsylvania is forty millions of dollars or about eight millions of pounds sterling. The state has the right to pay off the same at the periods designated in the following table:

At the present time, (and will be paid during the present year	$3,314,325 20
In the beginning of the year 1853 (will be paid as soon as the period arrives)	688,479 51
Loan made in 1841	650,163 00
Bank charter loans, payable at any time	119,500 00
During the year 1853, and January 1, 1854	2,744,057 83
During the year 1854	2,146,529 83
Aug. 1, 1855	4,478,040 36
July 1, 1856	2,781,190 49
March and July 1, 1858	7,022,233 01
July and August 1, 1859	1,209,990 59
July 1, 1860	2,582,386 43
The remainder of the loans are payable in 1861, '62, '63, '64, '65, '68, and '70, $400,000 due in 1789, and $850,000 in 1882, amounting in all to	18,062,000 00
Total	$40,784,905 20

It will be perceived by the foregoing, that the state has the right to pay off during this year, $3,314,325 20. During the year 1853, $4,207,200 34. During the year 1854, and August 1855, $6,624,670 09; and July 1, 1856, $2,731,190 49.—The first half year of 1858, $7,022,233 01. In two years after, $4,392,386 02; making an aggregate of $28,287,005 20, payable in less than eight years. It is for the holders of these loans to determine, in the present condition of the money market of the world, the prospect of vast accumulation of capital which may become idle or unproductive, or the rates of interest everywhere materially reduced, if it is their interest now to make a permanent investment for any period not exceeding thirty-five years.

Should all or any believe the present opportunity the Executive, Treasurer and Legislature of Pennsylvania has afforded them through her commissioner, worthy of acceptance, the undersigned will be most happy to carry out the object of his mission, and upon the surrender of the certificates of their loan or interest, will issue authorised receipts for the fulfillment of the same, taking effect immediately.—Or if they prefer any arrangement to exchange their certificates upon the delivery of

the new bonds, he is prepared to negotiate the same.

The following exhibits the comparative revenue of the state of Pennsylvania, for the years 1843, and 1851, and the estimated revenue of 1852, from general and regular sources. The fiscal year terminates on the 30th of November.

	1843.	1851.	1852.
Loans	$8,254 03	$43,152 96	$15,000
Auc. Com & duties	88,972 28	71,316 47	74,000
Tax on banks Cor. and their dividends	67,040 55	392,830 61	420,000
Tax on loans, offices, enrollments &c	42,844 03	202,672 95	225,000
Tax on real and personal estate	544,452 06	1,372,170 36	1,400,000
Tax on collateral inheritances	22,337 05	150,625 48	150,000
Licenses, ret. Tav., etc	119,952 34	297,999 90	300,000
Pub. works, Rail-roads, & canals	1,019,401 15	1,719,783 54	2,000,000
Other sources, ordinary rec'ts.	1,573 87	70,853 21	100,000
Balance of avail funds at end of fiscal year.	115,466 91	543,979 21	1,000,000
Total	2,040,294 27	4,865,398 70	5,760,000

The prosperity of the state cannot be retarded, unless by some improbable casualty; the completion of the last link of her improvements has been provided for, and it is expected that in one year the North Branch canal will pay a revenue upon more than three and a half millions of dollars, hitherto entirely unproductive. The railways are now improving, and being adapted to increased business and celerity in transporting passengers and freight; and we may confidently predict that, in less than two years, the receipts upon our public works will exceed two and a half millions of dollars per annum. The single article of anthracite coal will illustrate the productive wealth of the state. In 1843 there was sent to market from our eastern coalfields 1,240,710 tons, and in 1852, 4,383,730 tons—showing an increase of production of 3,143,020 tons. The amount mined in 1852 will equal 5,300,000 tons.

The proposals for the five million loan, at a rate of interest not exceeding five per cent per annum, for 25 years, advertised to pay off so much of the debt, will be opened at Harrisburg, the capital of the state, Sept. 7. Those who desire to bid for any part of it can leave sealed proposals addressed to the secretary of the Commonwealth, care of the undersigned, until the 10th inst. Whatever amount the holders of the loan which the state has now the right to pay off convert, will reduce the allotment of the same to the bidders.

In thus addressing the loanholders, it may be proper to state, that the authorities of Pennsylvania believed it was due to the holders of our debt in Europe, to make known to them the passage of the law authorising the foregoing, and afford them such facilities in embracing its provisions as the presence of an authorised commissioner would give; and also, at the same time, exhibit to them the prosperous condition of her affairs.

☞ Communications addressed to the undersigned, at Long's hotel, New Bond street, or care of Messrs. Baring, Brothers, and Co., or Messrs. George Peabody & Co., will meet prompt attention.

JOHN J. McCAHEN,
Commissioner of Loans for
state of Pennsylvania.

London, Aug. 5, 1852.

North Carolina.

The Centre railroad through North Carolina which connects with the Charlotte railroad, is graded nearly the entire distance.

The Population and Representation of the United States.

We understand that on the 2d instant the Secretary of the Interior, in compliance with the provisions of the Act of Congress, approved 23d May, 1850, providing for the taking of the seventh and subsequent Censuses, transmitted to the House of Representatives his official certificate of the number of Representatives apportioned to each State, under the last or Seventh Enumeration of the inhabitants of the United States, and that certificates are being prepared to be sent to the Executive of each State of the number to which such State is entitled. These certificates are in accordance with, and founded upon the following table, showing the federal and representative population of the United States on the 1st day of June, 1850:

Population of the United States, Seventh Census, 1850, with the Apportionment of Representation and the Fractions for each State:

	Whites.	Free colored.	Total.	Slaves.	Federal representative population.	Represt's of each State. No.	Fract's.
Maine	581,813	1,356	583,169	....	533,163	6	22,649
New Hampshire	317,456	520	317,976	....	317,976	3	37,716
Vermont	315,402	718	314,120	....	314,120	3	33,860
Massachusetts	985,704	8,795	994 499	....	994,499	11	*60,299
Rhode Island	143,875	3,669	147,544	....	147,544	2	*54,124
Connecticut	363,305	7,486	370,791	....	370,791	4	*90,531
New York	3,049,457	47,937	3,097,394	....	3,097,394	33	14,534
Pennsylvania	2,258,463	52,323	2 311,786	....	2,311,786	25	*69,706
Ohio	1,956,108	24,300	1,980,408	....	1,980,408	21	18,588
Indiana	977,628	10,788	988,416	....	988,416	11	*54,216
Illinois	846,104	5,366	851,470	....	851,470	9	10,690
Michigan	395,097	2,557	397,654	....	397,654	4	23,974
Wisconsin	304,565	626	305,191	....	305,191	3	24,931
Iowa	191,879	335	192,214	....	192,214	2	5,374
California	91,632	965	92,597	....	92,597	†2	22,365
New Jersey	465,523	23,807	489,330	225	489,465	5	.....
Delaware	71,169	18,073	89,242	2,290	90,616	1	.....
Maryland	417,913	74,723	492,666	90,368	546,886	6	*79,786
Virginia	895,304	53,829	949,138	472,528	1,232 649	13	18,189
North Carolina	553,118	27,373	580,491	288,410	753,538	8	6,178
South Carolina	274,623	8,900	283,523	384,984	514,513	6	47,413
Georgia	521,438	2,880	524,318	381,681	753,326	8	5,966
Alabama	426,486	2,293	428.779	342,892	634,514	7	*73,994
Mississippi	295,758	899	296,657	309.898	482,595	5	15,495
Louisiana	255,416	17,537	272,953	244,786	419,824	4	46,144
Tennessee	755,893	6,271	763,164	239,461	906,840	10	*66,060
Kentucky	761,688	9,736	771 424	210,981	898,012	10	*57,232
Missouri	592,077	2,544	594,621	87,422	647,074	7	*86,554
Arkansas	162,068	589	162,657	46,982	190,846	2	4,006
Florida	47,167	925	48,092	39,309	71,677	1	.....
Texas	154,100	331	154,431	58,161	189,327	2	2,467
District of Columbia	38,027	9,973	48,000	3,687	.....	.	.....
Minnesota	6,038	39	6,077	.....	.....	.	.....
New Mexico	61,530	17	61,547	.....	.....	.	.....
Oregon	13,087	206	13,292	.....	.....	.	.....
Utah	11,330	24	11,354	.....	.....	.	.....

Total Population in the Thirty-One States.

Whites	19,427,259	
Free colored	419,451	
		19,846,710
Slaves		3,200,380
Federal Representative Population		21,766,931
Federal Representative ratio		93,420

Total Population, including the Territories.

Whites	19,557,271
Free colored	429,710
Slaves	3,204,093
Total	23,191,074

* All the States marked thus * have an additional member for the fraction.
† One Representative added for California under the Act of Congress approved 30th July, 1852.

Welland Canal Tolls.

We give below the amount of tolls collected at Port Colborne, during the several months of this year and last. It proves that the trade of the west is steadily maintaining its progressive increase of 20 per cent from year to year, notwithstanding the late period at which lake Erie was freed from ice this spring. This ratio has been maintained on the Erie canal for the last twenty years, and forms the basis on which the future increase of revenue on the Welland canal is estimated.

1851.		1852.	
March 31st	£14 19 7	April commencing	
April	3356 13 10	the 20th	£139 12 2
May	3460 6 5	May	475 11 6
June	3765 2 1	June	5461 10 5
July	4689 6 7	July	5486 10 5
	£14286 8 6		£17114 4 3
	$57,145 19		$68,457 85

Amount over last year, on 31st July....$11,311 15

—*St. Catherines Journal.*

Pennsylvania.

The president of the Pennsylvania railroad company has lately received very favorable intelligence from Mr. Miller, who is now in London on business connected with the proposed loan of three millions of dollars, The co-operation of the eminent house of Messrs. Overend, Gurney and Co., the largest bankers of London, whose transactions amount to more than one hundred millions of pounds sterling per annum, has been secured.

Hanover Branch Railroad.—We understand that this road continues to do a good business with every prospect of a rapid increase as the season for active operations advances. The passenger travel is also good, and as the rural beauties of the country around Hanover become known, many of our citizens will take the opportunity which is now afforded of visiting it.

Darien Ship Canal.

We learn from the Panama Star that Dr. Edward Cullen has received permission from the government of New Grenada, after obtaining the consent of the Panama railroad company, to open a ship canal across the Isthmus of Darien, between the Gulf of San Miguel on the Pacific, and the Bay of Caledonia on the Atlantic, or any other point on the Atlantic between Punta de Mosquitos and the west mouth of the Atrato for 99 years.

The date of privilege is the 1st June, 1852, given at Bogota—and the canal is to be completed within ten years, with a prorogation of four years longer, if required, should one third of the work be then finished. The company receives with the grant, 100,000 fanegadas of land to be selected in any part of the Republic. The harbors, both on the Pacific and Atlantic, are to remain free and neutral. The New Granadian government is to receive 3 per cent of the profits for 80 years, and 5 per cent for the remaining 19 years. The company are to make a deposit of £24,000 guarantee, within 12 months of the date of the grant. The names of the parties receiving this grant are Dr. Edward Cullen, Sir Charles Fox, John Henderson, and Thomas Brassey, Esqrs., names sufficiently well known to secure the speedy completion of the work. Fox and Henderson, it may be remembered, were the builders of the great Crystal Palace; and Brassey is associated with Peto and others, in the most gigantic enterprises in all parts of the world, and was the contractor for the Great North Western railroad in England.

By the eighth clause of the Bulwer and Clayton treaty, it appears that both the governments of Gt. Britain and the United States stipulate to extend their joint protection to any company undertaking the construction of this canal; and we learn that it is the intention of the present company in London to carry out the work as an united British and American enterprise.

This route will lead from Port Escoces in the Bay of Caledonia, about 120 miles east of Limon Bay to Fuerte del Principe, the site of an old settlement of the Spaniards, abandoned in 1790, distance about 22 miles S. W. This tract of country is level and of low elevation, but quite free of swamp, the only hill in the intermediate space between the Atlantic coast and Principe is a low ridge behind Port Escoces and Caledonia Bay, but which is intersected by valleys. Dr. Cullen does not believe that there is any where in this tract an elevation of 100 feet. Through this space a canal must be cut, to unite with the river Savana at Fuerte del Principe, or a little below it. At this point on the river, there is a depth of two, and often of three fathoms of water, and the tide rises there six to eight feet. Fuerte del Principe is 18 miles above the mouth of the Savana, and is 14 miles due north of the mouth. The largest vessels can ascend the river nearly to Principe, there being a depth of seven fathoms water at its mouth, and a rise of tide of 21 feet, and the course up the Principe being free from sinuosities, elbows, snags, playas, or other obstructions, its banks are never inundated, and no swamp exists any where in the neighborhood.

The Savana river opens into the Tuyra or Santa Maria del Darien, just as the latter discharges itself into the deep Gulf of San Miguel by two mouths, one of which has 18 and the other 20 fathoms of water. Thus the distance from sea to sea, by this canal route, would be about 40 miles. In a direct line, from Caledonia Bay to the west point of the mouth of the Savana, the distance is only 31½ miles.

The chief recommendation of this route is the excellence of its harbors, in which it has a decided superiority over any hitherto proposed. In many places in Caledonia Bay and Port Escoses there are from six to nine fathoms of water so close to the margin of the sea, that ships may discharge with as much facility as at a wharf. They are perfectly secure harbors, and would hold large fleets. The coast is clean and safe. The canal may open anywhere in these harbors, from Punta San Fulgencia in 8° 55′ N., and 77° 47′ W., to Punta Escoces in 8° 50′ N., and 77° 41′ W. Dr. Cullen places Fuerte del Principe in 8° 35′ N., and 77° 56′ W.

It is a singular fact, that these harbors were selected by Vasco Nunez for his settlement of Alga, by the Buccaneers for their landing place on the occasions in which they crossed to the Pacific by way of the Chuquanagua, and by the Scotch colony of 1698, so inhumanly crushed by William III, and by the Spanish government in 1785, for the garison of San Fernando de Carolina, abandoned in 1790.

The Gulf of San Miguel would hold the shipping of the world, has great depth of water, and its navigation is perfectly safe. Its mouth, bounded by Cape San Lorenzo to N. and Cape Garachine to S., opens into the Pacific immediately south of the east point of the mouth of the Bay of Panama, Cape San Lorenzo being that point. Near the latter is the shoal called El Buey, but which is easily avoided. Cape San Lorenzo is only 80 miles S.E. of Panama, and can be reached, with a fair wind, in one or two days.

Dr. C. had originally proposed the deepening of the river Savana from Principe to Canasas, a point several miles farther north, and cutting thence to the Atlantic, but subsequently considered it better to cut directly into the river, at such a point that the largest ships can reach, and using the upper part of the river as a feeder. He confidently expects that the canal can be cut entirely without locks, and that, by cutting deep enough, the Pacific tide may be let to flow into the Atlantic, and thus ships be enabled to pass from sea to sea, with the ebb and flow of the Pacific.

Missouri.

Pacific Railroad.—The party of engineers, having in charge the *location* of the western half of the Pacific railroad, have been for some weeks occupied in running various experimental lines through this country. One line has been traced, descending the Missouri, from Kansas to the mouth of Big Blue; thence up Big Blue, ascending Heart Grove creek; over the dividing ridge, between Big and Little Blue, and crossing the latter stream, at the Rock Ford, up Moose creek, to the dividing ridge between Little Blue and Big creek. This line here connects with that surveyed two years ago, by Messrs. Kirkwood and O'Sullivan.

Another line, commences at the summit of the Missouri Bluffs, above Wayne city—passes thro' Independence—descends the Lick Fork, (east of town) to Little Blue, and is designed to be continued onward to Warrensburg, in Johnson county, at which point this line also blends itself with the existing one above mentioned.

A third will then be run out, pursuing a straight course from Georgetown, in Pettus county, crossing the waters of Blackwater, to Independence.

The Engineer-in-chief, Thos. L. O'Sullivan, arrived on Saturday the 24th July, from St. Louis, and has gone to the south-west corner of the State, in McDonough county, for the purpose of making a *reconnoisance*. From thence, through Springfield and the mouth of Pinee Fork of Gasconade, to St. Louis.

At present, then, the following system of surveys are being executed simultaneously, by the company at St. Louis:

1st. From St. Louis, by way of the mouth of Pinee, through Springfield, to the south-east corner of the State. This is to have the name proper of the "*Pacific railroad.*"

2d. A branch, leaving the main stream at the western edge of St. Louis county, and passing south to the Brown Mountain in St. Francois county.

3d. A branch from the same point, pursuing the bank of the Missouri river, through Jefferson city, thence by Georgetown to the Missouri river in Jackson county.

These surveys are made in preparation for the assembling of the Legislature, designated by the Governor to be on the 30th of August next.—*Independence (Mo.) Western Empire.*

A letter of Gen. T. L. Price, dated California, Manitean county, August 10th, in reference to the same enterprise says: "We are progressing finely, no difficulty in procuring the right of way—besides, all the citizens of California and the neighborhood have manifested a liberal spirit toward the encouragement of the road. A number of individuals have taken considerable amounts of stock; and you will recollect that the people of the county voted for the county to subscribe fifty thousand dollars stock. This proposition was carried by a very large majority.

New York.

Chemung Railroad.—At an election held by the stockholders of the Chemung railroad company, at the village of Elmira on the 5th inst., for the choice of thirteen directors to serve for the ensuing year, the following gentlemen were duly elected, viz: Robert Bayard, Isaac Otis, J. S. T. Stranahan, J. W. Baker, New York; Simeon Benjamin, John Arnot, A. S. Diven, William Maxwell, Elmira; Charles Cook, Havana; C. A. Cook, N. B. Kidder, W. N. Clark, W. W. Watson, Geneva. The directors met on the same day and made choice of the following officers viz: Simeon Benjamin, Esq. president; Isaac Otis, Esq., treasurer; Henry H. Casey, Esq., secretary.

This is a strong board and includes the names of some of our leading citizens. This road, which unites the Erie road at Elmira with the Canandaigua and Jefferson at Jefferson, is leased to the Erie road for a long term at 8 per cent per annum on the cost. It forms a very important link in the chain of roads between New York and Buffalo, and by its position will always command a good traffic. At present it pays the Erie company a profit on their lease.

Albany and Schenectady Railroad.—The number of passengers carried by the Albany and Schenectady railroad for the first fourteen days in August

1852 were	18,310
Corresponding days in Aug. 1851	16,243
Increase	2,067

Rochester and Syracuse Railroad.—The following statement exhibits the earnings of this road for six months up to 1st August:

1852, Feb. 1, surplus profits	$144,758 73
Receipts in February	50,852 19
" " March	53,233 16
" " April	72,376 01
" " May	98 291 39
" " June	116,770 59
" " July	109,157 88
Interest dividend on Buffalo and State line railroad stock	5,549 90
Mail services for six months	10,360 00
Total	$661,289 85
Expenses in February	$38,504 46
" " March	42 622 55
" " April	31,533 76
" " May	29,225 76
" " June	39,559 33
" " July	35,482 22
Balance for disbursements	6,988 95
Int. on scrip stock and bonds	44,033 56
Dividend at 5 per cent on capital stock $4,066,000	203,300 00
Balance to new account	190,039 26
	$661,289 85

The surplus profits after declaring a dividend of 5 per cent on the earnings of six months has increased $50,000.

North Carolina.

Charlotte and Jonesboro' Railroad.—A meeting of the citizens of Mecklenburgh county, North Carolina, was held on the 5th July, at Charlotte C. H., for the purpose of considering the subject of a railroad between Charlotte and Jonesboro, Tenn. A committee was appointed to enter into correspondence with citizens on the route and its vicinity, and appoint a day for the meeting of a railroad convention on the project, at Charlotte.

Ohio and Mississippi Railroad.

The Common Council of the city of St. Louis, have passed resolutions to accept stock in the above Co., on receiving an assurance that the western division of the road shall be completed before the eastern. The following are the resolutions of the council, as amended and passed on the 13th of July, 1851, together with the note of Wm. Truesdail, the agent of the contractors to the committee of the board of directors, and the subsequent ratification by Messrs. H. C. Seymour and Co. The hearty co-operation of the city of St. Louis is now secured, and the most vigorous measures will be adopted for the immediate prosecution and completion of the work.

Resolved, by the city council of the city of St. Louis, That the city will accept and ratify as a stockholder, the act passed by the legislature of the state of Illinois, approved June 22d, 1852, entitled "An act to incorporate the Ohio and MIssissippi railroad company and for other purposes, and the joint committee of the council having charge of the city's interest therein, are instructed to enter upon the books of the company, an acknowledgement in conformity herewith, whenever the contract made with H. C. Seymour and Co., for the construction of said road, shall have been modified as follows:

1st. The said road from Illinoistown to Vincennes shall be finished, completed and turned over to the stockholders within three years from the 1st of July last past.

2d. The city to issue her bonds to the contractors only upon the regular calls of the board of directors upon all stockholders, and in no case to be dealt with differently than the other stockholders.

—

St. Louis, July 5, 1852.

Messrs. J. H. Lucas and Chas. P. Chouteau, Com. of B. D. Ohio and Miss. R. R. Co.

Gents: In answer to your note of this date, setting forth that ours to you of the 2d instant, might be subject to misconstruction, we now in lieu of former assurance, *do agree*, most *explicitly*, to finish the western division of the Ohio and Mississippi railroad, from Illinoistown to the State line at Vincennes, within *three years* and have *the same in successful operation before* the eastern division, from Cincinnati to Vincennes, shall be completed; provided, however, the means are furnished as are required.

With much respect, your ob't servant,
Wm. Truesail, Agent.
H. C. Seymour & Co.
Sanger, Camp & Co.

—

St. Louis, August 2, 1852.

To Messrs. Lucas and Chouteau, Committee, &c:

Gentlemen: Having been advised during our absence that an agreement on our part so to modify the contract as to complete the Illinois division of the Ohio and Miss. railroad within a period of 3 years would harmonise the conflicting views on this subject, and secure the hearty co-operation of the Common Council of St. Louis in the prosecution of the work, we authorised our agents Wm. Truesdail, and Sanger, Camp, and Co., to signify our willingness to accept such modification.

Their letter of July 5, 1852, we fully and cordially indorse; and furthermore, we are now prepared to carry out the intimation of our agents, and will hold ourselves in readiness to execute the modification as above, any time on or before the 7th inst., provided, that in the meantime the council adopt the inclosed report and resolutions of the joint committee of the city council.

Very respectfully, yours, &c.,
H. C. Seymour & Co.

Vermont.

Vermont Valley Railroad.—The following gentlemen comprise the board of directors: Hugh H. Henry, of Chester, president; G. L. Schuyler, A. Hamilton, Jr., R. B, Mason, G. R. Bowdoin, New York; Charles Chapin Brattleboro'; P. R. Chandler, Putney.

Michigan Central and Canada Railroad.

The Michigan Central railroad, is one of the very best roads in this country. It is laid with heavy T rail, and the road in all its appointments is laid and equipped in the most substantial and perfect manner.—The distance from Chicago to Detroit is 278 miles, and it is run by the express train in a little more than ten hours. The time is soon to be reduced to *nine hours.*

In connection with this road, the great Western road through Canada is now being pushed with great energy and will be completed by a year from next month.—The distance from Detroit to Buffalo or Niagara, is 214 miles. Of this distance 107 miles is perfectly straight, with a maximum grade of only 4 feet to the mile. The time on this 107 miles is to be two hours—*fifty-three and a half miles per hour.* This will be going through the world fast enough to satisfy the progressive spirit of the age.

The number of passengers during the month of July last on the Michigan Central road, the most unfavorable month of the summer and fall, was,

Way passengers	13,979
Through "	5,400
Emigrant "	2,965
Total	22,344

Baltimore and Ohio Railroad.

New Depot at Washington.—The new railroad depot at Washington, built by the Baltimore and Ohio railroad company, is now nearly completed The dimensions of the station house, situated at the corner of New Jersey avenue and C street, are 106 feet front, by 68 deep. It presents a beautiful front, built of Connecticut brown stone, and surmounted with a fine quadrangular tower, 70 feet high and 18 feet square, whose sides exhibit the faces of a large well-regulated time keeper. The main car house runs diagonally through the square. It is 60 feet wide and 330 feet long. A long glass window extends through the centre of a grooved iron roof, supported by granite pillars, and girt with massive iron tie beams, remarkable for simplicity and strength. This roof was designed by Mr. Bollman, road master to the Baltimore and Ohio railroad company. Ample platforms on either side render the entrance and exit from the trains easy and convenient. In the night the building is handsomely lighted with gas. The main entrance to the passenger trains is through a beautiful hall, 45 by 68 feet in area, on either side of which are arranged the ticket and freight offices, ladies' and gentlemen's saloons. To the latter are attached elegantly furnished dressing rooms, supplied with mirrors, sofas, and numerous little comforts, seldom, if ever, found at railway stations. Messrs. Niernsee & Neilson, of Baltimore, furnished the designs for the building, which has been erected under the superintendence of Mr. John H. McMachen.—*Balt. American.*

Influence of Railroads.

The following list of improvements now going on at Wheeling are attributed to the expected completion of the Baltimore and Ohio railroad to that point. The Wheeling Gazette says:

We will name but a few of the buildings of a public character going up, and the aggregate expenditure they will involve, at a rough guess, and see what an immensity of money they sum up.—Four iron works $400,000. Two hotels $160,000 (one completed.) Washington Hall $35,000.—Forsythe & Co's Warehouse, the largest in the Union, $30,000. Four other warehouses $25,000, One market house $40,000. Ten stores $40.000. B. and O. railroad depot, $100,000. Bridge $60,-000. One pork house and Chandler's shop $20,-000,—in all, $910,000. This is the money now being expended here in a few varieties of business, and building. What amount may be fairly estimated as the expenditure in residences, and smaller establishments, we have not now time to inquire into, dependant on the increase of population which these works must produce?

Illinois.

Chicago and Alton Railroad.—We learn that a corps of engineers have been organized for the survey of that portion of the above road lying between Bloomington and Chicago. Mr. P. A. Badeau, who has been connected with the road for sometime past, will have charge of the survey, and has proceeded to Bloomington, where the work will be immediately commenced. We commend him to the people along the line.

That portion of the road between this city and Springfield is progressing with great rapidity, and it is confidently anticipated that it will be in order for the cars to run to Springfield in the course of two weeks from this time—there being about eleven miles of track to lay.—*Alton Telegraph.*

Chicago and Rock Island Railroad.—Gangs of hands are busy laying down the ties and iron, at both ends of the section of the Rock Island railroad, between this city and Joliet. With a continuance of ordinarily fair weather, the entire section will be completed, and trains running between this city and Joliet, by the middle of next month—say thirty-five days hence.

The division beyond Joliet is being graded and bridged rapidly, and the iron and ties will be put down some distance before winter sets in.

Mr. Farnham, who has the superintendence and control of the whole enterprise, is a man of uncommon energy, and the fact that he directs the construction of the road, is a guaranty that it will not lag. Early next year we may expect to visit La Salle and Peru on the *first train.*—*Chicago Tribune.*

Pittsburg and Steubenville.

Right of Way through Virginia.—The case stated briefly as we understand it, is this: The people of Brooke and Hancock counties, Virginia, petitioned the Virginia legislature last winter, for the right of way for a railroad connection between Pittsburg and Steubenville. The petitions were presented and referred to a committee. The committee reported by resolution "that it is inexpedient to grant the prayer of the petitioners." The report coming up for consideratian in the house of delegates, Dr. Smith moved to amend the resolution reported by the committee by striking out the word "*inexpedient.*" And, after a discussion of the question for several days, the amendment of Dr. S. was *carried.*

The legislature will re-assemble next November, and this question will be then acted upon; and the right of way, we are confidently assured, will be then granted.—*Pittsburg Com. Journal.*

Sodus Bay and Southern Railroad.

The Sodus Point and Southern railroad, will soon be put under contract. This must be gratifying intelligence to its numerous friends. There are those who have labored long and well to secure this road, and all their labors are about being crowned with success, this certainly must be pleasant. Prominent among the early advocates, nay the originator of the road, is Dr. Cook. Those who will be benefitted by the road, and it will be advantageous to the whole country, owe to his indefatigable perseverance and untiring energy whatever of benefit may accrue to them, Such men are public benefactors, and are held in happy remembrance by a grateful people.—*Wayne County Whig.*

Immigration During June.

During the month of June, there have arrived at New York from foreign ports 508 vessels, bringing 53,206 passengers. The aggregate measurement of these vessels was 204,426 tons. The following table shows the number of passengers who have arrived in this city from foreign countries during the first six months of three years:

	1850.	1851.	1852.
January	13,977	17,240	12,709
February	3,990	10,020	6,570
March	6,690	18,103	23,195
April	15,912	30,533	29,147
May	45,340	36,680	40,777
June	13,951	38,688	53,206
Total	99,900	151,263	163,583

Ohio.

Cincinnati, Wilmington and Zanesville Railroad.—The Lancaster Gazette says, the embankment across the Hocking valley west of the city is progressing rapidly, as is the grading and masonry on other portions of the line, and its completion is regarded as certain, next spring. The Gazette seems to think the Cincinnati papers have neglected to take proper notice of this road, and hopes that the "city press will at any rate notice the arrival and departure of the first train." We will do so with pleasure, and in the meantime, notice whatever we can get from the papers along the line and otherwise, as we have done heretofore, to keep our readers advised of the condition and progress of that important line of road.—*Cinn. Gazette.*

Cleveland and Lake Shore Railroad.—This company held their annual meeting on the 10th inst., and elected Alfred Kelly, Wm. Case, Chas. Hickox, T. M. Kelly, Stillman Witt, D. R. Paige and W. D. Beattie, directors. Mr. Kelley was subsequently elected President, and Mr. Case Vice President. The stock was increased 25 per cent, and the option given the stockholders who had paid up, to take the increase at par. The stock now commands a premium of 15 per cent. The road is finished to within five miles of the Pennsylvania line.

Railway from Hamilton to Rushville.—The Connersville American states that Messrs. L'Hommedieu, Wood and others have recently visited that region, and have made arrangements with the Junction company, for constructing a railway from Hamilton, by way of College Corner, Connersville, etc., to Rushville. The Cincinnati company to construct the road from Hamilton to the State line as soon as the Junction company shall construct one from the State line to Rushville. The people in the several counties in Indiana are alive to the subject, and are engaged in measures to push forward the work. That is a fine country sufficiently rich and productive to satisfy anybody, and furnishing large supplies to this city. They want a railway, must have one, and they are resolved to raise the funds for it.

The Belpre and Cincinnati Railway.—The Hillsborough Co., have done a good business in Cinn. the past week. They have raised principally among our citizens, $300,000 of stock, which will enable them to pay off all its liabilities which have matured, and leave their line finished from Loveland to Hillsborough unembarrassed, with a surplus running income sufficient to pay off all their remaining debts as they mature. The recent surveys for extending their line from Hillsborough to the coal regions and on to Belpre, has attracted great attention in Cinncinnati, and such is the desire to reduce the price of fuel here, and such the confidence that this road will effect a great reduction, that the company may look for still more aid. The stock in the company, when opened to the coal field, must be profitable, and when the line is opened to connect the St. Louis and Cincinnati road with the Baltimore and Ohio road at Parkersburg, this will rank among the best paying railway stocks in the Union. It is now certain that the connection with the Baltimore and Ohio road *will be made at Parkersburg.*

The directors, in consequence, have recalled the $225,000 bonds they have offered for sale, and they will be all cancelled.

Canada.

Prescott and Lake Huron Railroad.—The Perth Standard says that the town Council of Perth have recommended that the Municipality take stock to the amount of £10,000, in the Prescott and Georgian Bay railroad, via Smith's Falls and Perth.

New York.

Genesee Valley Railroad.—The friends of this road, says the Rochester Democrat, will be gratified to learn that the difficulty in regard to the directorship of this enterprize has at last been settled, and that there is now a prospect of its speedy prosecution. Operations will be commenced under very favorable circumstances. Including the city subscription of $300,000, the sum of $600,000 has been subscribed by responsible parties. The directors have now all been chosen, and consist of the following gentlemen, the four last having been elected by the common Council.

James S. Wadsworth, Allen Ayrault, Geneseo; Daniel H. Fitzhugh, Groveland; John Vernam, John R. Murray, Mt. Morris; William T. Cuyler, Leicester; Azariah Boody, Elijah F. Smith, Amon Bronson, Levi A. Ward, Joshua Conkey, Everard Peek, and Isaac Hills, of Rochester.

There is a very general anxiety among the people of the Valley for the speedy prosecution of the work. They prefer to maintain their long business connections with Rochester, rather than form new ones with other cities, as they will soon be forced to do without a railroad in this direction. The road from Hornellsville to Attica is just on the point of completion, and is already used to a considerable extent. The work upon two other lines is rapidly advancing, and in all probability will be completed before the Genesee Valley Railroad. The latter will be the favorite throughout the Valley, and will command the great bulk of the business. The trade of Alleghany county is now almost entirely turned into a new channel. The completion of the Erie railroad is working greater changes in that region than is generally supposed. Instead of taking a week to come to this city and return by teams or by the canal, two days suffice to send stock, butter, cheese, and other products to New York and get the returns in cash. The Valley railroad will reclaim a great share of this business for Rochester, and without it our progress would be seriously checked for a long time to come.

Lake Ontario and New York Railroad.—The Cayuga New Era states the contracts for the grading and masonry of this road have been made, and with a certainty that the work will be immediately commenced.

Erie Railroad.—This company have we understand leased the Paterson and Ramapo roads, on very fair terms; and it is their intention at once to widen the tracks to six feet, so that very soon New York will be put into communication with the lakes and the west, by a direct railroad line without any break of guage or other chasm, except crossing the Hudson at Jersey city. The ferries between New York and Jersey city have recently been greatly improved, and the new ferry houses, with their spacious rooms, offices, etc., resemble a regular depot more than the ordinary accommodation for ferry passengers.

New York and Buffalo Railroad.—The completion of the magnificent bridge at Portage, over the Genessee river, has opened direct communication between New York and Buffalo. The twentieth instant, was the day appointed for the running over of regular trains.

The Horse Trade of the West.

Horses are carried by railroad from Cincinnati to New York or Boston in five days, and for the sum of thirteen dollars each. The omnibus proprietors of New York are supplied from Cincinnati.

Massachusetts Railroad Statistics.

Eastern Railroad.—Incorporated in 1836. Opened throughout November 9, 1840. Length, 74 miles,* (including branches. Length of double track, 16 miles. Cost, Jan. 1, 1852, $3,614,275.*

The following table exhibits the operations of the road, during the last ten years; its cost, and the market price of the stock, at the beginning of each year. The item of "Interest" is not included in the expenses:—*Boston Courier.*

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842....	$.....	$100 per sh.	$269,169	$119,040	$150,129	6 per cent.
1843....	.....	60	279,562	104,641	174,921	6 "
1844....	2,388,600	104¼	337,238	109,319	227,919	7¼ "
1845....	2,406,400	112	350,150	116,840	233,310	8 "
1846....	2,471,600	104	371,339	132,556	238,783	8 "
1847....	2,815,100	108	424,841	135,083	289,758	8 "
1848....	2,937,200	104	479,158	182,216	296,942	8 "
1849....	3,005,400	104	517,929	183,980	333,949	8 "
1850....	3,119,300	101	539,076	185,218	353,858	8 "
1851....	3,120,400	104¼	502,054	195,399	306,655	8 "
			$4,070,516	4,464,992	2,606,224	Av. 7 11-20 per cent.

* Including Eastern RR in N. H. which is leased to, and operated by the Massachusetts company.

Telegraph Business.

The Magnetic Telegraph company, owning the line extending from Washington to New York, during the year ending on the 1st of last July, transmitted over their wires 253,857 messages, the tolls received on which amounted to $103,232·37. During the six years and a half the line has been in operation its receipts have amounted to $385,-641·42. The rapid increase of the business of the line is shown by the fact that the receipts for the year ending July, 1852, were but $67,737·12. The last annual report of the company gives some particulars of interest.

The capital of the company is $370,000. It has six wires from Washington to Philadelphia, and seven from Philadelphia to New York. It has offices at Washington, Baltimore, Havre-de-Grace, Port Deposit, Wilmington, Philadelphia, Trenton, New Hope, Princeton, New Brunswick, Newark, Jersey city and New York, and employs in its service, including messengers, outside laborers engaged in keeping the line in order, clerks, operators, etc., about one hundred and twenty-five persons. The distance from Washington to New York, by the line of the wires, is about two hundred and seventy-five miles; requiring between nineteen hundred and two thousand miles of wire. The cost for chemicals is considerable, and the amount of stationary quite immense—the single item of envelopes for the year reaching in number nearly one quarter of a million. This is the pioneer line of magnetic telegraph in the world, and very large sums have been expended in various experiments, the object all the time being to make it as perfect as possible. It is now, perhaps, all things considered for its length, the best appointed and most reliable in the country, and probably the most productive in the world.

Canada.

Ocean Steamers.—We have much pleasure in being able to state, that the government have succeeded in concluding an arrangement by which a line of steamers will run *fortnightly* from Montreal and Quebec to Liverpool, commencing next spring, and from Portland to Liverpool *monthly*, during the winter season. The Atlantic and St. Lawrence R. R. Co., and the Portland railway company, as also the city of Portland, contribute to the expense of maintaining the winter line of boats, and as the R. R. from this city to Portland will be completed through in July next, Montreal will thus not only be put in communication with England by the shortest route, but have the additional advantage of passing her winter imports and travel over a line one half of which belongs to the people of Canada. It is impossible to estimate the results of opening up a steam communication *via* the St. Lawrence. Through the Strait of Belle Isle, the distance to Quebec is some 400 miles shorter than to Boston, and with the Straits properly lighted, the *route* may be made with the most perfect safety. We believe that by this line our mails may be made to reach us earlier than they now do *via* Boston and New York, and we are satisfied that if the proper measures are only taken to point out the advanges of this *route*, by establishing agencies in that principal European ports—If this we say be only done, as it ought to be done, a large share of the vast stream of emigration which now sets into N. York can be directed, and will be directed to the St. Lawrence. Already the German emigrant bound west is finding out the advantages of coming this way, and with cheap steam navigation, the best of the European emigration will take this route in preference to any other. The proposed steamers will be 1500 tons, built of iron, and propelled by screw. The price of a cabin passage will be £20, second cabin £12, and steerage passage £6—this including meals and all that is necessary for the voyage.—*Pilot.*

New Hampshire.

An Important Railroad Movement.—We understand that the stockholders of the New Hampshire Central railroad, which runs from Manchester to Bradford, being satisfied of their inability to proceed any further with the undertaking, have given up their stock, and relinquished all interest in said road to Messrs. Clark & Co., the well-known brokers.—These gentlemen, we further understand, are to complete the road from Bradford, the present northwestern terminus to Claremont, N. H: From thence it is intended to intersect the Rutland and Burlington road at or near Bartonville, Vt. A line of road is also to be built from Whitehall to Sackett's Harbor, on Lake Ontario, and thus over all these roads furnish a new and important line of communication between the Lakes and Boston.—The contract for the surrender of the N. H. Central road has already been completed. From the reputation and extensive business connections of the firm, into whose hands this road has passed, we infer that operations will be soon commenced to forward this undertaking.—*Brattleboro' Eagle.*

Mohawk Valley Railroad.

This company, incorporated last year under the general law to construct a railroad on the south side of the Mohawk river, between Schenectady and Utica, has lately been reorganized to a considerable extent, and the following gentlemen were yesterday elected directors to fill vacancies:—

Erastus Corning, John Townsend, Marcus T. Reynolds, Thomas W. Olcott, and John V. L. Pruyn of this city, and Alonzo C. Paige and Chauncey Vibbard of Schenectady. John V. L. Pruyn was elected president of the board, in place of Azariah C. Flagg resigned.

Although no plan of operations has yet been agreed upon, we learn that it is contemplated, if it should on examination be found expedient, by the parties interested, so to do, to lay a third track on or parallel with portions of the Utica and Schenectady railroad, which connected with a track or tracks constructed by the Mohawk Valley company, running through the principal points on the south side of the river will amply serve all the purposes in contemplation when the latter company was incorporated.

Drainage of Great Rivers.

Lieut. Maury, in a recent letter to the Mercantile Library Association of Charleston, regarding his favorite prpject of steam communication with the river Amazon, gives a table of some interest. It shows the amount of drainage effected by the great water courses of the globe, as follows:

	Square Miles.
Extent of back country drained by the navigable rivers of Europe that empty into the Atlantic	532,940
Extent of back country drained by the navigable rivers of Europe that empty into the Mediterranean	678,430
Extent of back country drained by the navigable rivers of Asia that empty into the Indian ocean	1,661,760
Extent of back country drained by the navigable rivers of Asia that empty into the Pacific	1,767,280
Extent of back country drained by the navigable rivers of America that empty into the Gulf of Mexico and Caribbean sea	1,241,440
Amazon and its confluents	2,048,480
Other Brazilian rivers	443,000
La Plata	886,400
Total Europe	1,211,370
Total Asiatic	3,429,640
Total American	4,854,770

Parkersburgh Railroad.

The annual meeting of the Parkersburgh and Tygart's Valley railway company took place at Parkersburgh, on the 2d inst. Mr. Cook, the President, resigned, to make way for the election of Mr. Swann, the President of the Baltimore and Ohio road, because he knew him to be more capable than himself, particularly in managing the finances of the company. Mr. Swann was unanimously elected. He delivered an appropriate address, in which he declared that the road would be immediately put under contract, and pursued with all speed to completion.

It is designed to finish the road to Parkersburgh early in the spring of 1855, by which a continuous railway will be opened from Baltimore to Cincinnati, 518 miles in length.

The annexed report of the Parkersburgh company, speaking of its advantages, says:

"To illustrate the advantages to Baltimore of the Northwestern Virginia road, let the line of which it forms a part be compared with that by Wheeling. The railway distances from Three Fork to Cincinnati, are: via Wheeling, 341 miles; via Parkersburgh, 278 miles—showing a difference in favor of the Parkersburgh route of 68 miles, and if the river is adopted, as above, of 91 miles of distance, and from 8 to 12 hours of time.

"It is unnecessary to enlarge upon the advantages to be derived by the country through which the road will pass. Whatever benefits railways ordinarily confer, will be enhanced in proportion to the advantages the route has over its rivals. By its becoming the principal thoroughfare between the East and West, the greatest possible benefits will be secured to the adjoining territory, and the development of its resources of whatever character, will be speedy and certain."

Massachusetts.

Railroad to Westfield.—The Northampton Gazette says:—"The committee who have charge of the books of subscription to the stock of the road from Northampton to Westfield, have obtained satisfactory information in regard to operating the road, should it be constructed, opened the books for subscription to the stock on Tuesday morning. Samuel Williston, of Easthampton headed the list with the generous subscription of $25,000, and he was followed by John Clarke of Northampton, and H. G. Knight of Easthampton, with a subscription of $5000 each. Fifty thousand dollars is the least sum that Northampton ought to think of raising for the road. The work will cost from $160,000 to $115,000 and it can hardly fail to be a fair stock.

Michigan.

Michigan Central Railroad.—This company have contracted with the directors of the Military Tract railroad company, for the construction of the entire line from Galesburg to the junction of the Aurora extension with the Illinois Central—the whole to be completed by the 1st of October, 1853. The line from Quincy to Galesburg is already in a fine stage of progress, so that by October 1853, Chicago will be put in direct communication with the Mississippi at Quincy, as well as at Rock Island and Galena.—*Chicago Journal.*

Ohio.

Toledo, Norwalk and Cleveland Railroad.—Mr. C. L. Boalt, President of the T. N. and C. railroad company, returned home on Friday last, from New York city, where he has been for the last few weeks, attending to the interests of the road. He has been completely successful, having, as we understand, perfected arrangements with the Southern Michigan, and Cleveland, Columbus and Cincinnati. railroad companies, and the companies east of Cleveland, which it is said, will prove highly advantageous to our road, and indeed to all concerned. —*Huron Reflecter.*

Wisconsin.

The Detroit Free Press mentions, that the citizens of Milwaukee are anxious for railroad communication between that city and Chicago, and are moving in the matter.

Milwaukee and Mississippi Railroad.—The following gentlemen have been elected directors for the ensuing year: John H. Tweedy, Edward D. Holton, George H. Walker, Erastus B. Wolcott, William A. Barstow, Sheldon C. Hall, Joseph Goodrich, Alexander Mitchell, Anson Eldred, Eliphalet Cramer, James Kneeland, Adam E. Ray, Joshua Cobb, David L. Mills and John Catlin.—The following are the officers of the company:—John Catlin, President, Edward H. Broadhead, Chief Engineer, Wm. Taintor, Secretary, and Walter P. Flanders, Treasurer.

Mineral Point Railroad.—At the last accounts from Mineral Point, there had been subscribed at Mineral Point to the capital stock of the above railroad, the amount of $76,000.

Maine.

Penobscot and Kennebec Railroad.—At an adjourned meeting of the stockholders of the Penobscot and Kennebec railroad Co., on the 16th inst., the vacancies in the board of directors were filled. The following is the list of directors: John M. Wood, Phineas Barnes, John A. Poor, Henry B. McCobb, and Allen Haines, of Portland; Geo. W. Stanley, of Augusta; and Geo. W. Chamberlain, of Carmel.

We are informed that the most efficient measures have been adopted to put the work in progress.

The board was organized by the appointment of John A. Poor to the office of president; Wooobury Storer, treasurer; and John M. Adams, clerk.

Connecticut.

Another Loan Negotiated.—The $500,000 six per cent bonds of the city of Hartford, Conn., loaned by that city on the authority of the legislature to the Hartford, Providence and Fishkill railroad Co. have been taken at 105. These bonhs are redeemable in 1877, with interest payable semi-annually in New York.

Illinois.

Illinois Central Railroad and Branches.—The pre-emption bill introduced by Mr. Ficklin, in the early part of the present session, having passed both houses of congress was on Monday approved by the president, and has now become a law. In consequence of this law sales have been suspended along the lines of the road on all lands to which

pre-emption attaches, and this information has been conveyed to the land officers by means of the telegraph.—*Nat. Intelligencer.*

American Railroad Journal.

Saturday, August 28, 1852.

Railroad Investments.

In a series of articles recently published in our paper, we endeavored to show, and, as we believe, have done, so that we are not building railroads in advance of the wants of the country. We think we also gave a satisfactory explanation of the reason why most of our roads seek to borrow a portion of the amount necessary for their construction. The fact that we are not building in advance of the wants of our people implies that our projects are legitimate and proper, and consequently must pay. But as this point was only incidentally touched upon in the articles referred to, we propose to elucidate it still further.

We have in progress in this country from 12,000 to 15,000 miles of railroad. During the next three years we shall add at least 10,000 to the extent of line already in operation, say 12,800 miles.

The actual cost of the roads in progress will not exceed $20,000 per mile. The yearly call for railroads for *new* works, will equal about $60,000,000 per annum.

As a general rule, our railroad companies find no difficulty in furnishing whatever is required for construction, with the exception of those articles which have to be purchased abroad, such as the iron and equipment. The means applicable to the grading, preparation of the wooden superstructure, etc., etc., of a southern or western road, cannot be converted directly into *iron*. Nothing but money will do here. Those building railroads have *property* in abundance, and many of them have *money*, but opportunities for the profitable use of this money are so frequent, that those possessing it, prefer to borrow for a project in which they may be interested, to putting their available cash capital into it. If possible, it is for the advantage of the country that our domestic capital *should* be reserved, as means for the further development of our resources.

A liberal estimate for those objects for which our companies seek to borrow, is about $10,000 per mile. The average of loans for new works fall short of this sum.

To pay the interest on this amount, will require a net income of $700 per mile. A net income of $1,500 per mile will pay the interest on the loan, and produce a sufficient sinking fund, properly invested, to pay the principal in ten years.

That our roads will certainly earn the largest sum named, is demonstrated by the fact that the aggregate railroad investment in this country, which now amounts to over $400,000,000, is a profitable one, yielding in dividends a fair return upon the *entire* cost of our roads.

The railroads of New England and New York have cost on an average $50,000 per mile. Their average net earnings will equal seven per cent. The above are the most expensive, and taken together, the least profitable roads in the United States. Their cost is much above the average. A great many of the roads are rival lines, and they embrace among their number the most unproductive projects in the United States.

The roads that we have already constructed pay well. Those in progress must pay far better, for the reason that the business prospects of most of them are equally flattering while their cost is only about one half as much as those in operation.

The money now sought to be borrowed is, as a general rule, for southern and western roads. In those portions of the country there are but a few that have been in operation for any length of time. below we give a table of the gross and net earnings of some of the oldest western roads for the past year:

	Gross earnings.	Net earnings.	Net earnings per m.
Madison and Indianap..	$388,078	$185,080	$2,378
Michigan Central.....	1,069,947	599,017	2,154
Little Miami.....	487,815	297,457	3,554
Columbus and Xenia...	211,631	150,055	2,778
*Cleveland and Colum.	341,680	230,467	1,810

* For six months only.

The average gross earnings per mile of the above roads were $599,017, net earnings, $2,300. With the exception of the Michigan Central, which has a rival line to contend with, their average earnings have increased during the present year more than 25 per cent.

At present the average earnings of the above roads will probably slightly exceed those of new roads just coming into operation; but they do not exceed what the average of such roads will be when they shall have been in operation an equal length of time.

By no possibility, therefore, can we foresee any contingency which can prevent our new works from earning four or five times the amount necessary to pay the interest on their indebtedness. If the ability can be shown, the *will* to discharge their liabilities will not, we think, be doubted.

We may therefore state, as a general rule, the entire railroad investment of the United States to be, in the aggregate, a profitable one, yielding a net income on its cost equal to our legal rates of interest, and that the income of our new works will exceed this rate, as they have the advantage of all the experience acquired in railroad construction, and will cost much less, while they have promise of as equally lucrative traffic, as the average of roads in operation.

The lien ordinarily created by a mortgage bond, covers the entire property of the road, and the mortgage gives the bond holders a right to assume the control and management of the road, in case of failure on the part of the company to meet their liabilities. We can, therefore, conceive of no better or safer investment than that in railroad bonds, issued upon a good line.

It will be borne in mind that the railroad vastly increases the ability of those interested in it to meet their obligations. The fact, too, that the money borrowed is for a legitimate *business* transaction, and that it becomes instrumental in increasing the value of the entire property of the community to an extent exceeding many times the amount borrowed, adds vastly to the safety of the security. Business men fully appreciate the importance of the fact, that the success of the *borrower* adds vastly to the safety of the loan.

In every branch of business some losses must be incurred; even in the most successful. It would be almost impossible for all our railroad projects to escape this universal rule. But that the railroad system of the country is sound, and will bear the closest scrutiny, there cannot be a doubt. It is in the fullest confidence of the truth of this assertion, that we invite attention to, and have endeavored to present the whole system in all its working before the public. Had we believed otherwise, policy would have dictated an entirely different course; one of concealment instead of display. But, like everything that is really strong, the more it is investigated the greater the confidence secured to it.

Railroad to Hudson's Bay.

The Liverpool Chronicle states that an English company have contracted to construct 100 miles of railroad from Quebec towards Hudson's bay, at £10,000 per mile, and that the line is intended to be pushed rapidly forward until it reaches that great Northern sea. The whole distance is 600 miles. For ourselves, says the New York Journal of Commerce, we do not see what there is to support a railroad in that direction, but if the Canadian government or the British government see fit to build it, we certainly can have no objection. On the contrary, we should suggest the expediency of a line of steamers from the northern terminus of the road to the North Pole. It would be delightful in hot weather to run up to North Pole city, and take a glass of ice water fresh from the hands of old Boreas.

Ohio and Mississippi Railroad.

The Aurora, Ia., Standard, says this magnificent work is now progressing finely. It has been located permanently as far as Miller's Mill, on South Hogan. It follows the canal from Cincinnati to North Bend—crosses the Miami about a quarter of a mile above its mouth, passes through William street in Lawrenceburgh, near Henry Walker's residence and through the public square, in Aurora; then up the valleys of South Hogan and Whittaker's Fork to Table Land. The work of grading was commeneed at Miller's Mill last Monday, and yesterday quarries were opened near this city. From the way the engineers on this end of the route push the work ahead, we have every reason to believe it will be completed as soon as the magnificence of the work will admit.

Florida.

Brunswick and Florida Railroad.—Mr, Ephraim Alexander has contracted, on behalf of himself and Dr. Collins, of Macon, with the Brunswick and Florida railroad company, to construct the road from Brunswick to Thomasville, in the direction of Pensacola; also a branch road from Thomasville to Albany, Ga., and another from Thomasville in the direction of Tallahassee, to the Florida line. The roads are to be finished in about three years, at a cost of somewhat over three millions of dollars.

Seats for Railroad Cars.

The Utica *Observer* notices an improvement for railroad cars, the invention of Mr. A. B. Buel, of Hampden, Oneida county, New York, which promises to add much to the comfort of travelers, especially in the night. By means of a double back, one of which can be elevated to suit the inclination of the occupant the seat can be converted into a comfortable lounging place.

New Orleans and Nashville Railroad.

The Aberdeen, Miss., Democrat says that $270,000 worth of stock in the New Orleans and Nashville railroad has been taken in Monroe county, Miss.

Canada.

St. Andrews and Quebec Railroad.—A locomotive is already in motion on a part of this road, and ten miles are promised to be opened in two months and the line is already cleared for 20 miles.

Air Line Railroad.

The New Haven Journal says the road from that city to Middletown, being a portion of the proposed air line road, will be put under contract as soon as the New Haven subscriptions have been renewed. This is deemed necessary, in order to avoid all dispute upon the validity of the subscriptions.

Michigan.

Michigan Southern Railroad.—Messrs. John B. Jarvis, George Bliss, Charles Butler, Elisha B. Litchfield, E. C. Litchfield, Hugh White, John Straker, William L. Marcy, and John S. Barry, were elected directors of the company, at the last meeting of the stockholders. John B. Jarvis was elected President.

Stock and Money Market.

The stock market during the present week contrasts with the previous rise, which was altogether a speculative and illusory one, taking place at a time, when many large operators were out of town and utterly baseless in itself. The depression and reaction in the stocks thus elevated, produced a counter current against the steady rise of the stable stocks, which are appreciating under the operation of a sufficient financial cause. The banks calling in their loans for the purpose of raising the rate of interest, the shipments of specie to Europe and the payment of large sums for duties during the week have contributed to a temporary scarcity of money.

Thursday, 19th August.—The market fluctuated considerably. Large sales were made, but many of the fancy stocks seemed as if parting company with the more solid investments. 1750 shares of Harlem were sold, closing at 73¼, declining ¼. L. Island 22¼. Erie 88¼. Reading 92½. Hudson R. 69¼. Norwich 56½. The Western railroad and other premium stocks on the contrary rose. Madison and Indiana 110. North Indiana 121. N. Y. and New Haven sold at 114¼. Utica and Schenectady 139. Rochester and Syracuse 122. Roch. and Niagara 109½.

Friday, 20th August—Something like a panic prevailed among the operators in fancy stocks and the most of them fell off heavily. Erie stood 88. Reading 92¼. Norwich and Wooster 56¼. Hudson R. 69¼. Long Island and Harlem advanced slightly. L. I. 22¼, and Harlem closing at 73¼. Bonds were firm. Erie convertibles of '71 and '62 selling at 99. Government stocks were firm and the upward movement of the paying stocks went steadily on. Madison and Ind. 110¼. Utica and Schenectady 140. Syr. and Utica 139. Roch. and Syracuse 122.

Saturday, 21st August.—Rather more activity existed to-day after the depression of yesterday, but the tendency was decidedly downward in prices. Large sales were made in Erie which closed at 87¼ Reading went up ¼. Hudson River fluctuated considerably, and closed at 69¼, Harlem 73¼, Stonington 59¼. Some slight changes took place in Gov. and State stocks, but in these, as in the solid railroad stocks and railroad bonds, there seems to be a steady tendency upward. N. Y. and N. H. 115, N. Ind. 120¼, Roch. and Syra. 122. The steamer Pacific took out $616,928. The Sub-Treasury showed this evening a balance of over six millions in its vaults.

Monday, 23d August.—The dullness in the fancies prevails with some trifling exceptions, Erie closed at 87¼, Harlem 73. Reading went up, closing at 93¼, Nor. and Wor. 56, Stonington 60, an advance. The coal stocks all went up as well as Reading. The investment stocks were steady, Roch. and Syr. 122, N. Ind. 121, Mich. South. 121, Mad. and Ind. 109¼. Large transactions took place in Erie bonds, those of '62 brought 99¼, '71, 98¾. Large drains of money for shipment and the payment of duties, have drawn largely on some of the banks, but their wants were soon supplied.

Tuesday, 24th August.—The fall in stocks continueb to be very marked all the fancies have in the decline. The closing prices of the leading stocks were Erie 86¼. Harlem, a heavy amount was sold closing at 71¼. Hudson River 69½. Norwich and Worcester 54¾. Reading rose slightly 94. Stonington 59. Government, State and investment stocks generally seem in good demand. New York and New Haven 114¾. Michigan Central 112. Northern Indiana 121. Rochester and Niagara Falls 109. There seemed to be some check to day to the hitherto abundant supply of money.

Wednesday, 25th August.—The decline of the week, as a general rule, continues. One cause may be the calling in of loans by the banks, and the increase of the rate on call loans to 6 per cent.—Heavy operations, at a great falling off in Nicaragua Transit Co. have also affected the market. Erie closed at 86¾. Harlem 72. Hudson River 69¼. Reading 94¼, a rise. Norwich and Worcester 54½. Long Island 22 Investment stocks were steady but inactive. Northern Ind. sold at 120¾. Michigan Central 112. N. Y. and New Haven 114¼. Rochester and Syracuse 122. The steamer took out $632,547 in specie, making in all, $1,249,495 shipped during the week ending to-day.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, AUGUST 28, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101½
U. S. 6's, 1856	108¾
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118¾
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	119½
Indiana 5's	94
Indiana 2½	52½
" Canal loan 6's	95½
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	82½
Illinois 6's—interest	52½
Kentucky 6's, 1871	109½
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	108
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	119
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	111
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	107
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	105
Ohio 6's, 1860	109
Ohio 6's, 1870	115
Ohio 6's, 1875	116½
Ohio 5's, 1865	105½
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1890	107
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	105
Cincinnati 6's	103
St. Louis	96¾
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	110
New York 5's, 1858-'60	101
New York 5's, 1870-'75	106¾
New York 5's, 1890	106¾
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	104¾
Baltimore 1870-'90	108¾
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113¾
Erie 2d mortgage, 7's, 1859	108¾
Erie income 7's, 1855	98¼
Erie convertible bonds, 7's, 1871	98¾
Hudson River 1st mort., 7's, 1869	107¾
Hudson River 2d mort., 7's, 1860	97¾
New York and New Haven 7's, 1861	106¾
Reading 6's, 1870	89
Reading mortgage, 6's, 1860	95
Michigan Central, convertible, 8's, 1860	111
Michigan Southern, 7's, 1860	101
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102¾
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Aug. 19.	Aug. 26.
Albany and Schenectady	107	107
Boston and Maine	106¾	108
Boston and Lowell	—	109¾
Boston and Worcester	104	106
Boston and Providence	89	90
Baltimore and Ohio	82¾	83¾
Baltimore and Susquehanna	29¾	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	126¾	130
Eastern	96	98
Erie	88¾	86¾
Fall River	—	—
Fitchburgh	103	105
Georgia	—	—
Georgia Central	—	—
Harlem	75¾	72
" preferred	111¾	111
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	69¾	69
Little Miami	—	—
Long Island	22¼	22
Mad River	—	99
Madison and Indianapolis	112¾	110
Michigan Central	114¾	111¾
Michigan Southern	119¾	120¾
New York and New Haven	113	114¾
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	56	54¾
Ogdensburgh	26	26¾
Pennsylvania	46¾	46¾
Philadelphia, Wilm'gton & Balt.	32¾	32
Petersburg	—	—
Richmond and Fredericksburg	100	100
Richmond and Petersburg	35	35
Reading	92¾	94¾
Rochester and Syracuse	—	122
Stonington	62	59¾
South Carolina	—	—
Syracuse and Utica	132	135
Taunton Branch	115	115
Utica and Schenectady	136¾	140
Vermont Central	14¾	14¾
Vermont and Massachusetts	20	23
Virginia Central	—	—
Western	104¾	104¾
Wilmington and Raleigh	57¾	57¾

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Railroad Rivalry.

It is an old saying that "competition is the life of business," but however old or homely the phrase, to a certain extent, yet, there is a point beyond which many kinds of business cannot compete profitably. At least it seems so to us. It more persons and more capital are embarked in any particular branch of business at a given point, than the wants of the community require, then it seems to our mind that just so far as such is the case, to just so great a degree as this is allowed to be prosecuted, to just that extent, and no further, will the business be overdone and the profits on what is done become so reduced by competition as to be inadequate to the compensation of those employed in its transaction. As a general proposition the truth of this will be universally admitted. It strikes us, however, that like all general rules, this too has its exception. And if it has an exception, that one is in favor of railroads in this country. In the business of constructing and managing railroads in North America, there is, in our estimation, nothing which is likely to result in so much good to the country, as a lively competition. Of course we refer, in speaking of railroads in this connection, to legitimate projects, roads built in appreciation of the wants of the community. We do not wish to be understood to include projects started by a few interested individuals out of purely speculative motives. With such roads or proposed roads as do not command the sympathies of the inhabitants along their respective routes, or of the business men and capitalists of cities and large towns to be benefitted directly by their construction, sufficiently to insure their subscriptions or endorsement to that end, we disclaim all fellowship and sympathy, and class them among speculative schemes which may result well or ill as fortune favors or frowns upon, their management.

The point we wish to establish is simply this:—

That a railroad constructed on a line where the people in its vicinity will subscribe stock and loan their credit in amounts, necessary to insure its completion, will result advantageously to all parties interested in it; provided it is constructed on an economical plan, and *prudently managed.*

Whenever a railroad can be constructed on this principle there will be no danger from rivalry.—There will be no danger that the new road will lack employment at remunerating rates, nor will there be any danger that it will cause such a diversion of business from any other route as to be detrimental to the ultimate interests of either, or cause any permanent falling off from their revenues.—The reasons for these conclusions are obvious; almost self-apparent. A line of road is built through a densely settled country, far from a good market. What are its effects? Why the farms that were so large and poorly cultivated formerly, are now divided up between the old settlers and the new who have been induced to come in because by means of the railway they can have an eligible market.—The lands are tenfold nearer market than they were previously, and nearly tenfold higher in value.—Three hundred miles is a ten day trip for a team in fair weather, and it is only one day for an iron horse be the weather fair or foul. The lands are now highly cultivated and their produce commands cash at a good price in the (now) neighboring city. "But, does not this increase of producers cause great embarrassment to the old farmers who live near the city and used to supply it with all the farm produce, green vegetables, etc?" asks a good hearted, humane individual. "His land cost him a high price, he must be heavily taxed, and pay great wages for his labor, while it would seem that the great influx of produce caused by the opening of so many new railways, must reduce the prices of it in market and destroy the profits of his farm."—Well, and so it would were there not immutable, unchangeable laws, which govern the system of trade. If the community through which the railroad passes were the *only* party benefitted, most undoubtedly the city farmers and dealers would suffer. But such is not the case. Every railroad opened exposes a new avenue of trade to the city, and if the city buys more produce the country buys more goods; merchandize and manufactures. The more railways are built where there is a use for them, the more facilities are offered for emigration.—Emigrants in turn must have supplies from the city which they eventually pay for in produce, and all this gives such an increase to the business of the city that its population augments with greater rapidity. It extends its bounds and shortly absorbs within its limits many of those farms, whose owners our good hearted friend of the last century was just fearing would be ruined by the large supply and low price of produce; while the owners secure independent fortunes by such absorption.

But, now, how is it about overstocked markets and low prices? Do the cities complain of surfeit? Or are prices ruinously low? Twelve years ago this city had a population of 317,000 souls, scarcely any railroads, and depended upon the North river barges and steamers with some assistance from Jersey, for her farm produce, milk, and fruit. Westchester and Long Island furnished a little milk, and green produce. The milk was sloppy and impure, the farm produce was wilted and stale, and poultry, eggs and butter were scarce. Well, twelve years are passed, and what are the results?

We have a population in this city and suburbs composed of persons who do business in the city of at least 750,000 souls,—over one hundred per cent increase; we have railways stretching north, east, south and west, in continuous lines, with their heavy trains of cattle, horses, produce, fowls, eggs, butter, cheese, cabbage, corn, and potatoes as well as all other kinds of produce for table use, and still the cry is "give," "give," and "how scarce and high all things are." Our beef cattle, and prairie chickens are fattened on the prairies of Illinois; our pork both fresh and cured is from all the western states; our best flour and wheat from Canada and Michigan; our corn from the Wabash and Illinois valleys, and our butter, eggs, poultry, peas, beans and green corn, tomatoes, and numerous other delicacies are from Ohio, Pennsylvania, and N. York, while New Jersey, North Carolina and Georgia on the south furnish us fruits and many other luxuries early in season, and yet all these things are as scarce as ever, and prices are quite as high.

Where are Westchester, Harlem, Long Island, Bergen, Newark, Elizabethtown, Rahway, and many others of the old gardens and dairy places of New York? Their gardens and cow pastures are now covered with the suburban residences of New York merchants, mechanics and workingmen, with now and then, one even more costly than the rest, occupied by the rich old farmer or milk-dairy man, who has sold his land for village lots and is now living in affluence. And yet, we can recollect very well, when the Erie railroad first brought in a train of milk cars, and the Harlem followed with another, these same old worthies were deadly opposed to railroads as inimical to their interests, despoilers of their trade and consumers of their profits.

From these facts we may see the effects of railroads on all fertile countries as well as all large cities whither they tend or where they terminate. As a general rule it will be found that a railroad constructed through a fertile section of country will induce a sufficient increase of business to employ one track constantly, and eventually a double track will be needed, and hence, roads should be located with reference to local business, for this is their dependence. They should be located with an eye to the accommodation of the public in so far as the public and local interests can *both* be accommodated. We say this because so much stress is apt to be laid upon the probability that "our route" being the "shortest route," or the "most feasible" route from "everywhere" to "everywhere else and consequently every body must go over it." Why take so much pains to make this fact appear to the public when it is not the most important fact to you?

It is well known that passengers and mails will go by the route where there is most business. If then, your route is destined to be a through route, strive to serve local interests. This will build up business interests and connections with people abroad, who will take your route in their line when they travel. You may think your route the shortest to-day, and to-morrow some new route will spring up, perhaps never dreamed of before, which will drive you to a dependence on local business. Such things have happened ere this, and doubtless will happen again. And, it is for this reason, that a road should never, as a general rule, be constructed simply as a through route, and regardless of local business. It is liable to lose a portion of its through business at any moment, but local business partly built up by it, and which it was constructed to foster, never can desert it. Each will indemnify the other, and the work will prove mutually advantageous to those interested in it. Two roads may run parallel with each other through a fertile country, so they be twenty-five miles apart, and both will have all they can do. What folly then to look upon each other as rivals! What folly to run prices down so low as to make both unprofitable by allowing the loss on through business to eat up the profits on local! There are many other features of this kind of rivalry which we may examine at some other time, but this article is already much more lengthy than we had intended.

*

Canada.

The Trunk Railway.—A proclamation has been published authoiising private companies now existing or hereafter to be created by the legislature to construct a main trunk line of railway from opposite Quebec, to the village of Richmond on the St. Francis river, thence by the St. Lawrence and Atlantic railroad to Montreal, thence to the city of Kingston on some point in its vicinity on Lake Ontario or the St. Lawrence; thence to the city of Hamilton, or some convenient point on the Great Western road, and terminating at the Detroit river.

Maine.

Penobscot and Kennebec Railroad.—At the annual meeting held at Bangor, July 27th, the following gentlemen were chosen directors: John M. Wood, Nathan Camigs, Ira Crocker, J. C. Churchill, Wm. Kimball, of Portland, Samuel Pickard, of Lewiston, and Geo. W. Stanley, of Augusta.

Indiana.

Peru and Indianapolis Railroad.—A letter from Capt. E. G. Barney, the Chief Engineer of the above road, addressed to E. W. H. Ellis, Esq., the President, briefly enumerates its features. The road connects the capital of Indiana with the Wabash and Erie canal, at Peru, passing through the county towns of Hamilton, Tipton and Howard counties. The character of the road for grades and curves is extremely favorable, the tangent line is 59 miles, 4584 feet long, and the curved line, 11 miles, and 4140. The average ascent per mile on grades running north is 17 feet, running south 19 8-10. The superstructure is laid on a well ballasted road, the rail of the T pattern weighing 60 lbs on white oak cross ties 20 inches apart. The total cost including depots, locomotives, passenger and freight cars, will not exceed $1,150,000. The assets are stated as follows:

Total subscription to capital stock.....	$501,000
Probable increase to capital stock.....	99,000
Seven per cent bonds.....	600,000
Value of depot grounds and right of way.	43,275
Value of "*flat bars*" *to be taken up*.....	20,000
Total.....	$1,263,275

Toledo is the common point to which freights from Indianapolis tend during the Lake navigation. Capt. B. presents the following table of freights on a ton to Toledo by a number of the railroads of the State.

Route	Total cost per ton to Toledo.
Indianapolis via Terre Haute.....	$5,11
" " Lafayette.....	4,01
" " Gosport.....	5,90
" " Bellefontaine.....	4,43
" " Richmond.....	4,52
" " Lawrenceburgh	4,97
" " Madison	5,64
" " Peru.....	3,46

The Peru and Indianapolis railroad will draw produce from 15 of the richest counties in the State—the population of these counties by the late census, was.....184,016
Total product in tons.....453,623
Land in cultivation acres.....851,712

The P. and I. R. R. connects, besides the Wabash and Erie canal before mentioned, with the line proposed from Toledo through Indiana and Illinois, and the extension by way of Goshen to the Southern Michigan and Northern Indiana railroad. The gross annual receipts are estimated at $330,000 and the net at $198,000. The 1st of January, 1854, is the period when the road is expected to be completed.

Georgia.

The South-western Railroad.—This road was regularly opened for business on the first August, 1851.

Receipts for the year ending July 31, 1852, as follows:

For freight.....	$80,878 44	
" passengers.....	46,016 50	
" U. S. mail.....	2,500 00	
Total earnings.....		$129,395 38
The current expenses during that period have been.....		57,535 17
Leaving a balance of net earnings of.		$71,335 17
Out of this sum the directors have declared a dividend of eight dollars per share, amounting to.....		$44,536 00
Leaving a surplus of.....		$26,999 17

The total number of passengers transported during the year is 42,649; being an average of 116¼ per day—number of bales of cotton transported 45,476—total number of miles run by trains 46,475.—*Macon Telegraph.*

Blossburgh and Corning Railroad.

Below we give an extract from a letter of an intelligent gentleman, who has recently had an opportunity of inspecting the above work, which is the great northern outlet for the bituminous coal fields of Pennsylvania. This road is of vast consequence not only to the coal regions, and to western and central New York, but is to become an important link, in the great central line of road thro' the State of Penn.

To the Editor of the American Railroad Journal.

H. V. Poor, Esq:

Dear Sir: I have just passed over the route of the railroad from Corning to this place.

That part in the State of New York is now called the Corning and Blossburgh railroad—the part in Pennsylvania is called the Tioga railroad—the latter, 26 miles, the former, 14 miles long.

These roads you are aware were originally constructed with the strap or flat bar rail, and proved to be entirely insufficient to accommodate the business of this region.

The road is now being relaid with first quality iron, Erie railroad pattern, and upon the 6 feet gauge. The short curves have been straightened and the grade made, at all parts of the road, gradually and uniformly to descend from the coal mines to Corning. The work along the whole length is being actively pushed forward and about two-thirds of the road is relaid. New engines and cars will be ready to be placed on the road as soon as it shall be completed.

The part of the road finished is the best I have yet seen. Ties very large and good and close together, ballasted with gravel and well laid. It is indeed a very superior road and will give a suitable opening to the bituminous coal. Of this mineral there is here an inexhaustible supply, as I am convinced by a personal inspection of many of the veins, and of a superior quality.

The quantity to be sent over this road and distributed by the New York and Erie railroad, and its branches, and the New York canals, will be immense.

Surveys have been made to connect this road with the Williamsport and Elmira railroad at or near Ralston, which prove its practicability. Little has been said by the friends of the Tioga railroad of this route, as the proper one to connect the Pennsylvania and New York system of public works; but from the favorable results of their surveys, and from the fact that most of the business to pass over any such connexion, must come from points *west* of Elmira, it is now reduced to a certainty that this union will be made and road finished as soon as the Susquehanna road is completed to Williamsport.

You may imagine how immensely valuable these roads will become and within a reasonable period.

Pennsylvania.

Alleghany Valley Railroad.—The location of this road between Pittsburg and Kittanning, is going on rapidly. For some miles below Kittaning, as far as the engineers had gone, they found the line very favorable, level, and nearly straight. The negotiations for the right of way have already been commenced, and all on the line were disposed to treat the company liberal.

Louisiana.

The citizens of Claiborne have contributed $1000 towards a preliminary survey of the proposed railroad in North Louisiana, the Vicksburg, Shreveport and Texas railroad, is the title of the project.

Railroad Looking Glass.

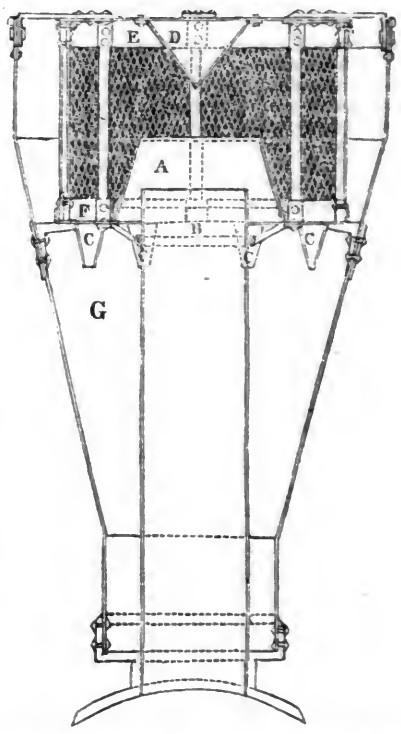
The European roads have adopted the plan of placing a looking glass before the engineer of a locomotive in such a way as to enable him to see the entire train without turning. The locomotives on the line from Brussels to Antwerp, have recently been fitted up in this way.

New York and New Haven Railroad.

Mr. W. P. Burrall has resigned the Presidency of the Housatonic railroad, and D. J. Sperry, Esq., of Stockbridge, has been elected in his place. Mr. Burrall is fully occupied by his duties as vice president of the New York and New Haven road.

Mr. Marshall, president of the Southern railroad company is on a mission to the north to make arrangements for its extension towards the east.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:
1st. The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive en-

gines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.

To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others.

Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,

ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,

HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them.

J. VAN RENSSELAER,
Superintendent S. & W. R. R.

Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road.

E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice.

EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.

Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.
CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs. Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle, Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co., Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.
CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer and Patentee, sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.
August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.
2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.
3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.
4. It must be finished in three holes, or nearly as hard as spring-wire.
5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.
6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.
7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.
8. The wire must be drawn on blocks of no less than 2 feet diameter.
9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.
10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.
11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.
12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.
13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.
14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.
15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.
16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.
17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"
18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallassechatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work. LEWIS TROOST,
Chief Engineer.
New York, August 3d, 1852. 5t32

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

To Contractors.



PROPOSALS will be received at the office of the Alabama and Mississippi Rivers Railroad Company, in Uniontown, Ala., until the first of October next, for the Graduation, Masonry, Bridging and Cross-ties of said road, from the west bank of Valley Creek to Uniontown, 28 sections about one m le each. Bids proposing the entire payment, or a percentage thereof, in the stock of the road, will receive the most favorable consideration. Specifications can be seen at the office of the company in Uniontown, and also at the office of the Chief Engineer in Selma, Ala. J. J. DRAKE, Secr'y.
Uniontown, Ala., August 16, 1852. 4t*

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc. WILLIAM A. BURKE,
Superintendent.
Lowell Mass., August 23, 1852.

TRUSTEE'S SALE

Of the Property, Personal and Real, of the

Maryland Mining Company,

IN ALLEGHANY COUNTY, MARYLAND.

—o—

BY virtue of a decree passed by the Circuit Court for Alleghany county, as a Court of Equity, the undersigned, Trustees, will sell at public sale, at the Eckhart Mines of the Maryland Mining Company, ON THE FIRST DAY OF SEPTEMBER, 1852, At Twelve o'clock, Noon,

All that Valuable Mineral Estate belonging to the Maryland Mining Co., and which said company has been improving for the last seven years, by the expenditure of a vast amount of capital.

The Real Estate consists of two Tracts of Land called "THE MARYLAND MINING CO.," and "FOUNTAIN INN," located in one body, containing about

1900 Acres of Land,

a large part of which is underlaid by the

GREAT VEIN OF COAL,

14 feet in thickness, likewise by many other veins, varying in thickness from 2 to 4 feet, the whole located in the very heart of the Great Semi-bituminous Coal Fields of Maryland.

ALSO—Two other Lots or Parcels of Land, containing 50 acres each, known as LOTS NOS. 3970 and 3972; these Lots are heavily timbered, and are said to be underlaid by the GREAT VEIN, or 14 feet vein of coal.

Also—Lots Nos. 3101, 3402 and 3403, containing 50 acres each, and adjoining the tract called "*Maryland Mining Company*," and underlaid with the great vein of coal.

Also—One Lot called "HOOK 'IM IN," containg about 80 acres, situated on Braddock's Run, two miles below the village of Eckhart. This land is heavily timbered, with timber suitable for RAILROAD CROSS TIES and other purposes. Braddock's Run affords many excellent sites for Saw or other Mills on this property.

Also—Two Lots of Land on the Canal Basin and Potomac River, containing 19¼ acres of land, being part of the bottom land of the ROSE HILL ESTATE, purchased by the Maryland Mining Company for a COAL DEPOT, and most eligibly situated for the purpose, and particularly described in a deed from Mary Lynn and others to the Maryland Mining Co., dated 19th of January and 2d February 1844, and recorded in Liber H. B. No. 1, folio 140. Each tract being on the slack-water navigation of the Potomac River. The Baltimore and Ohio Railroad passes through the whole length of both tracts.

Also—A Tract or Parcel of Land situated at the junction of Braddock's Run and Wills' Creek, containing about five acres, conveyed to the Maryland Mining Company by Joseph Dilley and Elizabeth his wife, by deed bearing date the 18th of February, 1841, and recorded in Liber A. B. No, C. C. folioes 29, 30, 31 and 32.

The two first Tracts of Land are divided into desirable FARMS, well watered and eligibly situated, and are in a high state of cultivation. The soil is good, and there is an immediate and certain market on the property in supplying the laboring population at the works with the products of the farm.

THE VILLAGE OF ECKHART MINES contains about 100 BUILDINGS of Wood, Brick and Stone, among them 1 Store house, 70 Dwellings, Machine Shop, Locomotive and Stationary Engine Houses, Carpenter Shops, Blacksmith do., Stables, Barns, etc., etc., all new and in the best repair. The village is situated near the centre of the property on the National Road, one and a half miles east of Frostburg; it is immediately convenient to the entrance of the Mines and affords accommodations to a population of 7 or 800 souls.

The Coal Mines are opened to be worked both by horizontal and slope workings, to an extent sufficient to meet the necessities of the largest coal trade. Besides the Eckhart Mines already opened, the Hoffman and other openings upon the property are eligibly situated to furnish vast amounts of coal on a very moderate outlay for improvements being made.

Also—A RAILROAD 9¼ miles in length, from the Mines to a junction with the Mt. Savage Railroad by which a continuous line of transportation is provided to the Baltimore and Ohio Railroad Depot, in the town of Cumberland, and by a branch Railroad to the Chesapeake and Ohio canal The road is laid partly on cross ties with a rail weighing 62 lbs. per lineal yard, and partly with an edge rail weighing 38 lbs. per yard supported by string timbers and cross ties, the whole in good repair, and constant transportation passing over it, together with full and ample right of way for the same acquired by condemnation and purchase.

Also—A Branch Railroad from the Mt. Savage Railroad about one mile in length to the property of the Cumberland Basin company in the town of Cumberland, said road being new and in the best order, laid with a heavy rail of 62 lbs per yard and large oak cross ties. The two roads above mentioned of the aggregate length of 9¼ miles costing over $250,000

Also—A vast amount of personal property, for railroad and mine equipment, too numerous to mention in detail, but consisting in part of the following articles: 2 first class coal burning LOCOMOTIVE ENGINES, (Winans' make) weighing 23 tons each; 1 second class wood and coal burning do., (English make and American rebuild,) and weighing 15 tons; 1 second class, do., do, 12 tons; 30 iron coal cars; 11 Gondola coal cars; 5 coke cars; 14 platform lumber cars; 2 passenger cars; 170 mine cars for the mines; 1 superior turning lathe and other machinery, tools and implements for repairing engines and cars. Also, Horses, Carts, Oxen, Wagon and Farming Utensils, etc., etc., etc.

The revenues of the Railroad growing out of the transportation of coal and miscellaneous freight and from passengers, are more than enough to pay the interest on its cost and keep it in repair.

It is not possible in an advertisement of this kind to give a full description of the property in question, but the object of the undersigned will be effected if they shall be able by this means to call the attention of capitalists to this magnificent property, which contains within itself all the elements necessary to sustain a large mining and manufacturing business, villages erected for workmen, collieries open ready for working—Railroad and Canal communication with tide water, etc.

THE TERMS OF SALE as prescribed by the decree are, one fourth of the purchase money in cash on the day of sale, and the balance in three equal instalments of six twelve and eighteen months, with interest from the day of sale, the purchaser giving his notes or bonds with security to be approved by the Trustees, or the whole purchase money may be paid in cash at the option of the purchaser.

For further information apply to M. O. Davidson, Engineer and Superintendent, at the Mines, who will exhibit the property and explain its capabilities, or the undersigned Trustees,

GEORGE WM. BROWN,
Baltimore.
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Cumberland, Trustees.

Notice is hereby given, pursuant to said decree, to the creditors of the Maryland Mining Company to file their claims with the vouchers thereof in the office of the Clerk of the Circuit Court for Alleghany county, within two months from the day of sale.

GEORGE WM. BROWN,
WILLIAM PRICE,
GEORGE A. PEARRE,
THOMAS J. McKAIG,
Trustees.

July 3, 1852.

To Contractors.

SEALED PROPOSALS will be received at the office of the Lackawana and Western Railroad Company, No. 45 Wall street, New York, until the 3rd day of September next inclusive, for the construction of a Tunnel, on the line of the Lackawana and Western Railroad, size 18 feet square, and about 2200 feet in length.

The excavation will be rock, of very favorable character for drilling and blasting.

The North end is open, and tunnelled about 100 feet. The earth excavation at the South end is now being made.

Parties desirous of bidding, can visit the work daily, via New York and Erie, and Lackawana and Western railroads, distance from Great Bend about 30 miles, and from Scranton, 18 miles.

For further information, apply at No. 45 Wall street, or at the Company's Office in Scranton.

Bidders must bring satisfactory testimonials.

By order of the President and Directors,
GEO. W. SCRANTON, *General Agent.*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation*, *Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th, 1852.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

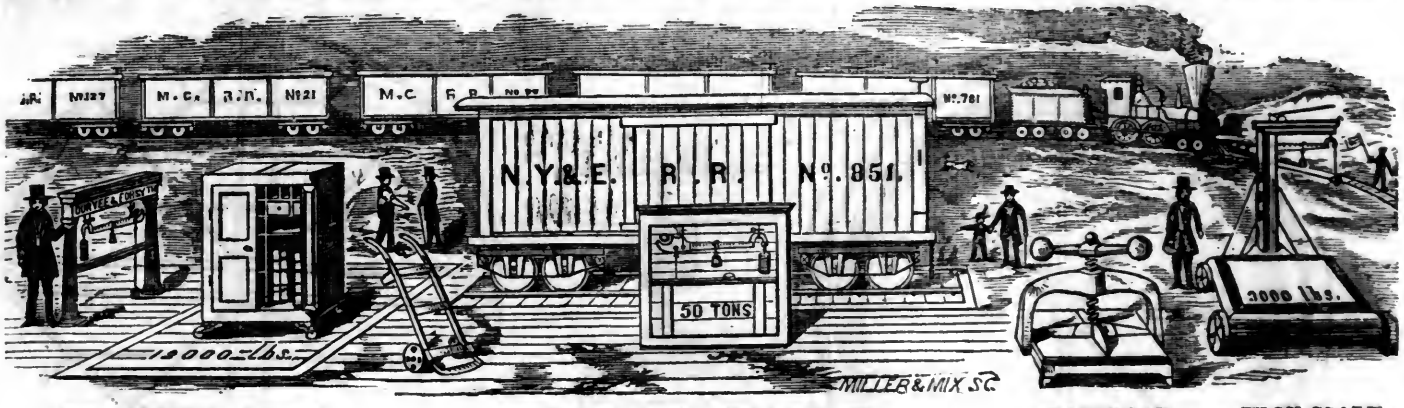
P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,
31st July. 1m

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co., " Chicago, Ill.
Crawford & Reynolds, " Cleveland, Ohio.
Joseph E. Elder, " St. Louis, Mo.
Byram, Millier & Shreve, " Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie, Cleveland and Columbus,
New York and Harlem, Michigan Central,
New York and N. Haven, Mad River and Lake Erie,
Sandusky, Mansfield and Newark, Paterson and Hudson R.,
Indianapolis and Bellefontaine, Cincinnati, Hamilton and Dayton,
Syracuse and Utica, Buffalo and Rochester,
Columbus and Xenia, Rochester and Syracuse,
Lexington and Frankfort, Louisville and Frankfort,
Hillsboro' and Cincinnati, Chicago and Galena,
Greenville and Miami, Dayton and Western,
Cayuga and Susquehanna, Central Ohio,
Rome and Watertown, Chemung,
Rutland and Washington, Illinois Coal Company,
Erie and State Line, Buffalo and State Line,
Rochester, Lockport and Niagara Fa'ls, Cleveland and Pittsburg,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement. Michigan Southern, American Express Co.,

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

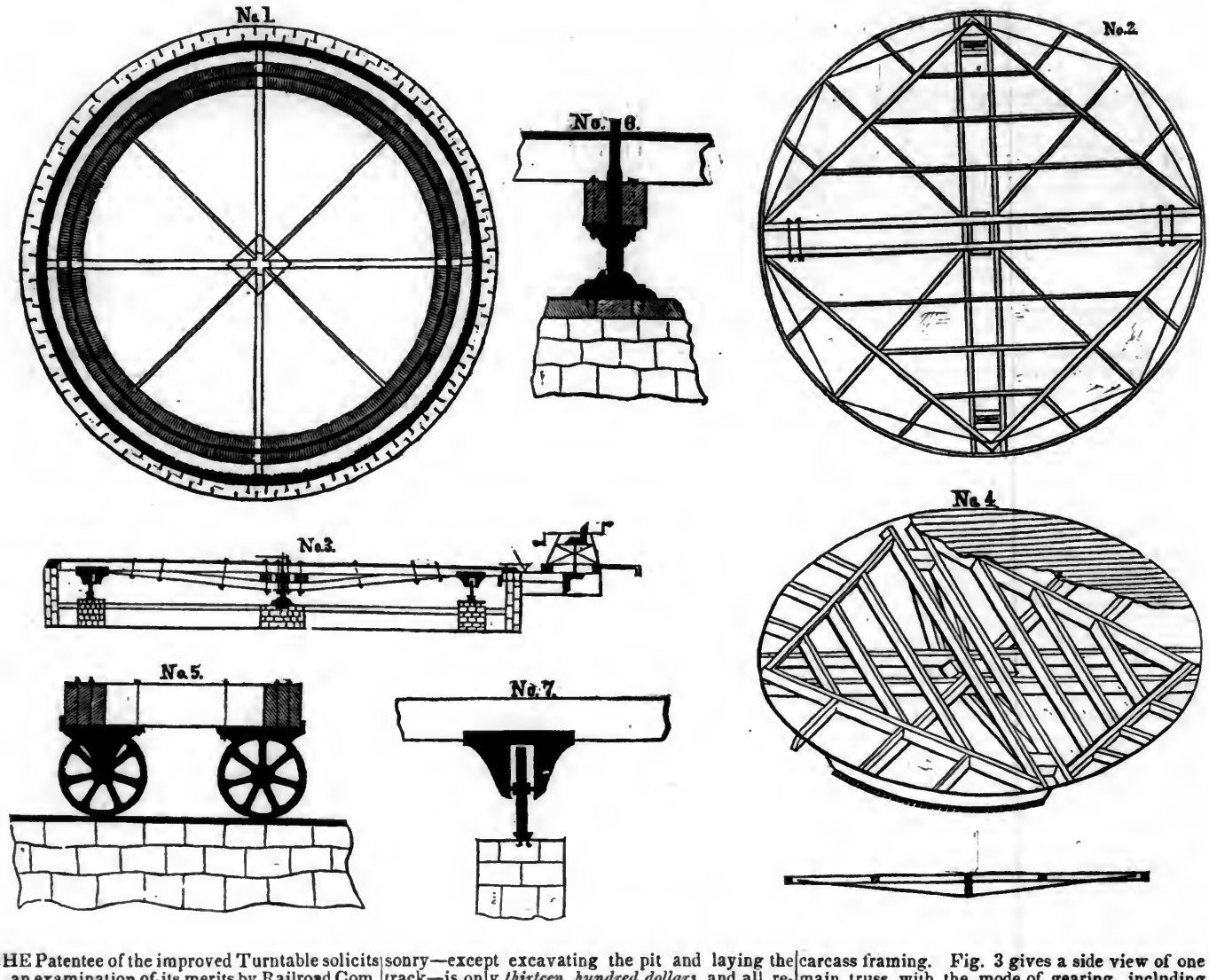
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company;

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,
6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 36] SATURDAY, SEPTEMBER 4, 1852. [WHOLE No. 855, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Extension of our Railway System.....561
New Constitution of Louisiana.....562
Railroad Law.....572, 562
American Credits.....563
Illinois and Wisconsin Railroad.....563
Mineral Point Railroad.....564
Opening of the Buffalo & N. Y. City Railroad..564
Steel Manufacture in India.....565
Railroads in Illinois.....565
Virginia Internal Improvement Convention...566
Texas " " " " ...566
Scioto and Hocking Valley Railroad.....566
Louisiana Railroads.....567
Portsmouth and Dover Railroad.....567
Railroads in New York.....567
Railroads in Ohio.....567
R. R. Securities and Real Estate Mortgages...568
Pacific Railroad.....568
Mobile and Ohio Railroad.....569
Stock and Money Market.....569
World's Fair in New York.....570
Jeffersonville Railroad.....570
Louisville and Frankfort Railroad.....571

American Railroad Journal.

Saturday, September 4, 1852.

Extension of our Railway System.

The railroads of the United States which, up to the present time, have been constructed apparently without reference to each other, are now rapidly assuming the symmetrical proportions of a regular system, embracing the whole country. This great system is to be made up of the subordinate ones of the several States. Thus far, each State has been occupied by a system particularly adapted to its wants, and based upon its leading commercial town. Many of these subordinate systems are already united, and the lines are now in progress and far advanced toward completion, which will stamp upon the whole a *national* character, and add vastly to the usefulness and value of all our roads.

The roads of all the Atlantic States north of N. Carolina, are already united by connecting lines. At Wilmington an hiatus occurs, which separates the northern roads from the extensive systems of South Carolina, Georgia and Alabama. This link will in a year or more be supplied, so that within that time, the traveller may go (by steam) from the eastern part of Maine to New Orleans, by the inland route; by *railroad* to Montgomery, Ala., and thence by *steamboat* to New Orleans. Roads are in progress which will constitute other lines, but the above is noticed as the one coming first into operation.

The roads of the two great natural divisions of the country, the Atlantic slope of the Alleghanies and their connecting ranges, and the Mississippi valley, are to be still earlier united. By the first of November next, the Lake Shore road from Buffalo to Cleveland, Ohio, will be opened, thus connecting the roads of that State with those of the east; and by the first of January, the roads of Indiana, Michigan and Illinois, will be joined to those of Ohio. A traveller will then be able to go by railroad, from all the leading Atlantic cities, to Chicago, Ill., Terre Haute and Lafayette, Ia., and Louisville and Lexington, Ky. In all of 1853, the Mississippi river will be reached at Rock Island, by the Rock Island and Chicago road, if not by other lines.

It will be readily seen that the fusing of all our railroads into one grand system must add vastly to their revenues, their value and influence, and to the volume of our internal and foreign commerce. But we cannot yet begin to appreciate the extent of this increase. As far as the more distant portions of the country are concerned, our roads have been thus far distinct and isolated lines, dependent upon local traffic for their revenues. From the numerous breaks in their continuity, they have been much less used for transportation of merchandise than for travel. Up to the present time, our rivers and canals have monopolised the carrying trade of the interior. The country watered by the Mississippi and its branches has used that river as its avenue to and from market; that bordering on the great lakes, the Erie canal and the St. Lawrence. The freight business of our roads has thus far been entirely *local*. The only completed line of road making important connections, and which has been some years in operation, that leading from Albany to Buffalo, was restricted by the State from the carriage of freight. These restrictions, though no longer existing, have not been removed a sufficient length of time to develop the real capacity of this line for *through* business. The same may be said of the Erie road, and the line from Boston to Ogdensburg, they having only recently been opened. As far as the internal commerce of the country, therefore, is concerned, our railroads have played no part, except to develop and accommodate the *local* traffic of the section traversed.

The *closing up* of our isolated, and hitherto unconnected roads, into one grand system, will not only constitute an era in the internal improvement history, but in the commerce of the country. It will liberate commerce from bondage to the old and inconvenient routes, and allow it to follow in whatever direction the demand may exist with equa ease. As far as *through* commerce is concerned, our railroads are in the same condition as would be a system of canals, completed, but into which water had not been turned. This commerce has grown up and reached its present magnitude without the aid of railroads. When we take into consideration the present extent of this commerce, and the vastly greater facilities that railroads will afford to it, than any yet existing, its future magnitude, as well as the increased earnings of our railroads, must be beyond all calculation. These statements are not extravagant anticipations, but sober statements of facts.

Our canals and rivers have, of necessity, monopolised the carrying trade of the country up to the present time. The use of them involved the entire suspension of all movement of merchandise between the interior and the seacoast, for at least four months in the winter season, during which they are closed by ice. The inconvenience and loss arising from this cause will be readily appreciated by all. Every branch of business is affected by it, and the almost entire suspension of traffic in an important branch of the business of the country operates as a very serious drawback upon its prosperity. We may form the best idea of the extent of this evil, by imagining the consequences that would result from the entire suspension of business on our railroads for an equal length of time.

The evil referred to is soon to be removed, by the extension of our railroads into the great interior basin of the country. By the first day of January, 1853, the city of Chicago will have uninterrupted railroad communication with New York. Produce accumulating at that point can then be forwarded to market, to suit the demand; instead of lying embargoed there for four months, subjecting the holders to all the losses arising from change of prices, deterioration of the staple, cost of warehousing, insurance, loss of interest, etc., etc. So with mer-

chandise imported for domestic consumption. Instead of six months' stock, which merchants are compelled to purchase, they will be able to make the *daily* additions needed, and dispense with a large amount of capital which is now necessary to carry on business.

To show the influence that railroads are exerting upon the interior trade of the country, we would state what is already a well known fact, that the city of New York now draws no inconsiderable portion of its daily supplies of beef, pork, etc., from northern Illinois, a district of country at least one thousand miles distant. The prices of stock and provisions at Chicago are daily regulated by the price they bear in this city. What is true of the Chicago markets, is equally so of all other districts which have easy access to New York. As soon as the various railroad connections referred to shall be completed, nearly every portion of the United States will be within convenient distance of New York as a market for its great staples.

If, with local traffic alone for support, our roads have been able to show such promising results, what have we not a right to expect, when the connection of the whole with one another, shall secure to the entire system the greatest efficiency and usefulness? Their earnings for the future must certainly vastly exceed those of the past, and must for a long time, till competition shall bring down the rates of fare, cause railroad investments to be the most profitable of any that are being made among us.

Wabash and Erie Canal.

We have received the semi-annual circular of the Trustees of the Wabash and Erie canal, "exhibiting the proceedings of the board, the revenues and condition of the canal, and the general progress of the work," from December 1st, 1851, to July 1st, 1852. At the first named date the cash on hand amounted to $170,540 42. The receipts during the six months were $197,361 98, making a total of $367,902 40. The disbursements during the same period amounted to $229,183 29, leaving July 1st, 1852 a balance on hand of $138,719 11.

We also find in this table statements of receipts from various sources during the six months ending on the 1st of July last, "as compared with the same period of time of the previous year." From these statements it appears that the amount received from "tolls and water rents," from November 1st, 1850, to July 1st, 1851, was $88,262 35, while from November 1st, 1851, to July 1st, 1852, it was $98,880 73; also, it appears that the amount received during the six months of the previous year, from the sale of lands was $118,708 69, and that the amount received from the same source, during the last six months, was $135,506 48.

"The canal has been in good navigable order since its opening, and has been exempt from breeches. Up to this date the use of it has been uninterrupted by any casualty The spring was late, and it was not until near the first of May that the thro' navigation was fairly resumed."

In the month of May, the Trustees had a conference with a delegation, composed of leading and intelligent business men from the several towns on the line of the canal, on the subject of tolls, and the result was, (with the advice and consent of the Ohio Board of Public Works,) a reduction from the rates previously established, equal to 33 per cent., to take effect on the first day of June last.

It will be seen that, notwithstanding this large reduction in rates, the business of the month of June, just closed, exhibits an increase of revenue over the same month of last year. The Trustees anticipated that the revenues of the present year might fall short of those of last year in consequence of the reduction, but they had no doubt that the revenues of future years would be increased. They desire to reduce the burthens of transportation as low as they can with safety, looking to the increase of business and revenue.—*Cin. Price Current.*

Louisiana.

Public Works under the new Constitution.—The following are the clauses in the new constitution of Louisiana, in reference to extending state aid to public works:—

Art. 108. The state shall not subscribe to the stock of, nor make a loan to, or pledge its faith for the benefit of any corporation or joint stock company, created or established for banking purposes, nor for other purposes than those described in the following article:

Art. 109. The legislature shall have power to grant aid to companies or associations of individuals formed for the exclusive purpose of making works of internal improvement, wholly or partially within the state to the extent only of one-fifth of the capital of such companies, by subscription of stock or loan of money or public bonds; but any aid thus granted shall be paid to the company only in the same proportion as the remainder of the capital shall be actually paid in by the stockholders of the company; and in case of loan such adequate security shall be required as to the legislature may seem proper. No corporation or individual association receiving the aid of the state as herein provided, shall possess banking or discounting privileges.

Art. 110. No liability shall be contracted by the state as above mentioned, unless the same be authorized by some law for some single object of work, to be distinctly specified therein, which shall be passed by a majority of the members elected to both houses of the general assembly; and the aggregate amount of debts and liabilities incurred under this and the preceding article, shall never at any one time exceed the sum of eight millions of dollars.

Art. 111. Whenever the legislature shall contract a debt exceeding in amount the sum of one hundred thousand dollars, unless in case of war; to repel invasion or suppress insurrection, they shall, in the law creating the debt, provide adequate ways and means for the payment of the current interest, and of the principal when the same shall become due.

And the said law shall be irrepealable until principal and interest are fully paid and discharged, or unless the repealing law contain some other adequate provision for the payment of the principal and interest of the debt.

The following are the provisions for establishing a board of public works:—

Art. 130. There shall be a board of public works, to consist of four commissioners. The state shall be divided by the legislature into four districts, containing as nearly as may be an equal number of voters, and one commissioner shall be elected in each district by the legal voters thereof, for the term of four years; but, of the first elected, two, to be designated by lot, shall remain in office for two years only.

Art. 131. The general assembly, at its first session after the adoption of this constitution, shall provide for the election and compensation of the commissioners and the organization of the board The commissioners first elected shall assemble on a day to be appointed by law, and decide by lot the order in which their terms of service shall expire.

Art. 132. The commissioners shall exercise a diligent and faithful supervision over all public works, in which the state may be interested, except those made by joint stock companies. They shall communicate to the general assembly from time to time, their views concerning the same, and recommend such measures as they may deem necessary, in order to employ to the best advantage and for the purposes for which they were granted, the swamps and overflowed lands conveyed by the U. States to this state. They shall appoint all officers engaged on the public works, and shall perform such other duties as may be prescribed by law.

Art. 133. The commissioners may be removed by the concurrent vote of a majority of all the members elected to each house of the general assembly; but the cause of the removal shall be entered on the journal of each house.

Art. 134. The general assembly shall have power by a vote of three-fifths of the members elected to each house, to abolish said board, whenever in their opinion a board of public works shall no longer be necessary.

Journal of Railroad Law.

DAMAGES IN CASE OF ACCIDENT.

In the case of Morse, vs. the Auburn and Syracuse railroad company, the Supreme Court of the State of New York, last year, adjudicated upon a point concerning which most, if not all, of the standard Treatises upon the Law of Evidence are silent.

A passenger in the cars of the Syracuse railroad was severely injured in consequence of a collision between the cars and an engine, which ran into the train while standing on the track, by reason of the negligence of the agents of the company.

On the trial of the action brought by the passenger against the railroad company to recover compensation for the injury he had sustained on that occasion, the Judge charged the jury that in estimating the plaintiff's damages, they had a right to take into consideration *the bodily pain and suffering* he had sustained in addition to loss of time and pecuniary expenses, and compensate him therefor.

To this charge the counsel for the defendant excepted, and requested the Judge to instruct the jury that they must not give exemplary damages to the plaintiff unless satisfied that the defendants had acted wantonly and maliciously,—or had been guilty of negligence of such a degree as is equivalent to malice.

The Judge refused to modify his charge as requested,—although he admitted that as an abstract proposition the doctrine of defendant might be correct. Yet it was deemed inapplicable to the case in hand,—as he regarded the damages claimed by the plaintiff for the bodily suffering which he had sustained, not as *exemplary* but as *compensatory* damages.

On review, the Supreme Court hold the preceding charge to have been correct.

CROSSING MILL-PONDS.

The Supreme Court of Massachusetts have recently held in the case of White, vs. the South Shore railroad company, that the proprietors of a railroad are responsible for the damages occasioned by the construction of their road through and across a mill-pond authorised by the Legislature to be built in a navigable river, although in erecting the dam for raising such a pond, the proprietors thereof have not complied with the conditions of the Act by which they were empowered to construct their pond.

The proprietors of the pond had the right to freely use and enjoy the same until prevented from so doing by due process of law.

EVIDENCE IN CASE OF LOSS OF LUGGAGE.

The much mooted question as to how far the evidence of the owner of lost luggage is admissible on the trial of an action brought for recovering the value thereof, has been lately examined in the Supreme Court of Ohio, in the case of Shaw, vs. the Eastern railroad company, 20 Ohio Reports 319.

The Court held that the owner of a trunk is a competent witness in a suit brought by him against a common carrier for its loss, to prove the contents of the trunk, and their value;—and also that the evidence of the wife of the owner of the trunk is admissible to prove the same facts;—the wife often being better acquainted than her husband with the contents of his travelling trunk.

The Court, however, observed that the admissibility of such evidence does not extend further than

to the proof of such articles as are commonly carried in a travelling trunk.

The following decisions are confirmatory of the doctrine above laid down.

Romand vs. McGill and others, 3 Barr's Pennsylvania reports 451. Herman, vs. Drinkwater, 1 Greenleaf's Maine reports 27. Clark, vs. Spencer 10 Watts Pennsylvania reports 335. Dughan, vs. Rogers, 6 Watts and Sergeants Pennsylvania reports 500. Crane, vs. Whitesell, 8 Watts and Sergeant's Pennsylvania reports 369. This doctrine is also favored in 1 Greenleaf's Evidence 416, and in Story on Bailments 345.

The Supreme Court of *Massachusetts*, however, have laid down the contrary doctrine, in 12 Metcalf's reports 44.

In the *State of New York* we can find no reported decision on the subject.

In *Michigan* a person losing luggage is, by *Statute*, permitted to testify to his loss, but he cannot in such case, unless corroborated, recover more than $150.—*Laws of Michigan of* 1850, *page* 307.

American Credits.

We took occasion not long since to correct some of the erroneous views of the English press in reference to the financial condition of this country, as far as our public works were concerned. We now find in the London Chronicle, a letter from its Philadelphia correspondent, in which he gives the following reasons why a financial revulsion is *not* to be expected, from any fancied resemblance of our present condition to that of 1835, '36 and '37.

So far from the symptoms of the present day resembling the forerunning events of the panic of 1837, or that of 1841, they appear to me to be in most instances precisely the reverse. But let us examine the matter.

Prior to 1837, there had been immense speculations of all kinds—an inflation unmatched since the days of John Law, in France, and all based upon a paper currency.

At the present time the currency, in its more minute details, is chiefly metallic, and there is no such extraordinary inflation; and if the value of real property be high, it is owing to peculiarity of location, or otherwise based on a sound prosperity, against which the doubtful character of a few western railroad stocks (if they be doubtful), cannot and ought not to weigh for a moment. They will have no influence on the general prosperity of the country.

Prior to 1837, the excess of imports over exports was enormous, considering the amount of international trade then transacted. For example:

In 1834 the imports were $126,521,332 in value; the exports, $104,336,973—showing an excess of imports over the exports amounting to $22,184,359.

In 1835, the imports were $149,895,742; exports, $121,693,577; excess of the former, $28,202,165.

In 1836 the imports were $189,980,035; the exports, $128,663,040; excess of the former, $61,316,995.

Even in 1837, the great panic year, the excess of imports over exports was $23,560,801.

Then the imports and exports drew near to a balance; yet in 1839, prior to a second but smaller panic in 1840 and '41, the imports were $162,092,132, and the exports only $121,028,416. And, as if to show the then very feverish condition of things, in 1840 the tables were turned, and the exports actually exceeded the imports by $26,766,059.

I may here add that in the above exports the re-exportation of foreign goods was comparatively small—say from $7,000,000 to $11,000,000.

So much for the condition of the foreign trade prior to the panics of 1837 and '41.

Now is there anything like that condition of things at the present time? Certainly not.

In 1848 the exports were $154,036,436, of which $21,132 315 were foreign. The imports were $154,998,128.

In 1849 the imports were $147,857,439; the exports, $132,666,925.

In 1850, the imports of the United States were $178,138,318; the exports, $151,898,820; of which the re-exported foreign goods were only $14,951,808.

Last year, 1851, the imports were $223,405,272; the exports were $217,523,201; of which the foreign re-exports were a little over $20,000,000.

This I call a very wholesome condition of foreign commerce, as compared with the enormous over imports prior to the panic of 1837.

And here another fact should be noted, which contributed to the panic of 1837. For several years grain had been imported largely into the United States, and such was the rage for speculation that the land was not duly cultivated. The cotton planters, then almost universally bought all their provisions, instead of as now, producing large quantities of them on their plantations.

At the present time the United States is a great grain exporting country.

At that time, to pay for those imports, as well as to pay the interest and dividends of state, bank, R. R., and other bonds and shares, this country was literally drained of specie, both gold and silver, nothing but $1, and $2 notes in circulation for small change, both gold and silver at a high premium.

Is that the case now? No, quite the contrary. The excess of imports is very moderate; the dividends and interest on shares and bonds are comparatively moderate. Instead of the country being drained of the precious metals, I am within bounds when I state that $50,000,000 to $70,000,000 a year is a fair average receipt of gold from California, not half of which is exported in payment of goods and bond and share interests and dividends. Instead of small money being paper it is gold, and to such an extent that in several states banks are not allowed to issue notes of a smaller denomination than $5. It is so in Pennsylvania.

In proof of this look only for a moment at the low rate of interest in America at the present time, from 4 to 8 per cent per annum only as a range. Prior to 1837, it ranged from 15 to 40 per cent per annum. Does this contrast show anything like an approaching panic?

Prior to 1837 there was an immense movement in land speculations, banks, corporations and even individuals buying, or agreeing to buy, and mortgaging their hundreds of thousands of acres in the west. Now the very contrary is the case. The house of Representatives has just passed a bill granting lands to the states for schools and railroad purposes, and people more than suspect that at no distant period free farms will be given by the government to actual settlers. Who speculates in public lands now? It is not as prior to 1837, when western traders bought land in place of paying their creditors in the eastern cities, thereby entailing ruin on all parties by their almost criminal folly.

It is said in the London papers alluded to that the banks have extended their discounts enormously. It is positively not so. But three weeks ago there were $17,000,000 of specie in the vaults of the N. Y. banks, and an unusually large amount in those of this city. The banks are very careful in discounting on any thing but the best paper. For good names money goes begging, but names that are not good can get no discounts at all.

Surely the increase of population—from 16,000,000, in 1835-6-7, to about 25,000,000 at the present time, should weigh somewhat in the balance, to account for increased and increasing trade, and railroads especially when an immigration of about a million in three years must have brought in a vast amount of specie, while the country has been greatly enriched by the labor and skill of these adopted citizens.

The above is a very correct and sensible view of the case. In 1835 we hardly began to develop our resources. The western had not then even begun to be exporting states. The public works which now stimulate production, by opening avenues to market, were not then in operation. How is it now? These states furnish a large amount of what constitutes the basis of our foreign commerce. The following table copied from the U. S. census of 1850, shows the amount of production of the articles of wheat and Indian corn in the leading western states for that year,

	Population.	Bushels.
Ohio	1,980,408	74,755,816
Indiana	988,416	59,513,038
Illinois	851,470	66,613,248
Kentucky	980,405	61,107,551
Tennessee	1,002,625	53,776,333
	5,803,324	315,765,986

averaging about 54½ bushels to the inhabitant.

Nearly the whole of this vast developement dates from 1835. All our agricultural interests has advanced in equal ratio. Never in the history of this country was there such a plethora of every thing that constitutes *wealth*, as at the present time. For years past, all our great supplies have been produced in unusual abundance, and added to these, is a vastly increased stock of the precious metals. If we are to have a financial crisis, it certainly cannot happen for the present, from the lack of *wealth*.

Illinois and Wisconsin Railroad.

The corporators and stockholders, under the charter of the Illinois and Wisconsin railroad, have elected the following board of directors: John P. Chapin, Wm. Jones, John M. Wilson, John H. Dunham, Charles V. Dyer, Daniel Elston, Amos Page, of Chicago; Wm. Sloan, Woodstock, Ill.; John B. Macy, Fond du Lac: A. Hyatt Smith, Janesville, Wis.; James W. Baldwin, Boston, Mass.; Philip Dater, New York city; Robert J. Walker, Washington, D. C. Subsequently, Wm. Sloan, of McHenry county, was elected President.

The Chicago Tribune gives the following account of the condition and objects of the above road, with its connecting line, the Rock River Valley Union railroad company.

The Illinois and Wisconsin railroad is the southeastern connection of the Rock River Valley Union railroad, and the two roads are one in fact, though prosecuted under different charters. The Rock River Valley Union railroad company is authorised, by several acts of the Legislature of Wisconsin, which constitute its charter, to construct a railroad from the boundary line between the States of Illinois and Wisconsin, to Janesville, and from that point by two branches, the one running to Fond du Lac on Lake Winnebago, and thence to Lake Superior, the other from Janesville to Madison, thence to the Falls of St. Croix, by the way of La Crosse and Willow river, thus traversing the most productive parts of the State of Wisconsin, embracing a country unsurpassed in fertility of soil and mineral wealth, the road being more than one thousand miles in length, and the charter containing every power necessary or convenient to carry it into effect. There is also another charter known as the Southern Wisconsin railroad, under which a company has been organised for the purpose of building a road from Janesville to Dubuque, on the Mississippi, on the same gauge as that of the Rock River Valley Union railroad, and the road when built in connection with the Rock River Valley Union railroad, and the Illinois and Wisconsin railroad, will furnish a shorter route with lighter grades, from the Mississippi river, opposite Dubuque, than can be had by any other proposed route.

The Rock River Valley Union railroad company, towards the construction of their road, have purchased and paid for 11,019 tons of railroad iron—have expended in the purchase of cars, locomotives, buildings, grading, etc., about $350,000, and will have from 30 to 35 miles, extending from Fond du Lac southward, in running condition during the coming fall—the rail for which is now being landed at Green Bay. Among other stock purchased, part of which has already been delivered, the remainder to be delivered this fall in season to be forwarded through the lakes, are seven locomotives, one of which is now at Fond du Lac, and the others *en route* for this city, to be used on the Illi-

nois and Wisconsin road. The whole of the road from Fond du Lac to the Illinois State line (about 107 miles) is under contract with Bradley & Co., who are to do all the work, and furnish all the materials, except the rails, chairs, and spikes, for a single track, at an average cost of $7,500 per mile—the whole estimated cost of the road without furniture is $12 500 per mile—and with furniture, $17,500 per mile. In the whole length of the line, there is no grade exceeding 30 feet to the mile. The gauge adopted by the company is six feet, which in all probability will be the general gauge in Wisconsin, excepting the Milwaukee and Mississippi railroad. It is proposed that when the Illinois and Wisconsin railroad is built to the State line of Wisconsin, and the Rock Island Valley Union railroad shall also be completed to the same point, the two roads shall be stocked together, one being almost entirely dependent upon the other, and their interests identified. This is deemed desirable for both. The Rock River Valley Union railroad company propose to loan to the Illinois and Wisconsin railroad company as much iron as can be put down this year, say from 25 to 30 miles, and also as many of their locomotives and cars as may be necessary for the operating of the road this season. The Illinois and Wisconsin company are authorised by their charter, granted by the Legislature of this State, to build a road from the Wisconsin boundary on the north line of McHenry county, passing through Woodstock to Chicago, and the charter contains all the necessary powers and privileges. Under this charter a company has been organised to construct a railroad over the line above mentioned, and a contract has been made with Messrs. Bradley. Page & Co., the contractors of the Rock River Valley Union railroad, to construct this road from Chicago to the State line, a distance of 68¼ miles.

The grades of this road are to be similar to those of the Rock River Valley Union railroad, viz: 30 feet to the mile, and like the other road is to be made up of straight lines with few curves, and those of large radii, the first 30 miles from Chicago being an air line. Arrangements are now perfected for the building of 30 miles from Chicago in a northwest direction, the coming fall, provided the season will possibly permit. It is estimated that the cost of the grading, masonry and bridging of the first 30 miles will not exceed $3,000 per mile.

Mineral Point Branch Railroad.

This is the name of a railroad proposed to be built from *Mineral Point*, in Iowa county, Wisconsin, to a point on the Galena Branch of the Illinois Central railroad, west of Freeport. The charter under which the road is to be built, is one extremely liberal, the distance is between twenty-six and thirty-two miles, and the grades thought to be easy, by those who have made an examination.

Messrs. Silas Woodman and Jno. Bracken, of Mineral Point, commissioners of the Mineral Point road, were in our city on Wednesday, to consult with gentlemen connected with the Illinois Central and Chicago and Galena roads, in reference to their branch. The estimated expense is about $400,000, of which $100,000 has been subscribed by the citizens of Iowa county, and they seek assistance in this city, to which the new work will contribute an immense trade.

Mineral Point is the centre of the Mineral region of Wisconsin; a region probably richer in lead and copper together than any other part of the world, but also one of the most beautiful agricultural districts in the Western States.

The amount of lead mineral raised in the two counties of Iowa and Lafayette, last year, was about 400,000 pigs, and with the stimulus that a railroad would give to the business of mining, it would soon increase to twice that amount. It may safely be calculated that in the first season the two counties would send off, by railroad, 400,000 pigs, or 14,300 tons of lead. Besides lead, there are millions of tons of zinc lying upon and near the surface, which are now useless, for the want of fuel to smelt it. As soon as the proposed railroad is opened, and the coal fields of Illinois reached, there will be a demand for from five to ten thousand tons of coal, for smelting purposes, which will give a very large business to the railroads in return freights.—*Chicago Tribune.*

Opening of the Buffalo and New York City Railroad.

The crowning work on this road was the completion of the "Portage" bridge over the Genesee river. The principal dimensions of this gigantic construction, one of the largest works in timber ever produced, we have already given. It spans the great chasm worn by the Genesee river through the solid rock in the neighborhood of the Portage falls; the gorge itself is about 500 feet wide, but owing to the sloping of the eastern bank the bridge elevated over it is continued a further length of 300 feet more, before it strikes the same level as on the western bank. The bed of the river is of slate, and from it 8 piers of solid masonry 80 feet in length in the direction of the stream and 12 feet thick rise to the height of thirty feet. On the platform of each of these piers rest 15 standards of timber extending from top to bottom, a distance of about one hundred and ninety feet, and six compound beams reaching about half way up. These standards are composed of timbers about 40 feet in length. Each wooden pier has a base of 75 in length in a direction, across the line of the bridge, and rises pyramidally so that the length of its section at the top is about 25 feet. The uprights are bound firmly together, by five sets of ties at right angles to the sides of the bridge, and the entire system of piers are bound by ties running the length of the bridge. This skeleton is filled up by a net work of braces, bolted together throughout by iron bolts and straps. There is no tenon or mortise in the whole structure and it is so constructed that any timber can, if found to be defective, be taken out and replaced without weakening it in any appreciable degree. On the tops of the piers the bridge is laid composed of timber braced together and rising so that the track is about 14 feet higher than the tops of the wooden pier. The structure is computed to be able to sustain a weight 20 times greater than that of any train that will probably be run upon it. The total height of the roadway above the bed of the river is 234 feet, and as about one hundred feet farther down the river there is a fall of sixty feet, the depth as viewed from the bridge is over three hundred feet.

The first locomotive and train passed over the bridge on 14th August, and the opening was celebrated on the 24th August. Crowds came in from the adjoining county on foot, on horseback, and in various vehicles during the morning of the day, and the number was swelled by the arrival of large trains of cars from both the East and West. At one o'clock 10,000 persons had assembled. Among the persons present were Gov. Hunt; Ex-Lieut Gov. Patterson; Benjamin Loder, President of the New York and Erie railroad, and Chas. Minot, Superintendent of the same; and also the officers of the Buffalo and New York City railroad—R. H. Haywood, President; B. Bayley, Vice President; R. Pomeroy, Secretary; Col. S. Seymour, Engineer and Superintendent; Geo. B. Chase, and others of the board of directors.

A superb banquet was given on the occasion, at which a mammoth ox weighing 3,600 lbs. presented by Geo. B. Chase figured. Over three thousand persons partook of the repast. A number of speeches were made, we copy the remarks of Gov. Hunt from the Tribune.

"The New York and Erie railroad stands pre-eminent among railroads—it is the longest line in the country. Its triumphant success has led to the construction of numerous branches. Such a work has brought us together to-day. I have always contemplated achievements of this kind with peculiar interest, and I should be glad to speak at some length on this subject, but to-day I can but glance at some of the benefits arising from this source.—By these achievements the value of every production is increased; they even give greater value to every tree of the forest. They give new value and life to the people of the country; they bring men nearer together and wear away prejudices.

"To day we have seen the greatest obstacles overcome in the wonderful triumphs of art before us. We have seen that no valley is so sequestered, no spot so rural, but its repose is startled by the locomotive's whistle. What we have here seen must convince us that there may be new worlds yet to be conquered; but it shows us that nothing is impossible. We have to day witnessed trains of cars passing through the air crowded with hundreds of human beings.

"The sublime scenery around us is familiar to me. The days of my childhood and youth were passed amid these everlasting hills. Then I had no idea of seeing anything higher than the tall pines which covered their summits. No one then thought of seeing these hills spanned by bridges, the deep ravines leaped across by the iron horse, and the canal winding through these gores"—['Or that Washington Hunt would be Governor of the State of New York,' shouted a voice from the crowd]—"No, no," added the Governor, "and had any one been bold enough to have predicted either of these events, he would have been called some wild dreamer, worthy of a lunatic asylum."

The Governor alluded to the Board of Directors and others who had been chiefly instrumental in accomplishing this great work, as individuals worthy of being regarded public benefactors. (Cheers for Haywood.) "I see with me, to-day, one who has overcome almost insurmountable obstacles to railroads—Benjamin Loder, who placed himself behind a steam engine and never stopped until he carried himself to Lake Erie; but how under heaven he got there, I don't know. [Applause.]

"Our Canals, too, are of great service to our State; but, gentlemen, you must excuse me from talking about the canals to day. I have already detained you too long. [Cries of no, no, go on.]—In conclusion let me add, I trust this spirit of improvement will be cherished and these achievements extended until all parts of the country are accommodated."

Mr. Haywood, the president of the road, was then called on, and after a few observations called on Mr. Loder of the Erie. Mr. Loder remarked:

"What little I have to say can be soon told. I almost feel that this railroad is a part of the Erie road. It has the same wide gauge, and the same contractors have been engaged on each. In 1845 came on a portion of the New York and Erie railroad. Then there were but five or six other railroads in this State. Now in the United States there are 12,000 miles completed, and 12,000 miles more in process of construction. Those already completed have cost from three hundred and fifty to four hundred millions of dollars. Thirty thousand miles of railroad will be seen in this country by those who live in 1860.

"Many of these achievements have been made by the State of New York. I am proud that I am a native of the Empire State. The mighty West—that great storehouse of wealth, is rapidly extending its resources. We want railroads and canals to bring their productions to us, and to return to them the stores of the East. To-day New York and Buffalo are united with a road of six foot guage.—Already we begin to feel that we are a part of that flourishing city."

The celebration passed off with great spirit, and the work is well worthy a visit. The bridge and the sublime natural scenery in its vicinity will make Portage a place of popular summer resort.

Massachusetts.

Hampden Railroad.—The following gentlemen have been elected directors of the corporation:—James Fowler, A. Post, Thomas Ashley, J. R. Rand, H. B. Smith, H. Harrison, William G. Bates, Ira Yeamans, Caleb Alden of Westfield, A. L. Plympton of Southwick.

Steel Manufacture in India.

We extract from Prof. Royle's lecture on the great exhibition of 1851, contained in Silliman's Journal, some account of the process of manufacturing steel in India.

The Hebrew name of steel, *paldah*, is evidently the same word as the Arabac *foulad*, which is also in use in Persia, where Indian steel is known by the name of *foulad-i kind*. Even now the best Persian swords are made with steel imported from India, and Mr. Wilkinson has ascribed the markings of the famed Damascous blades to their having been made with Indian steel, which has long formed an article of trade from Bombay to the Persian Gulf.

Mr. Heath, at one time the managing director of the India Iron and Steel company, and whose steel obtained a prize at the exhibition, even says, "We can hardly doubt, that the tools with which the Egyptians covered their obelisks and temples of porphyry and syenite with hieroglyphics, were made of Indian steel." There is no doubt that the ancient Indian temples and fortresses were carved with steel instruments, as they are at the present day. That they made steel which was highly valued in the time of Alexander the Great, is evident from Porus making him a present of about thirty pounds of steel; and still earlier, in the Rig Veda, we read of chariots armed with iron weapons, of coats-of-mail, arms and tools of different kinds and of bright edged hatchets.

Mr. Heath describes the ore used as the magnetic oxyd of iron, consisting of seventy-two per cent of iron with twenty-eight of oxygen, combined with quartz, in the proportion of fifty-two of oxyd to forty-eight of quartz. It is prepared by stamping, and then separating the quartz by washing or winnowing. The furnace is built of clay alone, from 3 to 5 feet high, and pear-shaped; the bellows is formed of two goat skins, with a bamboo nozzle, ending in a clay pipe. The fuel is charcoal, upon which the ore is laid, without flux; the bellows are applied for four hours, when the ore will be found to be reduced; it is taken out, and while yet red hot, it is cut through with a hatchet, and sold to the blacksmiths who forge it into bars and convert it into steel. In an old account which I possess, written on the spot, apparently in Mysore, it is said, that one pound and a half of iron is heated lower than red heat, and then beaten for about three minutes with a stone hammer on a stone anvil, experience having taught them, they say, that instruments of iron ruin the process. Mr. Heath says that the iron is forged by repeated hammering, until it forms an apparently unpromising bar of iron, from which an English manufacturer of steel would turn with contempt, but which the Hindoo converts into cast steel of the very best quality. To effect this he cuts it into small pieces, of which he puts a pound more or less, into a crucible, with dried wood of the *Cassia auriculata*, and a few green leaves of *Asclepias gigantea*; or, where that is not to be had, of the *Convolvulus laurifolia*. The object of this is to furnish carbon to the iron.

As soon as the clay used to stop the mouths of the crucibles is dry, they are built up in the form of an arch in a small furnace, charcoal is heaped over them, and the blast kept up without intermission for about two hours and a half, when it is stopped, and the process considered complete. The furnace contains from twenty to twenty-four crucibles. The crucibles are next removed from the furnace and allowed to cool; they are then broken and the steel taken out. The crucibles are formed of a red loam, which is very refractory, mixed with a large portion of the charred husk of rice.

Mr. Heath, after remarking the astonishing fact that the Hindoos had discovered the way of making steel at such early periods, refers to Mr. Mushet's discovery of converting iron into cast steel by fusing it in a close vessel, in contact with any substance yielding carbonaceous matter, and then to that of Mr. Mackintosh, of converting iron into steel, by exposing it to the action of carburetted hydrogen gas in a close vessel at a very high temperature, by which means the process of conversion is completed in a few hours; while by the old method it was the work of from fourteen to twenty days. Mr. H. observes:—

"Now, it appears to me that the Indian process contains the principles of both the above described methods; on elevating the temperature of the crucible containing pure iron and dry wood and dry leaves, an abundant evolution of carburetted hydrogen gas would take place from the vegetable matter, and as its escape would be prevented by the luting at the mouth of the crucible, it would be retained in contact with the iron, which at a high temperature appears from Mr. Mackintosh's process to have a much greater affinity for gaseous than for concrete carbon; this would greatly shorten the operation, and probably at a much lower temperature than even the iron in contact with charcoal powder. In no other way can I account for the fact that iron is converted into cast steel by the natives of India in two hours and a half, with an application of heat that in this country would be considered quite inadequate to produce such an effect; while at Sheffield it requires at least four hours to melt blistered steel in wind furnaces of the best construction, although the crucibles in which the steel is melted are at a white heat when the metal is put into them, and in the Indian process the crucibles are put into the furnace quite cold."

By such simple methods the Hindoo prepared steel, which has long formed an article of commerce from the west of India to the Persian Gulf, and there is every probability of its being used in larger quantities if it were easily procurable in sufficient quantities, as manufacturers here have expressed a desire to employ it. In the arms which we have exhibited, as well as in the edges and points of the tools, we see its admirable fitness for the fabrication of all cutting instruments.

Among the arms we have a display of such as would appear to belong to different ages of the world but which are actually in use in India at the present day; such as chain and scale armor, both for man and horse, helmets and shields, spears, battle axes, bows and arrows, with daggers in every variety. Some of these display in a remarkable manner their skill as cutlers; as for instance, the sword formed of two blades, and another in which pearls are let into the centre of its blade: and still more in the daggers contained one within another, all of hard steel, with the line of junction so beautifully welded as to be hardly perceptible even with a magnifier,—so also in the dagger, which on striking separates into five blades, as these are most nicely brought into juxtaposition. The twisting of gun-barrels and the damasks of their blades of steel have been imitated in all countries. These beautiful specimens have been sent chiefly by the native princes of the northwest of India from Puttela to Scinde, as well as from the central government of Hyderabad.

Altoona.

The Harrisburg Telegraph referring to the Pennsylvania railroad, gives an account of Altoona, a place located since the commencement of the road, but which is destined to become one of the largest towns in the interior of the state.

It is situated on the summit of the ridge between the Little and Big Juniata, about 132 miles from Harrisburg, and 117 from Pittsburg. Its elevation is 1,169 feet above the sea, and 982 feet below the summit of the railroad at the west end of the mountain tunnel. It is here that the heavy grade necessary to ascend the mountain commences, and as this cannot be completed till the winter of 1853, a road branches off six miles to the Mountain house near Hollidaysburg, to intersect with the Alleghany Portage road. The property of the company includes about 43 acres between this branch road and the main line west. On this space is erected a semi-circular engine house of 225 feet in diameter, to contain sixteen engines, and a machine shop of the T form, the stem of which is 420 feet long by 70 feet wide, the wings being each 250 feet long by 51 feet wide. The main building of this large establishment will be partly used for car building and partly for iron work. One wing is used as a foundry, which is already in full operation, making castings for the use of the road. The other wing is a smith shop containing twelve forges, trip-hammer and a punching machine. Included in these wings are also an engine room, wash room, pattern making room, and brass foundry. The engine which is of forty-five horse power, is not surpassed in the superiority of its workmanship, by any in this country. The forge room is arranged with cast iron forges, with fan blast, and underground flues connecting with a chimney stalk, built with eight points flaring to a circular head at the top, 122 feet in height, the draught being more than is actually required. The roof of the engine house is arched resting on trusses of wrought and cast iron, and, though exceedingly light is very firm. It is provided with Collins's ventilators to carry off the smoke from the engines.

With these facilities, the company will be enabled to build their own cars and locomotives, and do all their own work, and when it is considered that the buildings just described form but one-half of the design to be carried out eventually, some idea may be gained of the extent of their improvements.

There are at present in Altoona about 200 dwelling houses, and 32 more are in process of erection. Many additional ones, however, will be required to meet the rapidly increasing demands. Several churches are going up, and arrangements are being made for a copious supply of water from Brush mountain, two and a half miles distant. When the shops are finished and fully manned, the population will probably reach six thousand.

Illinois.

Chicago and Alton Railroad.—In view of the completion of the Chicago and Alton railroad to Springfield, which will be during the present month, the company are making extensive preparations at their workshops in this city for the transit of freight and passengers. The equipment of this section of the road will be in every respect complete, and fully equal in point of finish and style to any in the United States. It embraces ready for service, five passenger cars, two baggage cars, thirty platform cars, forty-four house and freight cars, twenty-five gravel cars, three freight locomotives, and two passenger locomotives.

The walls of the depot at the corner of Fifth and Piasa streets are already up, and the inside work will be finished speedily. This building is made of rough stone, and will be, when completed, a very material improvement to the looks of that portion of our city. Its height is two stories, breadth forty feet, and length one hundred and thirty feet.—*Alton Telegraph.*

Galena and Chicago Union Railroad.—The Illinois Central railroad company, which is now building the 4th division of the Galena and Chicago road—viz: from Freeport to Galena—has been forbidden by the corporation of Galena to enter and traverse the city. The company threaten to stop work at a distance of 25 miles, unless the corporation yield. By an amendment to their charter, passed by the last Illinois legislature, the city have also control of Fevre river to its mouth—and as the track crosses the river, just above the city, its re-crossing below can be prevented. The Dubuque people understand all this as a conspiracy to prevent the continuation of the Illinois Central to a point on the Mississippi opposite their city.

The Lake Shore Railroad—This work connects Chicago and Milwaukee. Preliminary survey from Milwaukee to the State line completed. Estimated cost, $14,217 per mile. Estimated cost from Milwaukee to Green Bay, 115 miles, $1,725,000.

Belleville and Illinoistown Railroad.—Hon. Sidney Breese has published an opinion, that this Co. have no power to extend their road in the direction of Terre Haute.—*Burlington Hawkeye.*

Canada.

Brantford and Buffalo Railroad.—The board of directors have passed a resolution authorising the contractor to place a sufficient number of hands upon the work to have the road between Hamilton, C. W. and the Niagara river completed by the 15th of June next. The board have also concluded to contribute $200,000 towards the extension, to Goderich, of the Brantford and Buffalo railroad.—*Herald.*

Pennsylvania.

North Branch Canal.—The Pennsylvanian states, that the entire amount of the stock of the Junction canal between Athens, the termination of the North Branch canal and Elmira, in the State of New York has been subscribed. The work will be immediately proceeded with. The whole line of this Junction canal, which is but eighteen miles, extending from the Pennsylvania State line to the town of Elmira, where it connects with the Chemung canal, will be put immediately under contract, and be finished in time to be opened in connexion with the Pennsylvania division of the North Branch canal.

In connection with a notice of the above fact the Pennsylvanian adds, since 1841, this great work, upon which the State had expended more than two millions of dollars, remained in an unfinished condition. No outlet had been afforded for the iron of the Susquehanna Valley, or for the Anthracite coal of the Lackawanna and Wyoming valleys. These great interests were suffering, and our citizens who were so deeply interested in them, had just cause of complaint. With the opening of this canal a fresh impetus will be given to business of every description, and the exhaustless treasures which lie hidden in the earth in the Lackawanna and Wyoming coal regions, will now be opened. A portion of our State, now comparatively uninhabited, will, before many years be past, teem with busy life.

It has appeared to us that our citizens were not paying sufficient attention to this section of our State, but were quietly permitting the citizens of New York to engross all its trade. With the Southern and Middle Coal basins, our citizens are thoroughly acquainted, and have expended millions in aiding their development, but of the Northern basin they know but comparatively little. The development of this region has but commenced, and already New York has large companies in the field, all whose coal and iron is carried there; and from which city all their purchases are made. Will the merchants and capitalists of Philadelphia permit this stage of things to continue, or will they not grasp this growing and increasing trade from the hands into which it is likely to fall?

There will now be an unbroken line of internal navigation through the heart of the two great States of Pennsylvania and New York, uniting Chesapeake Bay, Lake Erie, Lake Ontario, Lake Champlain and the Hudson river. The anthracite and bituminous coal of our State will now find a ready market, and this great staple of our State be distributed through the entire North and West. A work which has been worse than useless to the State from which it has derived nothing, though, upon it millions have been expended, will now become a source of great revenue.

Massachusetts.

Boston, Concord and Montreal Railroad.—The following statement presents the earnings of this road for six months ending August 1st.

Gross receipis for June, 1852	$15,176 24
" " " 1851	12,718 58
Gain	$2,457 66
July, 1852	18,798 81
July, 1851	16,579 77
Gain	$2,218 04
For six months 1852, ending August 1.	91,456
" 1851, " ..	73,821
Gain	$17,635

Maryland.

Mount Savage Railroad.—The extension of this road, to the foot of the hill below Frostburg, will be completed in a week or two. It is already finished to the mines of the Alleghany company. The road is constructed in the most superior manner, and will prove of great advantage to the coal companies, in facilitating the despatch of coal and saving cost in transportation.—*Cumberland M. Jonrnal, August 27th.*

Virginia Internal Improvement Convention.

This body met at Union, Va., on the 19th Aug. last, and continued in session for three days. Gen. P. H. Steinberger, was appointed president, and Jefferson Kinney, secretary. After organizing and appointing a committee of thirteen to report on the business before the convention, a recess was taken till the afternoon. On reassembling, the convention was addressed in a clear and forcible speech by Mr. Apperson, of Kentucky, president of the Maysville and Big Sandy railroad company, in which the value of a connexion of the Central line with the railroads in Kentucky, was strongly set forth. His argument exhibited irresistible reasons for the speediest possible prosecution and completion of the Central railroad.

Among the speakers were Messrs. Wm. B. Preston, Botts, Rives, Gifford, McFarlane, and Prof. DeBow, of the Southern Com. Review. The substance of the report of the committee was a recommendation of the early completion of the several lines already begun, including the Norfolk and Petersburg road; the loaning of state bonds to the several Internal Improvement companies for the purpose of completing their respective works; and the extension of the works of the James river and Kanawha company, by a railroad from Covington or Clifton Forge, to the Ohio river, with a gauge of five feet.

The question of the gauge excited an animated discussion, and it was finally decided to leave it open. The report, as adopted, recommends the immediate construction of a branch of the Virginia and Tennessee railroad down New river to the mouth of Greenbrier, and a railroad from the western terminus of the canal to the Ohio river, to be constructed under the auspices of the James River and Kanawha company.

Texas.

An Internal improvement convention, recently held at Galveston, Texas, concluded its labors on the 24th July, by the adoption of a report, recommending a plan of internal improvement on the part of the State. The State is to undertake and construct the works on her own account, companies and individuals being permitted to engage in the business of transportation on them. The whole to be under the direction of a board of State commissioners. Fifty millions of acres of the public lands or their proceeds, and $2,000,000 of the surplus U. S. funds are to be pledged for the payment of the interest on loans for these improvements. Provision is to be made for meeting the interest on such loans by annual taxation.

With these funds it is designed to build a system of railroads, penetrating to all sections of the State, but all terminating at Galveston. There are to be four trunks, so constructed as to be connected with branches that may be required hereafter. These are to be prosecuted cotemporaneously, and at equal rates of progress: the first, or main trunk, to leave Galveston, crossing West Bay and leading to Houston, and thence across the country to Red River. The second to branch from this road, turning off into Montgomery county, and running northward between the Trinity and the Brazos rivers.—The third, branching from the Galveston road, crossing the Brazos near Columbia, and thence between the Brazos and the Colorado to Austin; and, lastly, a road branching from the last, crossing the San Bernard and the Colorado to San Antonio.

To effect this, it is proposed to borrow from twelve to fifteen millions of dollars, laying down a basis for credit in the lands and surplus fund as before stated, and laying an assessed tax for the payment of a five per cent. interest on every loan contracted.

Trade of the Wabash Valley.

The Vincennes *Gazette* contains the following abstract, prepared by the collector of tolls for the Wabash navigation company, of the business done at their Lock, at Grand Rapids, on the Wabash river, for the years ending June 30, 1851 and 1852. It will give some idea of the immense resources and consumption of the Wabash valley, the river being only one of the many channels of trade of this part of Illinois and Indiana. Much of the produce which now finds an outlet by the Wabash river, must eventually be transported to market by the Terre Haute and Alton, and Vincennes and St. Louis railroads. The *Gazette* states, that the stock of this company yields a profit of 15 per cent after paying expenses and setting aside annually a considerable amount as a contingent fund:

	1852.	1851.
Steamboats engaged in Cincinnati, New Orleans, St. Louis, and other trades	235	236
Other crafts, flatboats, etc	155	155
Passengers	2.382	2.116
Pounds freight merchandize	17,426 075	18,187,020
Meat, in cask and bulk	9,033,170	6,429.366
Lard etc	3,581,638	2,798.532
Barrels of Pork	24,994	38.007
" Flour	31,300	21,270
" Whiskey	2,340	1,269
" Salt	16,522	11,296
" Molasses	7.176	3,396
" Lime, apples, etc.	2,729	1,820
Bushels of wheat	150,016	145,871
" Corn and Oats	546,661	567,170
" Rye and Barley	3,812	1,094
Sacks of salt	7,430	7,810
Tons of hay	222	168
Horses and cattle	134	125
Hogs, sheep, and calves	920	522
Dozens of poultry	3,433	3,468
Feet of lumber	33,100	72,600
Shingles	114,500	59,000
Total tons	49,080	42,170

Ohio.

Scioto and Hocking Valley Railroad.—The following extract from a letter from J. Dille, Esq., of Newark, Ohio, dated Portsmouth, August 6th 1852, shows the mineral resources of the route of this road, and the prospect of its speedy completion.

The directors of the Scioto and Hocking valley railroad company, have this day adopted the guage of the Mansfield and Sandusky city railroad, and are taking vigorous measures to secure a stock subscription to complete the road through to Newark at the earliest day. This will give us a trunk line from the lake to the river, through the best mineral and agricultural region in the world. The road will traverse the axis of the coal and iron region—in coal, having no equal on the globe, and in iron surpassing any other field between the Alleghanies and Mississippi. Portsmouth is already the second river city in the state, and bids fair to rival Pittsburg in the manufacture of iron.

But Portsmouth will not be the terminus of this great chain. A company is already organized to construct a road from this place to Maysville in Ky., from which place a line is already in progress and a part of it in operation, to Nashville, Tenn. Whence to New Orleans and Mobile, far more than the incipient steps have been taken to extend railroads.

Ohio.

Marietta and Cincinnati Railroad.—At a late meeting of the stockholders of this company, the following gentlemen were chosen directors: William P. Cutler, John Mills, Douglas Putnam, Noah L. Wilson, John Ballard, Archibald B. Walker, Wesley Claypool, Mather Scott Cook, John Madeira, Francis Campbell, Abraham Hegler, Hugh Smart and Ruel Beeson. This board chose W. P. Cutler, President, J. Madeira, Treasurer, and S. W. Ely Secretary. The capital stock of the company was increased to six millions of dollars.—*Ohio State Journal.*

Louisiana.

New Orleans and Opelousas Railroad.—We are glad to know that the directors of this company are progressing as rapidly as the nature of things will admit of, with the great work of internal improvement committed to their charge.

Judge John H. Overton, of St. Landry, has been elected president of the company, to fill the place so efficiently occupied by the late lamented Christopher Adams, Jr. We feel assured that his appointment will give universal satisfaction.

The selection of depots opposite the city, has already been made. The grounds belonging to the heirs of Brown, situated nearly midway between Gretna and Algiers, (nearest to Gretna,) have been purchased by the company, on which proper depot buildings are to be erected, intended for the accommodation of the 1st and 4th districts. The grounds are spacious and well calculated for the purposes for which they are designed. The price to be paid is forty thousand dollars.

Arrangements have been made and they will no doubt be consummated, for the purchase of the Belleville foundry in Algiers, with a view of converting it into a depot for the accommodation of the 2nd and 3d districts. This property, houses lands and machinery, is held at the price of one hundred and twenty-five thousand dollars.

Several corps of engineers will start to-day, from Algiers, for the purpose of determining upon the route to Opelousas. It is expected they will get through their labors by the middle of next month. Other parties are on ahead, engaged in the same work, which, it is thought, may be fully completed by the 1st of October.—*New Orleans Commercial Bulletin.*

New Orleans, Jackson and Great Northern Railroad.—The Mississippi papers indicate great enthusiasm in favor of the road along its route. The Aberdeen Independent announces that the chief engineer, Mr. Winchester, in company with Chancellor Cocke and Mr. Kendall, the general agent arrived at that town on the 8th August, having examined the contemplated route between Aberdeen and Canton. Mr. Winchester stated that he had never seen a better route for a road, one that could be built with less per centage over an air line, or would cost less. The surveyors are on the line above Canton, surveying at the rate of two miles and a half per day, and will get there in six or eight weeks. The route will then be surveyed and located, the estimates made, and the whole line offered for contract as soon as it can be done. We understand that the Co. design to build the line from Aberdeen to Canton as speedily as possible, in order to open a channel of communication from the Tombigbee valley to New Orleans, for the transportation of the produce from the former to the latter.

Railroad Convention.

A large body of railroad men assembled in convention, in this city, on the 24th August, and, we understand, will have another session to-day.—Every road in all this region of the country is represented. The special objects of the convention we are not aware of, though we suppose them generally to be for consultation upon the advancement of the common interests of American railroads, and the reduction to a uniform system of the various details of management.—*Springfield Republican.*

Antiquities.

The following is taken from the Windsor (Canada) Oak.

In excavating the bank above here, for the Great Western railroad, the men under the charge of Curtiss and Churchill, two of the overseers, found a large number of Indian ornaments, consisting of silver pins, broaches, bracelets, amber bead necklaces, etc., also red stone pipes, copper camp kettles, and a variety of articles usually buried with an Indian. The place where these things were found was an Indian burying ground. A great many skulls, bones, and skeletons have been found; doubtless these ornaments were buried centuries ago, with the lords of the soil.

Tennessee.

The Brunswick Canal.—We are informed by a friend just from Brunswick, that about eight miles of the canal from that port to the Altamaha river are already completed, and that the lock at the Brunswick end is going forward rapidly. Our informant has no doubt of the speedy termination of the work. A new bridge is being made at the point where the public road crosses the canal, high enough for the passage of boats. The Oglethorpe hotel has been completely refurnished, and put in the best condition. The Brunswick canal will communicate with that grand reservoir of lumber on the Altamaha and its tributaries. Those forests contain uncounted millions of treasure, and to them the country must look, not many years hence, for the principal supply for ship building and other purposes.—The canal, if properly constructed, will eventually, no doubt, do a large business in the transportation of lumber.—*Macon Journal.*

Nashville and Chattanooga Railroad.—We are glad to learn that William C. Murdoch, an enterprising contractor on the Nashville and Chattanooga railroad on a large portion of the road between this place and the bridge across Tennessee river, has just effected an arrangement with the president of the road by which he will be enabled to go ahead with his work. Owing to some misunderstanding, Mr. Murdock suspended operations for two or three weeks, much to his damage and the delay of the work. But the ever vigilant president, Col Stevenson, came on, and straighted things, and the work is re-commenced under favorable circumstances. The contractor, Mr. Murdoch, who has gained the confidence of the people by his honesty and untiring perseverance, wants to employ several hundred hands immediately.—*Chattanooga Gazette.*

Indiana.

Indiana Gauge.—We are informed by a railroad director that the Eaton and Hamilton, and Cincinnati Hamilton and Dayton railroad companies, will if it becomes necessary for carrying forward with facility the passengers and freight from the Indiana Central railroad and other Indiana railroads, put down *one track on the Indiana Gauge from Richmond to Cincinnati.* It is believed that the Ohio gauge can be carried to the principal points in Indiana, Logansport and Indianapolis;—but if it is found by experience that it will be desirable to have the Indiana gauge put down from Richmond to Cincinnati, the companies are ready to put down a track of the Indiana gauge.

We are pleased to find that these companies are disposed to accommodate the public by adopting such course as may be found by experience to be required by the general interest of the community and the business of the country.—*Hamilton Intelligencer.*

Railroad Convention at Warsaw,—We are gratified to perceive by a circular now before us, that the initiatory steps are about being taken to secure the completion of the Pennsylvania and Ohio railroad direct to Chicago, via Fort Wayne, Warsaw, Plymouth, La Porte and Valparaiso, Indiana. A meeting in reference to the matter has been called at Warsaw, Kosciusko country, Ind., on the 14th proximo, to effect an organization under the general railroad law of that state to complete the Indiana portion of the road. The call is signed by a number of the most wealthy and enterprising citizens of northern Indiana —*Chicago Tribune.*

New Hampshire.

Portsmouth and Dover Railroad.—A meeting of the projectors of this proposed road was held at the New Hampshire Hotel, Dover, on the 21st August last, Ichabod Bartlett was chosen chairman, and Chas. W. Woodman, clerk. Mr. Atkinson, the engineer who has re surveyed a part of the line upon that route, which in his opinion is the best and most economical, crossing the river at Knight's Ferry, estimates the cost of the whole road at less than $200,000. The following gentlemen were unanimously elected directors of the company:—William Hill of North Berwick; Richard Jenness, James P. Bartlett, Portsmouth; Thomas H. Cushing, Charles W. Woodman, Dover.—*Boston Courier.*

New-York.

Rochester, Lockport and Niagara Falls Railroad.—The earnings of this road for July last, the first month of operation, were, for passengers..$26,452
Freight..... 232
Mail..... 146

Total.....$26,830

The freight and mail earnings were only for a week.

Attica and Olean Railroad.—A meeting of the citizens of Franklinville was held at the Globe hotel, August 19th, to take such measures as were deemed necessary to secure the location of the Attica and Olean railroad through the Ishua Valley to intersect the Pittsburg road at Olean. The meeting was organized by the appointment of Pardon J. Jewell as chairman. Wm. Wade and H. E. Green, secretaries.

Genesee Valley Railroad.—The directors of the Genesee Valley railroad met at Avon on the 21st August, and after organizing and the transaction of some miscellaneous business, proceeded to fix the location of that section of the road between the village of Avon and Rochester. The subject was fully discussed by representatives of the interests on both sides of the river. It was finally decided to locate that section, as far as the Rapids, about two miles from Rochester, on the *East* side of the river, that being the shortest route by a mile and a half, and the easiest grade. The contracts will doubtless be soon let on this section of fifteen miles, as proposals had been advertised for early in the season. The board was full with the exception of Messrs. Fitzhugh and Boody.

Ohio.

Iron for the Railway from Eaton into Indiana.—A large quantity of railway iron has been landed at Hamilton to lay the track from Eaton to Richmond and Newcastle, Indiana. Sufficient has arrived to lay the track from Eaton to Washington, ten miles west of Richmond, and every confidence is felt that the road will be finished to that point before the 1st of December. This will open 100 miles of railway from this city into Indiana, and next year the line to Logansport will be completed—say 200 miles from Cincinnati.

The down train from Eaton, on Wednesday, consisted of 24 cars heavily laden with freight, and several cars this side of Camden were left.—*Cincinnati Gazette.*

Central Ohio Railroad.—The annual election for directors of this company took place on the 25th August, at Zanesville, the following gentlemen were elected:

James Raguet, J. H Sullivan, George James, William Galigher, James L. Cox, S. R. Hosmer and H. J. Jewett, of Muskingum; D. W. Deshler, of Franklin; G. B. Wright and Thos. Blanchard, of Licking; John Hall, of Guernsey; and Nehemiah Wright and John Welch, of Belmont.

The number of shares of stock voted on was 20,041.

Greenville and Miami Railway.

The iron for the extension of the railway eleven miles west from Greenville to Union, (there to connect with the Indianapolis and Bellefontaine road,) has been purchased in New York, and is all to be delivered in Dayton in the month of September.—The graduation is more than half completed, and there seems to be no doubt that the work will be completed by the first of November next. The Bellefontaine and Indianapolis road is to be finished to the State line by the same time, and thus a connection will be formed between Cincinnati and Indianapolis by railway, which will enable passengers by this route to perform the trip between these two cities in eight hours. The railway from Terre Haute to Indianapolis is in full operation, and this connection will enable travellers to go from this city to Terre Haute by daylight. For the present season, at least, this route will be the shortest and

quickest between Cincinnati and St. Louis. It must command a very large travel.—*Cincinnati Gazette.*

American Railroad Journal.

Saturday, September 4, 1852.

Railroad Securities, and Real Estate Mortgages.

There is a great class possessed of wealth, who are incapacitated from employing it profitably, they have retired from active business, or their age and sex render such pursuits impossible; the necessity arises then for the investment of this capital. The elements most attractive in such investment are large returns and perfect safety, the two stand in relation with each other, and the lender desires if possible their union. With the old fashioned capitalists of the city of New York, it was, and is very popular to put out their money on bond and mortgage on improved and productive city property of an estimated value equal to twice the loan. The security here is real and tangible, the lot and lands are indestructible physically, and the prosperity of the great commercial metropolis in the eyes of the lender is probably equally safe. The house it is true is subject to dangers from the elements and civil tumults, but sometimes, an insurance clause in the mortgage deed secures the lender, and at all events there is the land. But in all loans the ability of the borrower must be taken into account, for this will give him the means to pay the interest regularly and promptly. Not only valuable but productive property is required to ensure this ability. A larger rate of interest was obtained than on the stocks of the general government or the richer states of the Union. These were the leading inducements which influenced New York capitalists of the last generation, to prefer to put money of their own or belonging to those for whom they were acting in any fiduciary capacity, out on bond and mortgage or improved real estate in the city of N. York. Now we think all these elements of safety, tangibility, and productiveness, are in an eminent degree united in railroad securities. The New-Yorker loaned money partly on the assurance of the continued prosperity of his city, but the railroad is valuable because of the fertility and agricultural wealth and resources of the country which gives that very city its trade. It would be impossible to run a line of railroad through the broad west at the present time, at any reasonable distance from a competing line without its proving profitable, even if it had to attract the population to itself that was to furnish its way passengers and business. The value of the railroad rests on a broader base than that of a city lot.

It possesses the element of reality—the graded structure of a railroad though assailable by the elements, would take centuries to reduce to such a state that a comparative trifling outlay would not restore it to its original condition, and its iron and wooden track though slowly destructible, is in the heaviest item, consumed, just in proportion to the amount of business which rolls over it. Tell the lender that the iron is wearing away so that in twenty years it must be replaced, and he knows at once that there is a traffic which makes his security as real as it possibly can be.

Productiveness is another element, growing directly out of value, houses in New York pay high rents, but the tenants sometimes run away without paying their quarterly instalments—the tenants of a seat in the cars pay their rent *in cash* and in advance. It is considered that a gross earning of 10 per cent. is a pretty good tenement interest on the gross value of house and lot, we have seen that the railroads now asking for these loans, are making more than double that return in the form of net earnings. Of course the expenses of the movement of the locomotives and cars must be first deducted, and the replacement of the iron and wooden superstructure, whether included in expenses or not, is but a small item in comparison of these large returns.

The legal remedies are ample and the property in the hands of the new proprietors will be as valuable as in any other. This is a contingency capitalists do not like to view, but a far less proportion of railroads, even the most unfortunate, have been sold under execution than houses and lots by decree of the Chancellor during the period when these N. Y. capitalists made their loans on real estate in this city. We just advert to these leading points to put the subject in a popular light. There are qualities of intrinsic value giving the railroad bond a preference in the eyes of business men, its passing with the ease almost of a bank bill from hand to hand, without the formality of a search to be instituted by a lawyer before the transfer could be effected, the ease with which it can be pledged for the purposes of a temporary loan need hardly be mentioned, they are obvious. The capitalists we have alluded to were exceedingly cautious and careful men, and we may be certain that if we have discovered any mode of investing money as safe as that they were willing to trust, we may go to sleep without any fears for the risk of principal or interest.

Missouri.

Pacific Railroad.—A railroad convention was recently held at Boonville, Mo., at which Gen. W. Shields of Lafayette, was appointed President; and Col. J. M. Ewing of Lafayette, Jordan O'Bryan and J. S. Bell of Cooper, and G. S. Chrisman of Saline county, Vice Presidents; B. C. Clark and B. E. Ferry of Cooper, and J. L. Hardiman of Saline, Secretaries.

A committee was appointed to prepare an address to the Pacific railroad company, which was adopted by the convention, as were resolutions to the effect, that, the location of the Pacific railroad, through the counties of Cole, Moniteau, Cooper, Saline, Lafayette and Jackson, making Jefferson city, the cities of Boonville, Lexington and Independence points upon said road, would accomplish the greatest amount of good to the greatest number of the inhabitants of the State, and pay to the stockholders a larger dividend than if located south of those counties. And that if the road is thus located, subscriptions to the amount of a million and a half could be obtained from the above mentioned counties and individuals along the line. Committees were also appointed to advance the main end proposed by the convention, and the change of route to Independence.

Louisiana.

New Orleans, Opelousas and Great Western R.R.—Messrs. Gibbs and Phelps, engineers of this road, arrived at Thibodeaux on the 9th August, and left on the 13th to locate the line between there and New Orleans. Contracts are to be advertised for the first of October, when the work on the road will be commenced.

Nashville and Louisville Railroad.

Sumner county, Tenn., has subscribed $300,000 to aid in building the above road.

South Carolina.

The Charlotte and South Carolina railroad is in such a state of forwardness that the cars are running over, and beyond the Catawba bridge for several miles.

The King's Mountain railroad is finished for 25 miles—the cars now running from Chesterville, one terminus, to Guthresville, which is only distant from Yorkville, the extreme terminus about 7 miles.

Wisconsin.

Southern Wisconsin Railroad.—A meeting was held at Monroe, (Green Co.) on the 30 ult., to promote the building of the railroad from Milton, Rock Co., on the M. and M. K., through Janesville and Green, Lafayette and Grant Cos., to the Mississippi, at Dubuque. Addresses were made by Messrs. Budd, Noggle, Earnest and Sleeper.

Tennessee.

Knoxville, Cumberland Gap and Lexington Railroad.—The commissioners to receive subscriptions or this road, have been notified to attend a meeting at Rutledge, Tenn., on the 23d Aug., to consult and make arrangements for carrying out the provisions of the charter.

A road is contemplated from Chattanooga, Tenn., to meet the East Tennessee and Georgia road, and pass through Harrison.

Fox River Valley Railroad.

The commissioners mentioned in the act of incorporation of this road, met, pursuant to public notice, at Elgin on the 24th August, for the purpose of effecting an organization. They were met by a large number of the citizens of the Fox river valley, including several prominent men and capitalists of Wisconsin, residing as far north as Waukesha, 18 miles west of Milwaukee. The amount of stock required by the charter, $25,000, was promptly subscribed, and about $10,000 over. This road branches from the Galena road at Elgin, running along the valley of the Fox river, thence to Fond du Lac.—*Chicago Tribune.*

Knoxville and Charleston Railroad.

The county court of Blount county, has authorized a subscription of $200,000 to the stock of this road. The proposition is to be submitted to the people of the county for ratification.

Cleveland Water Works.

It is intended to build a water works at Cleveland, with a reservoir which has a capacity to hold 10 000.000 gallons, and to furnish for daily use 3,000,000 gallons. The water will be brought from the lake by engines superior to those now in use in America.—*Detroit Free Press.*

Illinois.

Springfield and Terre Haute Railroad Company.—The incorporators of the above company met at Charleston, Illinois, on the 18th August, pursuant to notice. Gov. French in the chair. A committee of five—Messrs. Brough, Rose, McGregor, Young and Ripley—was appointed to open books of subscription in Springfield, Terre Haute, New York city, and at such places on the line as they may see proper, after thirty day's notice; and on the completion of subscription of $500,000, they agree to call a meeting of stockholders and elect directors, and organize the company. Several speeches were made and a spirit of harmony and zeal for the work pervaded the meeting.—*Alton Telegraph.*

New York.

Erie Railroad.—The receipts of the Erie railroad for the month of August, 1852, were as follows:

From passengers and mail.	$164,500 30
From freight	149,101 41
	313,601 71
Receipts in August, 1851	263,964 12
Increase	$49,637 59

Mobile and Ohio Railroad.

Capt. Childe, the chief engineer and general agent of this work, has started for Mississippi, for the purpose of opening the proposals and closing the contracts for its construction as far as the South line of Pontotoc county, a distance of 267 miles from Mobile. He began this service at Quitman on Monday last, and will conclude it at Okolona on the 30th of September. Thus, by that time, more than half of this great work will be put in process for the speediest completion.

The Mobile Register says the residue of the route to the Ohio river, is 250 miles, and this we are assured will be let out within twelve months. The subscriptions for it are already taken up, and the prospect is most encouraging that they will be completed without delay or difficulty.

Railroad Investments.

In our article on this subject of last week, an error crept into the summary of earnings of the roads taken as examples. After the table of the gross and net earnings of the Madison and Indianapolis and other roads. The sentence should read—"the average yearly gross earnings per mile of the above roads were $4,467, and the net earnings $2,300."

Stock and Money Market.

The simple oscillation up or down of the fancy stocks is at best of temporary moment even to those most interested, and we do not know that the aspect of the stock market is in any other respect noticeable. No change has been effected in the sound investment stocks, except that the demand keeps them out of the market almost to an injurious degree if such a thing can be conceived. Their slow appreciation founded either on causes inherent in each company, or in monetary relations, will hardly be felt from week to week. The money market has recovered from the slight stringency noticed last week, and the most abounding prosperity prevails in every department.

Thursday, 26th August.—The wave of depression appeared to have about reached its minimum, and a slight rise was generally anticipated, perhaps to be carried forward with the activity incident to the commencement of the general business season.—Large contracts for the delivery of stocks ahead have been made during the week just passed.—Sales of Erie stock were made to day to the amount of 3,500 shares, closing at 86¼, a slight advance. Reading railroad which had gone up last week, today fell, closing at 93¼. Harlem railroad 71¼ nearly 2,000 shares sold. Stonington 58½. Norwich and Worcester 53½. Hudson River railroad 69.—Stocks for investment were steady, one or two fell off. Madison and Ind. sold at 108, and Michigan Central at 110. North. Ind. 121. Roch. and Syr. 122. Mr. Draper sold $40,000 in the Troy and Rutland railroad at 52½ a 48, and $4,000 of the Rutland and Whitehall at 81.

Friday, 27th August—The fluctuating stocks were stationary with rather a rising tendency though it was but slight and the sales were not heavy. Erie rose and fell, closing at 86¼. Reading 93½. Harlem 72. Stonington 58½. Norwich and Worcester 53½. Among the sales of premium railroads we notice New York and New Haven 114. Rochester and Niag. Falls 109½. Mich. Southern 121½. Northern Indiana 120½. Michigan Central 110.

Saturday, 28th August.—The improvement in stocks was more marked, and considerable activity prevailed. Erie, 2000 shares sold, closed at 86¼. Reading 94½. Harlem 72½. Nor. and Worcester 54. Stonington 59. The investment stocks were firm.

Monday, 30th August.—The rise is slower than he previous one. Erie closed at the same mark of 86¼, after selling during the day at 87. Reading was unchanged. Harlem closed at 72½. Norwich and Worcester 54½. Stonington 59½. The investment stocks are in fair request. Madison and Ind. 107½. Michigan Central 111. Michigan Southern 121½. Northern Indiana 120. Rochester and Syracuse 122.

Tuesday, 31st August.—The buoyancy of the stock market increases, and loans on call are easily procured both from the banks and individuals. Erie closed at 87. Reading at 94. Harlem 72½. Norwich and Worcester 55. Stonington 60½. L. Island 23½. Hudson River 69½; a rise, as will be seen, of from one-fourth to one per cent on the stocks most dealt in. The coal companies improved and the investment stocks were firm, though but little comparatively was doing in them.

Wednesday, 1st September.—The transactions of the stock market to-day, though marked by buoyancy in the morning fell back at the close, in almost all the stocks to the price of the day previous. Erie R. R. closed at 87. Harlem 73. Norwich and Worcester 54½. Stonington 60½. Hudson railroad 69½. Long Island sold largely, closing at 23½. A large sale took place in Pennsylvania 5's at 96½. Government and state stocks are very firm. We notice sales of Mich. central at 113, a recovery from its slight fall. Roch. & Syracuse 122½. Madison and Indiana 107½. Utica and Schenectady 145.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, SEPTEMBER 4, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¾
U. S. 6's, 1856	108¼
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118½
U. S. 6's, 1868	118½
U. S. 6's, 1868—coupon	119
Indiana 5's	91½
Indiana 2½	52½
" Canal loan 6's	95½
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	81
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	108
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	108½
New York 5½'s, 1865	109
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	105½
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	105½
Ohio 6's, 1860	109
Ohio 6's, 1870	115
Ohio 6's, 1875	116½
Ohio 5's, 1865	105
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1880	107
Virginia 6's, 1886	110½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	103
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	110
New York 5's, 1858-'60	103
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	98½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	88½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 2.	Aug. 26.
Albany and Schenectady	107	107
Boston and Maine	106½	108
Boston and Lowell	—	109½
Boston and Worcester	104	106
Boston and Providence	89	90
Baltimore and Ohio	82½	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	128	130
Eastern	96	98
Erie	86½	86½
Fall River	—	—
Fitchburgh	103	105
Georgia	—	—
Georgia Central	—	—
Harlem	72½	72
" preferred	111½	111
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	69½	69
Little Miami	—	—
Long Island	22½	22
Mad River	—	99
Madison and Indianapolis	112½	110
Michigan Central	113	111½
Michigan Southern	121	120½
New York and New Haven	114	114½
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	56	54½
Ogdensburgh	26	26½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	97½
Richmond and Petersburg	35	35
Reading	94½	94½
Rochester and Syracuse	121½	122
Stonington	62	59½
South Carolina	—	122½
Syracuse and Utica	135	135
Taunton Branch	115	115
Utica and Schenectady	140	140
Vermont Central	14½	14½
Vermont and Massachusetts	20	23
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

The World's Fair in New York.

The second day of May, 1853, will be as memorable for America, as was May the first, 1851, for Europe and the world. For this enterprise we have all along predicted the most certain success.

We have much pleasure to announce, from the facts now brought to public notice by the enterprising Board of Directors—into whose hands by the company interested in the New York Crystal Palace has been judiciously placed the management of the concern, the positive certainty—as far as anything human can be certain—that this Exhibition will be magnificently carried out. Under the most auspicious generosity of a State charter, and city aid, all the necessary funds have long since been subscribed and *paid up*, the plan has been decided on, and by the time these sheets meet the eyes of our readers, the building itself will have been begun. As Americans we are proud of this enterprise, and as Americans we will endow it with the rich and varied products of our magnificent domain.

The New York Crystal Palace will be the finest architectural specimen, as it will be the largest building—with *perhaps* the exception of the Capitol—in America, and will very favorably compare with the most elegant structures of Europe. Without being so imposing or so large as its London prototype, whoever will see the Crystal Palace when finished in New York, who has already seen that of London, will undoubtedly, as a thing of beauty whereon the eye can rest with untired delight, so prefer *the* Palace of the New World to that of Europe.

The successful competitors, Messrs. Carstensen & Gildmeister, are architects of this city, but with European fame. The plan of the building is a Greek Cross with a Dome over the Intersection. Each diameter of the Cross is 365 feet long and 149 feet broad. The height of the dome is 130 feet. The building will be of iron and glass, and will cost $200,000.

Already have European nations expressed their intention of sending their products of invention, of manufacture and of art. In the progress of invention, manufacture and art in America, there exists great jealousy on the part of Europe, and we doubt not but she will do her best to silence our pretensions in this respect. And the excuse will now be wanting to America, which was offered by her in London, that she had no such special interest as to induce her to put forth sufficient energy to show her vast productions and true capabilities. But this insinuation we consider unjust.

It is in the *nature of things* that the American people will as a nation rally to the support of what must now be considered as *their* undertaking—the Crystal Palace in New York.

What vast crowds of the stirring and enterprising people of this continent and nation, will gather to witness this grand structure, with its stored collects of world-wide production. How magnificent the idea of the great progress of our country, that on this same spot, not many hundred years ago, the lawless savage roamed untamed and free!

In this undertaking, no class of persons are more deeply interested than those connected with our railroads; and we believe some united and efficient movement will be made on the part of the directors of the various roads to assist and facilitate the movement. The impetus given to travel must be immense. During the year 1853, railroads and hotels will reap a rich harvest.

If no movement has yet been made, we recommend this matter to the attention of railway directors, ere it be too late to secure unanimity, efficiency and vigorous action. There is not a railroad throughout the country that will not be more or less directly or indirectly benefitted by the occasion of this exhibition.

We have seen with much pleasure the Circular of C. Buschek, Esq., the European Agent in London, and augur for his efforts very high success.

We are also pleased to notice the appointment of James Whitman, Esq., at the last meeting of the board, as a Special Agent to Canada and the British North American Provinces, the sentiments of whose commission we most heartily endorse, more particularly as follows:

"You will put yourself in personal communication with all those Functionaries of Her Majesty's Government in Canada, to whom the purposes of your mission and the sanction of this association, added to your personal claims, may procure for you access; and you will do your utmost to impress them favorably with the general character of this association, its objects, and the consequences that may be expected from its success. These it is obvious must be an enlargement of the scope of knowledge, and an expansion of the sphere of good will, through interchange of ideas and a reciprocation of friendly offices, *which it is thought no other one human device is better calculated to produce.*"

Canada is deeply interested in the success of this Exhibition. Every year the round of travel from this city as a centre, is increasing, over her noble lakes and down her magnificent rivers, unveiling her vast and rich resources. Her railway enterprises are about commencing. She has fields rich with historic association for the traveller's interest.

We do not doubt but that Canada will fully sustain in New York the high reputation she has already won at the London Exhibition.

Crowds of European visitors to New York will doubtless follow up their desire to inspect the beauties and wonders of America, by coursing through that noble Province, to visit the resting place of Montcalm and Wolfe, to see Montmorency and Niagara, Toronto, Montreal and Quebec.

Finally, we advise our manufacturers, all our local organisations of State Fairs, Mechanics' Institutes, literary, scientific and other societies, who can in any way contribute to the honor and renown of their country, to bestir and put themselves in immediate communication with the "Association for the Exhibition of the Industry of all Nations," through their Secretary, Wm. Whetten, Esq., at the office of the Association, No. 53 Broadway.

Illinois.

Danville and Paris Railroad.—Albert S. White writes to the Lafayette Journal that a project has been started to connect the L. E. and Wabash R. R. with the Alton and Terre Haute road by a road from Danville to Paris. This route is only 34 miles long, and leads through the wealthiest and most fertile portion of the Grand Prairie, and there is not a single stream to cross. The road from Paris to Alton is under contract, and will probably be finished as soon as it is wanted by the eastern road. This will furnish a shorter connection with St. Louis than the Springfield route. Both connections will be secured.

Georgia.

Georgia State Railroad.—The receipts of the Western and Atlantic railroad for the five months ending 30th June, were $188,849 53; and the expenditures $99,393 06.

Indiana.

Jeffersonville Railroad.—The last annual report of the president and directors of this company under date of 17th May, 1852, gives promise of its immediate completion. The graduation of the road has been carried to Columbus, 66 miles, and with probably a less expenditure of money, than an equal distance on any other road in the country.

On the first of March, 1851, bonds of the company to the amount of $300,000 were issued, bearing seven per cent interest, payable semi-annually, in the city of New York, and to mature in ten years from that date; the payment is secured by a mortgage on the road. Part of these bonds were used in the purchase of locomotives, wheels, and axles, amounting to about $75,000. A small portion of the bonds have been retained to meet contracts at home, and are in the hands of the Treasurer of the company. The remainder of the bonds have been sold at different periods during the year, on as good terms and for as good prices, it is believed, as the bonds of any new work in this section of the Union. These bonds, though secured by mortgage on the road, are *not* convertible into stock, as are those of most companies. The convertible clause in the bonds of a road, promising good dividends, enhances their market value at least five per cent. and adds to the facility of making sales; but your bonds *without that privilege*, have sold as high as the convertible bonds of other roads, and at better rates than most of them.

Some delays have been experienced in the receipt of the iron shipped to New Orleans, in consequence of impediments in the navigation. It was however in process of being laid at the date of the report. The superstructure and bridges were going forward, and the expectation was entertained that the whole line would be completed on the 1st instant. Forty-five miles being then in actual operation.

A failure in negotiations to secure a transit over the Madison and Indianapolis road, under favorable terms, made it necessary to provide for the construction of an independent line, between Columbus and Edinburg, or submit to the probable expense and delay of *two transhipments* of freights, in a distance of eleven miles. To meet this exigency, the roadway between those places, is now being graded; the iron is provided for, and it is intended to have the road completed early the approaching fall, so that the trains will run from Jeffersonville to Knightstown, a distance of 120 miles, during the month of October next.

Seven locomotives are already on the road, and two more have been contracted for, but the rolling stock is yet inadequate to meet the business demands which will be presented on the completion of the road to Edinburg. So far as the road is now supplied with cars, they are of a class not inferior to those of any road in the West, and will, we have no doubt, in their use, be found far more economical and convenient than the cars heretofore ordinarily used on other roads in the State.

Of the subscriptions of the city of Jeffersonville, the portion to be paid by taxation was promptly met, and the residue in bonds was sold at fair rates and applied to the purchase of iron.

The subscription of $200,000 by the city of Louisville, has lately been taken up by the city, and bonds of $1,000, each bearing six per cent. interest, payable semi-annually, in the city of New York, to mature in thirty years, from the first of May, 1852, have been delivered to the company, in discharge of that subscription; of which, $50,000 have

within a few days past been sold at a small discount from their face, and it is expected that the residue will sell at equally good rates.

Although the rains of the last spring were exceedingly heavy, very little damage was done the road, as the cost for repairs was light. Since the first locomotive was placed on the road, no serious accident has occurred. The report concludes by congratulating the stockholders and friends of the road on the success which has attended it, and that its completion at an early day is now looked upon *by all* as a "fixed fact."

The report of the Chief Engineer, B. F. Marsh, Esq., presents the following details of the principal points included in that of the President, Wm. G. Armstrong, Esq. The graduation is completed between Jeffersonville and Columbus. The bridges and culverts are finished as far as Rockford; two piers for the Rockford bridge were completed at the date of the report, May 4th, and the remainder was expected to be finished during the summer. The masonry of the Columbus bridge was complete. Cross ties of hewed white oak had been furnished for the track to Columbus, and iron delivered for 59 miles. Fifteen miles of the road between Jeffersonville and Vienna had been ballasted. An engine house and smith and car shops had been built at Jeffersonville, and a freight depot 60 by 405 feet was in progress, to be completed in time to accommodate the business of the road.

The location of the extension between Columbus and Edinburgh had been made, a distance of 11 miles, foe which the estimated cost was $100,000. The total cost of the road from Jeffersonville to Columbus, up to the time of the report, was $575,679 32, and the additional amount required to complete and equip it, $173,763 68—making the total cost $749,443. The report of the Treasurer, J. H. McCampbell, exhibits the liabilities of the company at $125,412 85, and the means at $369,816 53—leaving an excess of means of $244,403 68.

Boston Locomotives.

The Boston Locomotive works, Harrison avenue, have just completed six powerful locomotives for the Terre Haute and Richmond railroad. They are named the "Dublin Poney," "Hoosier Poney," "Illinois," "Boston," "Kentucky," and "Ohio," and will be taken to Buffalo and thence across the lakes.

One of the locomotives built at Wilmarth's Union Works, South Boston, for the Hudson R. railroad, attained on Saturdav last, probably the greatest speed ever made in this country. Its running time from New York to Albany was *two hours and fifty-seven minutes*, a speed of about 53 miles per hour.

At Souther's Globe Works, south Boston, a fine twenty ton locomotive has just been completed for the Jacksonville and Indiana railroad. It is called the "Bartholomew," and is a first class engine.

At the same establishment there has just been built a lilliput engine, called the "Yankee" weighing but six tons. It is constructed in the most simple manner possible, with water tanks hung under the boiler, between the drivers which are but two feet in diameter. It is intended for the Great Western railroad, Canada, leading from Niagara Falls to Detroit, and is the first locomotive placed on that road. There are now four large excavators used in constructing that road, and another is about to be built at the Globe Works. This lilliput is intended as a gravel engine to remove what the excavators throw out.

Kentucky.

Louisville and Frankfort Railroad.—The fourth annual report of the president and directors of this road, submitted to the stockholders at their annual meeting, July 5th, 1852, presents the condition of the work.

The capital stock is made up of a subscription of the city of Louisville of $510,875, paid by taxation on the property of the citizens during the years 1848, '49, and '50. $300,000 paid in city bonds on time, and $42,812 50, individual subscriptions, to this to be added $51,443 42 interest on the payments for stock, making in all $905,130 92.

To obtain additional funds to complete the road, the company executed a deed of trust to secure the payment of 400 bonds of $1000 each, of these 172 have been sold, realizing $145,529; with the proceeds of the remainder it is expected to pay the demandable debt, and also debts contracted for real estate purchased for depots etc. The road is now in good running order, and the rolling stock sufficient to do double the business offering. The only delay is at the Frankfort bridge, which is crossed by a light engine of six tons, causing very little inconvenience in the present state of business. During the past season, the unfinished state of the road the excessive cold of the winter, and the drought, operated very unfavorably on the interests of the road, but it gave sufficient evidence that the road will eventually prove very beneficial to the country and profitable to the stockholders.

The early completion of the branch through Shelbyville to Harrodsburg, is relied on as a certain means of adding materially to the profits. The extension of the road from Lexington to the mouth of Big Sandy to unite with the Virginia roads, and the Baltimore and Ohio railroad at Parkersburg, the construction of the road from Louisville to Nashville, and that of a road from Louisville to Covington, either as a distinct road or a branch of the Louisville and Frankfort, are considered a guarantee in the future that the latter road must form a link in a grand railroad route uniting the south and west with the east.

The propositions that the company should take stock in the Shelbyville company, or that the Shelbyville company should purchase a portion of the city stock in the L. and F. Co. to enable the city to subscribe to the Shelbyville are submitted to the stockholders.

The directors recommend the payment of a dividend in stock out of the profits applied to the cost of the road, amounting to $36,307 80, and increasing the stock of the company to $941,438 72. If the bonds of the company can be profitably disposed of, the managers intend to make a dividend of six per cent of the future profits and constitute the surplus a sinking fund to pay the debts contracted for depot grounds, etc., and the bonds of the company.

The report of the engineer and superintendent of the road, Charles N. Warren, Esq., exhibits the construction and working of the road for the year ending June 30tL. The total receipts since the first locomotive was put on the track have been $222,786 18, and the total expenses $130,338 64, including the hauling of iron and other material. Within the year, the road has been connected with the Lexington road, side tracks laid at Frankfort, Pleasureville and Smithfield, water stations put up along the line, the depot at Louisville built, and engine houses put up at that place and Frankfort. The passenger business for the present June has exceeded that of the corresponding month in 1851, by 16 per cent. At this rate of increase the receipts for the coming year will be $195,000. There are 10 eight wheeled and 1 six wheeled locomotive, on the road, two freight engines of ten wheels are to be delivered during the month of Sept. The total mileage of the engines was 135,000 miles, and they averaged 18,000 miles each.

The receipts per mile run was	$1 24.4
Expenses	73.4
" deducting items above mentioned..	61.1

The total cost of the road including interest in cash and stock up to the 1st of July is $1,358,764,-43.

The receipts for the year are:

	Passengeas.	Freight.	Total.
July	$7,015 10	$1,072 92	$8,088 02
August	7,694 55	3,192 21	10,886 76
September	10,692 10	4,702 43	15,394 53
October	9,281 20	4,432 91	13,714 11
November	8,540 20	9,660 72	18 201 22
December	8,844 20	7,606 51	16,450 71
January	6,315 62	4,086 18	10,401 80
February	6,956 60	6,168 38	13,124 98
March	8,770 05	6,751 44	15,521 49
April	7,970 70	6,278 66	14,249 36
May	8,524 45	4,862 35	13,386 80
June	8,366 35	4,588 10	12,954 45
Total	$99,971 42	$63,402 81	$162,374 22
Mail for the year			5,546 02
Total			$167,920 25
Expenses			$99,134 19
Less one half for repairs	$12 600 00		
Wood on hand.	4,000 00		
		16,600 00	
			81,534 19
Balance			$85,386 06

Mr Warren's report is accompanied with his resignation of his office as chief engineer, to take effect on the 5th July, 1852.

The Tunnel Machine.

The Tunnel machine, at Hoosac mountain, is suspended for repairs. The knives, or cutters, proved to be too thin and frail, for the quartz and flint found in the mica slate, of which the mountain is composed. New knives will be substituted in the course of a few weeks.

The machine has not yet so far cut into the mountain, as to form a complete circle. The Springfield Republican says that it cuts from a 16th to an 8th of an inch at each revolution, and makes five or six revolutions a minute. The core is blasted without removing the machine, which is protected by a wood covering. The wood work, however, suffers, and requires constant repairing.

Georgia.

South Western Railroad.—This company has recently declared a dividend of 8 dollars per share on the operations of the last twelve months. This is the first year's business and on a road of fifty miles in length, gives evidence of the ability of the officers and the resources of the country through which the road passes. The company in concert with the citizens of Sumter county have determined not to wait for the tardy assistance of the State, but extend the road at once to the town of Americus in Sumter county. A contract has been already entered into for the building of the road to this point, and its completion is only dependent on a subscription of $75,000 from the citizens of Sumter.

Kentucky.

Louisville and Covington Railroad.—The survey of this route was commenced at Louisville on the 17th August, under the direction of Mr. E. F. Lee. It is intended to make the line as straight as possible, and to push it through without delay.

Railroad Corporations, vs. Hack Drivers.

A case has recently been tried in Boston, in which one of the depot masters of the Old Colony railroad, complained of an assault committed on him by a hack driver, while engaged in enforcing a regulation of the company, excluding all hackmen from the depot, except those whom the company had expressly authorised to enter. The right of the company to make such a rule was brought in question on the trial.

F. B. Crowninshield, Esq., president of the corporation, appeared for the prosecution, and claimed the right of making the regulation complained of. The court was of opinion that the right to make the regulation could not be questioned, and believing that an assault had been proved, fined the hackman $10 and costs.

North Carolina.

Wilmington and Raleigh Railroad.—The receipts of this road from November 20th, 1851, to August 5th, 1852, have been.

Through passengers.....	21,709	$195,509 68
Way "	39,085	75,350 61
Freight.....		3,348 93
Total receipts for 8¼ months...		$364,209 22

To Contractors.

PROPOSALS will be received at the office of the Alabama and Mississippi Rivers Railroad Company, in Uniontown, Ala., until the first of October next, for the Graduation, Masonry, Bridging and Cross-ties of said road, from the west bank of Valley Creek to Uniontown, 28 sections about one mile each. Bids proposing the entire payment, or a percentage thereof, in the stock of the road, will receive the most favorable consideration. Specifications can be seen at the office of the company in Uniontown, and also at the office of the Chief Engineer in Selma, Ala. J. J. DRAKE, Secr'y.

Uniontown, Ala., August 16, 1852. 4t*

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work.

LEWIS TROOST,
Chief Engineer.

New York, August 3d, 1852. 5t32

A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.
THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

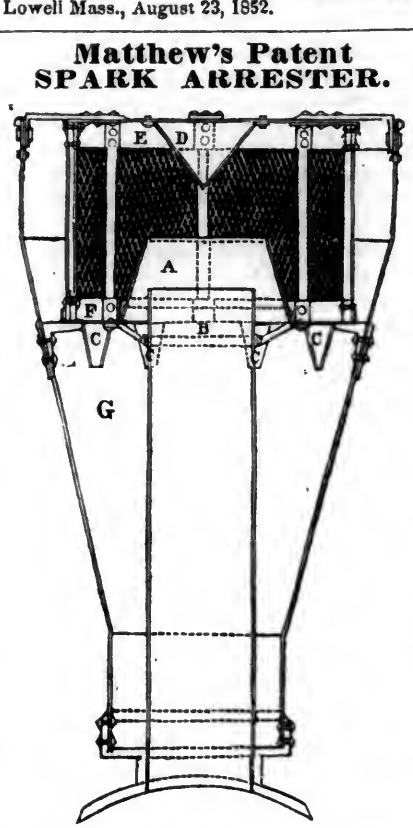
MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M W. MASON, Supt. of Machinery.

To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

Mr. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours. very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs. Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co., Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer and Patentee, sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.

2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.

3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.

4. It must be finished in three holes, or nearly as hard as spring-wire.

5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.

6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.

7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.

8. The wire must be drawn on blocks of no less than 2 feet diameter.

9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.

10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.

11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.

12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.

13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.

14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.

15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.

16 Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.

17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"

18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

Ohio and Pennsylvania R. R.

The only Western Railroad running out from Pittsburg.

FREE FROM ALL THE DELAYS OF THE OHIO RIVER.

TO CLEVELAND, COLUMBUS, CINCINNATI, TOLEDO, DETROIT, CHICAGO, MILWAUKEE, &c.

Running in connection with the Cleveland and Pittsburg Railroad from Alliance to Cleveland.

RUNNING DIRECT FROM PITTSBURG TO CANTON, MASSILLON AND WOOSTER.

AND THROUGH IN A DAY TO MANSFIELD, BY STAGES FROM WOOSTER.

FIVE Trains start from Pittsburg daily, (Sundays excepted).

MAIL TRAIN

Leaves Pittsburg at 8 30 a.m. Passengers dine at Alliance at 12 30 p.m., and reach Wooster at 5 p.m.—Fare to Wooster, $3 75.

EXPRESS TRAIN

For Cleveland leaves Pittsburg at 11 a.m. Passengers dine at Alliance at 2 30 p.m., and reach Cleveland at 5 40 p.m., in time for the evening boats on Lake Erie. This train stops at Rochester, New Brighton, Enon, Columbiana and Salem, and at no other station between Pittsburg and Alliance.

Through from Pittsburg to Cleveland, 140 miles, in about SIX AND A HALF HOURS. Fare $4.—Passengers can take this train and be in Dunkirk the next morning, or Chicago in the evening of the next day.

The Mail Train coming eastward, leaves Wooster at 9 30 a.m., dines at Alliance at 12 30 p.m., connects there with the morning train which leaves Cleveland at 10 a.m., and reaches Pittsburg at 5 p.m., connecting with the evening train on the Pennsylvania Railroad for Philadelphia and Baltimore at 8 p.m., and also with the West Newton Steamboat route.

THE EXPRESS TRAIN.

Returning leaves Alliance at 8 30 p.m., and reaches Pittsburg at 12 at night By this train passengers come from Cincinnati to Pittsburg in one day of less than 18 hours, instead of several days by steamboats on the Ohio river. Fare from Cincinnati to Pittsburg $10. Passengers leaving Cincinnati at 6 15 a.m., and Cleveland 5 40 p.m, reach Pittsburg the same evening.

Stage lines run in connection with the road from Enon to New Castle, Mercer and Erie; from Salem, on the plank road, to Warren, and from Wooster to Mansfield.

THE FREIGHT TRAIN.

Leaves Pittsburg at 4 30 a.m., and freight is carried through in a day to Cleveland and to Wooster.

☞ The New Brighton Accommodation Train leaves Pittsburg at 10 a.m. and 5 30 p.m., and New Brighton at 7 a.m. and 1 p.m., stopping at intermediate stations.

Excursion Tickets, good for two days, are sold between Pittsburg, Rochester and New Brighton.

Quarterly tickets are sold at low rates, and tickets by the package to some of the stations.

Excursion parties are accommodated at reasonable rates.

The trains do not run on Sunday.

Omnibuses run in connection with the trains to and from the station on Federal street.

For tickets apply at the Federal Street Station of the Ohio and Pennsylvania Railroad, to

GEORGE PARKIN, Ticket Agent,
or to J. MESKIMEN,
Monongahela House, Pittsburg.

Pittsburg, August 21, 1852.

Notice to Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Marietta and Cincinnati Railroad, at Point Harmar, up to the 8th of September, inclusive, for the Graduation, Masonry and Bridging of 70 miles of this road, extending from the East end of the present contract in Vinton county to Marietta. This work is well worthy the attention of Contractors. There will be about 2000 feet of Tunnelling, with several deep cuts and high embankments. The line will be ready for examination eight or ten days prior to the day of letting. Plans, profiles and specifications will be found at the Engineer's office in Athens and Harmar, and all necessary information given upon the line of the road by the Resident Engineers.

Separate proposals will be received for the Masonry and Superstructure of the Bridge across the Muskingum at Marietta—this will be about 600 feet long and be furnished with a draw of 50 feet span.

W. P. CUTLER, President.
A. KENNEDY, Engineer.

Engineer's Office, M. & C. R. R.,
Chillicothe, July 16, 1852.

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August	15th—At	Quitman, for line in Clarke County.
"	25th—At	Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September	5th—At	Macon, for line in Noxubee County.
"	15th—At	Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
"	25th—At	Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
"	30th—At	Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south.

JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th. 1852.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

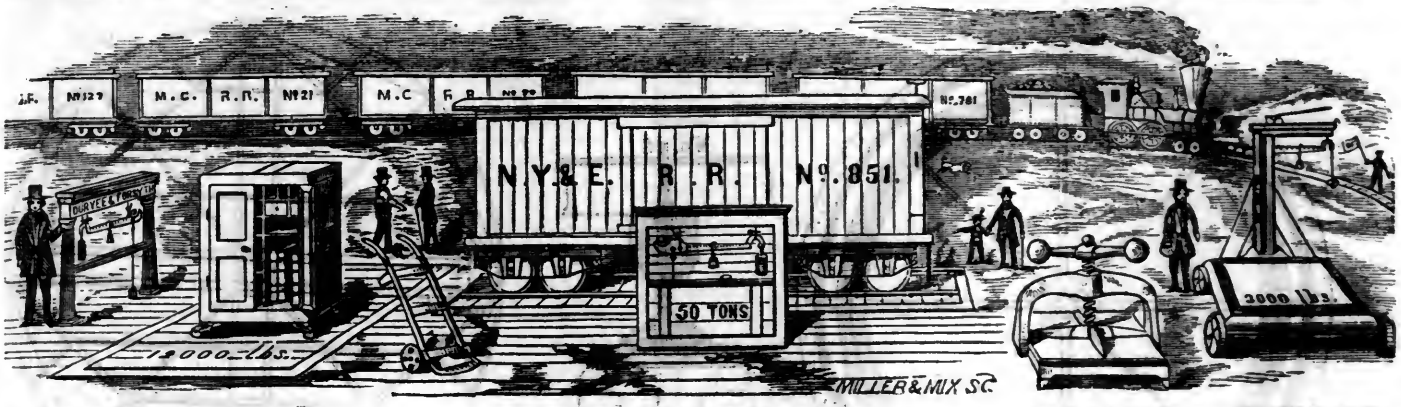
P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,
31st July. 1m

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	" Chicago, Ill.
Crawford & Reynolds,	" Cleveland, Ohio.
Joseph E. Elder,	" St. Louis, Mo.
Byram, Miller & Shreve,	" Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

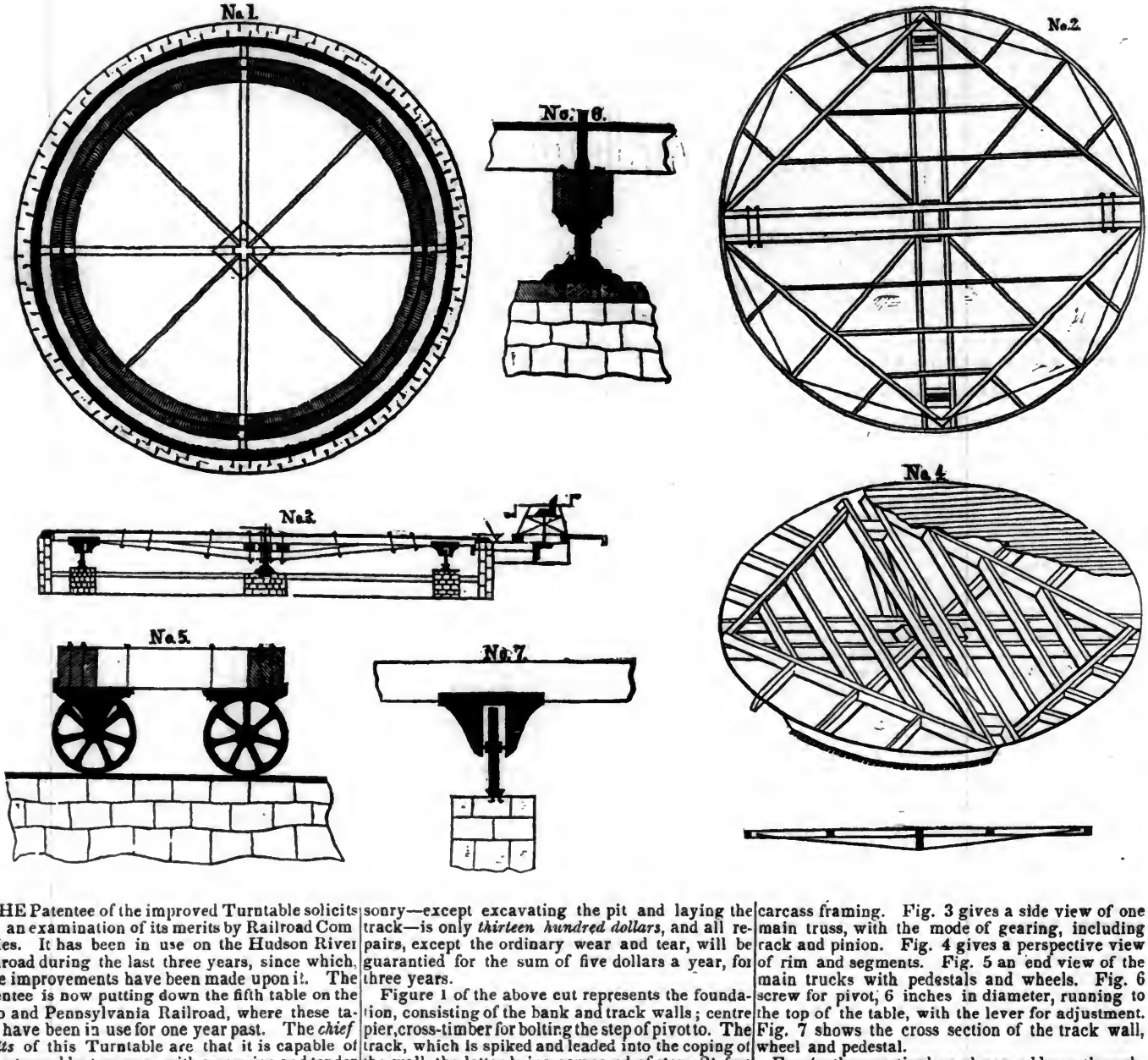
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co., 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.

 The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JNE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson.,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 37] SATURDAY, SEPTEMBER 11, 1852. [WHOLE No. 856. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Marietta and Cincinnati Railroad.....577
Atlantic and St. Lawrence Railroad.....578
Suspension Bridge at Niagara Falls.....578
Ohio Railroads.....587, 580
Texas Internal Improvement Convention.....580
New Crystal Palace in London.....582
New Orleans and Jackson Railroad.....582
Union Depot at Indianapolis.....583
Indiana and Bellefontaine Railroad.....583
Buffalo and New York Railroad.....583
Bangor and Lincoln Railroad.....583
South Carolina Railroad.....583
Comparative Safety of Railroads.....584
Stock and Money Market.....585
South Western Georgia Railroad.....586
Maryland Mining Company.....586
Projected Roads in Ohio.....586
Railroads in Illinois.....587
Railroads in Missouri.....587
Baltimore and Frederick Railroad.....587
Lebanon Springs Railroad.....587
Baltimore and Susquehanna Railroad.....587
East Tennessee and Virginia Railroad.....587

American Railroad Journal.

Saturday, September 11, 1852.

Ohio.

Marietta and Cincinnati Railroad.—The second annual report of the President and directors of this company, submitted 18th August, 1852, states that since the last annual meeting, when contracts had been put out for the grading, masonry, and bridging of 33 miles of the road, the construction of the line eastward to the coal measures of Vinton and Jackson counties, and westward to the intersection with the Hillsborough and Cincinnati road, has been awarded to Messrs. Cushing, Wood & Co.—These gentlemen were giving every satisfaction and rapidly preparing the line for the iron.

The total expenditure up to 1st August including engineering, is, $351.482 43. The funds of the Co. are $850,000, and the road bed will be prepared in readiness for the iron without any indebtedness on the part of the company, being incurred.

8,000 tons of compound rail, 75 lbs. to the yard, have been contracted for, to be delivered in New York next spring. This iron has been purchased at low rates, and is to be paid for in the mortgage bonds of the company. A locomotive for the transportation of the earth on the heavy embankments, near Chillicothe, and iron for a track have already been purchased. Contracts for cross ties, at a low rate, have also been made for about half the track.

The surveys from the termination of the present lettings, to Marietta, are sufficiently advanced to justify a location, and proposals from contractors for grading, etc., were to be received up to the 8th inst. A line has also been surveyed to Belpre connecting with the Northwestern Virginia, railroad at Parkersburgh, and a mile and a half shorter than the line previously run by the Hocking Valley, and avoiding the short curves and other difficulties of that route. By this line the distance from Cincinnati to Belpre will be within 178 miles.

The citizens of Wheeling, under authority granted by the State of Virginia, have by vote authorized their City Council to subscribe $250,000 to the capital stock. Under the provisions of the general railroad law of Ohio authorising an increase in the amount of capital stock, not to exceed the amount of the original stock, the directors recommend, that authority be given by the stockholders, for filing the proper certificate with the Auditor of State adding $3,000,000 to the present capital, making it in all $6,000,000.

The report next enumerates the connecting lines of the Marietta and Cincinnati railroad, which, when completed, will form the grand *Southwestern System.* Among these are the Baltimore and Ohio railroad, and the North Western, the Pennsylvania Central, and the Hempfield roads, and the Ohio and Mississippi, securing a simultaneous opening between St. Louis, and Cincinnati, with the completion of the Marietta and Cincinnati railroad.—The citizens of Dayton propose opening a road connecting at Leesburg, and a thorough organization may soon be expected under the charter of the Dayton, Xenia and Belpre Co. Coal now costs in Dayton 20 cents a bushel, but with a railroad of 100 miles Dayton can be supplied at less than 7 cents, the difference in price for 2,000,000 bushels, a little over 2 years supply, would yield $260,000. The Gallipolis, Jackson and Chillicothe railroad, have recently organized, and will intersect with the M. and C. railroad upon the portion already under contract. Through this channel a direct communication will be secured by the Central railway of Virginia to Norfolk and Richmond, nearly simultaneously with those to Baltimore and Philadelphia.—The Scioto and Hocking Valley gives a communication to the city of Portsmouth. The directors look forward to a speedy connection with the railway system of Kentucky centering at Lexington, and having its outlet at Maysville, and with the continuation of the same trunk line to Nashville and the still longer system concentrating there.

COAL BUSINESS.

It is ascertained that an arrangement may be effected with the Hillsboro' and Little Miami roads, by which the business of our line, may pass into the city of Cincinnati upon fair and equitable terms, leaving the immediate prosecution of the road under the charter into the city, entirely at our own discretion.

The extensive arrangements made by the Little Miami company by way of depot grounds, and the very liberal spirit manifested, in extending facilities to this company for the use of track and grounds, may well quiet any apprehensions on the score of city accommodations for our business.

The most important item in that business, will be the delivery of coal.

At the distance of 112 miles from Cincinnati, Cannel coal, said to be ten feet in thickness, as well as that quality described by Prof. Mather, as being "peculiarly adapted for the manufacture of iron, (without the necessity of even coking,) for fuel, for steam engines and locomotives, and for parlor fires," will be opened for mining upon the line of the M. and C. road.

From this point, the line of this road will pass, more than 50 miles, through the richest and most accessible portions of the coal fields of Southern Ohio. To the reports of the Geological corps in this State, made in 1833, and the full statement of Prof. Mather, made to this company and presented in our former reports, we are enabled to add our own observations, confirming all that has been said, by high authority, as to the value and extent of the coal beds on the route of said road. No effort has been made to develope these treasures—in fact of no value without a railroad—but they are met in every hill-side, and on the borders of the streams and ravines, the naked fronts of massive coal beds of from 4 to 12 feet in thickness, which invite the miner to open, without cost, "placers" of more than California profits.

The Scioto and Hocking Valley road will cross our line nearly at right angles, and will bring within our influence, for at least 25 miles on either side, the coal beds along its course. This, added to our own track of 50 miles, makes 100 miles in length, of railroad opening, to the coal fields, which Cincinnati and other points West will command, by the Marietta and Cincinnati line. With the power contained in the 10th section of our charter, "to construct branched roads from the main route, to any towns or *places* in the several counties thro' which the said road may pass," we can secure the development and render tributary to us, every coal and iron-ore bed in the counties of Jackson, Vinton, Athens, and Washington. But, confining the

prospect to the immediate vicinity of the road, we find the quantity of coal peculiarly belonging to this route, thus described in the Ohio Geological reports (page 87:) "The belt of coal deposits in Jackson county, and *thence to the Hocking river*, is so abundantly stored with coal, as to be equivalent to one solid, unbroken stratum fifty miles long, and nine feet thick. This amount of coal will yield about 9,000,000 of tons per square mile." The 250 square miles of coal being an average of 5 miles on each side of our track (not including contributions from the Scioto and Hocking Valley road) thus opened for mining by this road, will yield 2,250,000,000 tons of coal, above the valleys, and accessible without shafting. This would give to the road an annual business of 1,000,000 tons for 2,250 years—making an annual income, at 4 cents per bushel for transportation, of about $1,200,000; and an annual product in market, at 8 cents, of $2,400,000.

If coal can be held at the steady rate of about 8 cents per bushel to the consumers of Cincinnati and the Miami Valleys, and 6 cents to those of the Scioto Valley, the present generation will witness a demand fully equal to 1,000,000 tons per annum.

The more recent experience of the Baltimore and Ohio railroad company has demonstrated the practicability of conveying coal at even less rates than we have assumed in our former estimates of that business. The reduction from one and one-third cents per ton per mile, as claimed in former reports, to a fraction less than one cent, will enable us to deliver coal at the depot in Cincinnati at 6¾ cents per bushel, drawn from the Western limit of the coal fields, *a distance of* 112 *miles*. The same rate would place the *entire coal area, stated above*, at the command of Cincinnati, at the *average* rate of 7¾ cents.

The consumers of coal in that city, by relying *exclusively* upon the Ohio river for a supply, are now paying 14 cents per bushel. At the rates of the Baltimore company, her annual supply for many years may be drawn from the Jackson mines, and be placed at the depot in that city, by the M. and C. railroad, at one-half that price—to which one cent should be added for cartage. It is stated that the city now consumes 16,000 000 bushels, or or 500,000 tons per annum, which at 14 cents, amounts to $2,240,000; the same quantity at 8 cents amounts to $1,280,000—showing a difference, in cost to the city, in one year's fuel, of $960,000. This is the annual tax the city of Cincinnati has imposed upon herself, by allowing the fickle waters of the Ohio to *control* the supply of this article—to be her *master* instead of her *servant*.

The road has been constructed with especial reference to the transportation of coal, and the citizens of Cincinnati will be secured against all the exactions of the river trade by the completion of the M. and C. road before the 1st of Dec., 1853.—The $150,000 voted by the citizens of Cincinnati, will, the directors believe, be speedily placed at their disposal to bring about this end.

The policy of the road is very fully discussed, on this subject the directors state:

Cincinnati does not need to be connected through our line with Philadelphia and New York, other roads being built for that purpose. Her interest, therefore, with us, is almost exclusively a Baltimore interest, and will be fully provided for by the connection of our line with the Northwestern Virginia road. But a large portion of the business and travel from Southern Ohio, including that which may be thrown upon our track from the South, is destined for Philadelphia and New York. Besides the prospect of securing through the Pennsylvania Central railroad, greater economy of transportation over shorter distance for this trade, another prominent inducement, to favor the extension of this road from Marietta to Wheeling, is found in the connection thus to be formed with the cities of Wheeling, Steubenville, and Pittsburgh:—by the Cleveland and Wellsville line, with Cleveland and the Lakes;—and, at no distant day, by the Alleghany Valley railroad, with the great New York and Erie line at Olean. Those cities with surrounding towns and villages, are engaged more extensively in manufacturing, than any others of similar size west of the mountains. They constitute the nucleus of Western manufactures, rapidly enlarging, and with unfailing sources of power, and easy access to supplies, will maintain a constant and vigorous ascendancy for years to come. Southwestern Ohio, Western Virginia, and Northern Kentucky have a large interest in establishing a direct and uninterrupted intercourse between the manufacturer and the customer.

The lower Ohio Valley is also dependent upon the upper tributaries for that indispensable article, pine lumber, all creating an immense current of travel peculiarly belonging to the Valley.

The Board have steadily maintained the position of an independent line, endeavoring to secure for Southern Ohio the best outlet to the Eastern cities—at the same time to become a link in the great Southwestern railway chain between those cities and Cincinnati and St. Louis. This position may not suit the mere local interests of either Baltimore or Philadelphia; but every *Ohio* interest is certainly best served in having a choice of routes over the mountain barriers to the Atlantic, thus commanding that competition for their business which is the only safe regulator of tariffs and rates of transportation.

In the extension of our line to Wheeling, and a connection with the Northwestern railroad, every interest in Southern Ohio is made to harmonize, in their contributions to the construction of the road. Cincinnati is accommodated with her most direct line to Baltimore. Both Eastern cities may enter the Southwest in even-handed competition, for a business large enough to gratify the most sanguine expectations of either; and will, in their railroad connection with this company, find a party having a common and cordial interest in affording to each the requisite accommodations.

The report goes on to point out the objections to the construction of a competing line across southern Ohio, and shows the needlessness of such a project to both the cities of Cincinnati and Baltimore, between which cities the M. and C. road is a link and that no local interest in that section of the State of Ohio would be likely to undertake the enterprise. Baltimore has secured by the construction of the Belpre branch a connection with Cincinnati, besides a valuable tributary from Columbus, a connection by way of Dayton with Indianapolis and the northern sections of Indiana and Illinois. Cincinnati has secured her coal trade and its transportation by one strong railroad on cheaper terms than two competing roads could afford. No local interest will build a competing line, and, if they did, foreign capitalists would hardly come forward to the support of the measure when its rival is already advanced nearly to completion.

After alluding to the difficulties of their task in building a first class road over an uneven surface and collecting the basis of a large credit from many points of weak pecuniary strength, the directors conclude by congratulating the stockholders on the certain success now awaiting their efforts.

St. Lawrence and Atlantic Railroad.

This road which is now open from Montreal to Richmond, is to be further extended to Sherbrooke, near the line of Vermont, on the 11th September.—Lord Elgin will unite in the ceremony, and will leave Quebec by steamboat on the preceding evening for Montreal, and disembark at Longueil in the morning. A special train will leave immediately on his arrival, passing over the St. Lawrence and Atlantic railroad to Sherbrooke, where the party will dine.—*Portland Argus.*

A Large Train.

The Schuylkill Haven *Miscellany* mentions a train of 211 *loaded cars*, brought over the Mine Hill and Schuylkill Haven railroad, some days ago, by the locomotive No. 10. The coal weighed 975 1-20 tons, this added to the weight of cars (515 8-20 tons) makes a total weight of 1590 9-20 tons at one draught; the heaviest ever hauled over the road.

Railroad Suspension Bridge at Niagara Falls.

Although we have already given the outlines of this bridge, yet, theimportance in a scientific point of view of Mr. Roebling's report fully justifies our reprinting it entire.

Report of John A. Roebling, Civil Engineer to the Directors of the Niagara Falls International and Suspension Bridge Companies.

Your bridge will form a single span of 800 feet, from center to center of towers. It is to serve as a connecting link between the railroads of Canada and those of the state of New York; and it is also to accommodate the common travel of the two countries.

The question of the practicability of a suspension railroad bridge has been variously discussed. Some of the most eminent engineers have decided against it. Mr. Robert Stephenson, among others, made a report upon the failure of a railroad suspension bridge in England, and used it as an argument against the application of suspension chains for crossing the Menai Straits. In this report, this eminent engineer does no justice to the question; his only aim appeared to be to remove the objections, which were raised by the advocates of the suspension principle, against his own plan of a tubular bridge.

Whenever necessity calls for new works of art, new expedients will be discovered adapted to the occasion. It will no longer suit the spirit of the present age to pronounce an undertaking impracticable. Nothing is impracticable, which is within the scope of natural laws.

The principles which have guided me in the planning of your work, are exceedingly simple, and do not involve any intricate question. The only real difficulty of the task appears to be its novelty. Two principal considerations present themselves: that of strength and stiffness. In regard to strength, it is not only admitted by all parties, but established by ample experience, that good iron wire, if properly united into cables or ropes, is the best material for the support of loads and concussions, in virtue as well of its great absolute cohesion, which amounts to from 90,000 to 130,000 lbs. per superficial inch, according to quality and fineness, as on account of its high degree of elasticity, which in good hard drawn wire approaches that of steel. To support a heavy weight, nothing safer can be employed, than a well-made wire cable or rope. It is not only the strongest, but also the most economical. The second question is that of stiffness. Wire cables, if large, well made, and compactly wrapped, possess a considerable degree of stiffness, but too little to be taken into account in the present case. We can depend upon cables only for support and must apply other means for producing stiffness. There are three different modes for obtaining stiffness.

1. By using girders and heavy timbers, longitudinally, in the construction of the floor.
2. By trusses.
3. By stays.

The plan of the double floor bridge, which you have adopted, provides two girders in the uppper floor, of a depth of four feet for the immediate support of the railroad track. This is a very important feature in the construction of any railroad bridge; it serves to distribute the pressure upon any one point over a greater length, and thereby prevent short impressions and undulations. Such girders would alone be sufficient for moderate spans but larger ones require trusses besides. Since you have decided in favor of a double floor, the upper one to be used for the railroad, the lower one for common travel, a very good opportunity has offered for doubling the trusses, and of adding another valuable feature, that of the box or tube. Your bridge will form a hollow straight beam, of 20 feet wide and 18 feet deep, composed of top, bottom and sides. The upper floor, which supports the railroad, is 24 feet wide between the railings, and suspended to two wire cables assisted by stays. The lower floor is nineteen feet wide in the clear, connected with the upper one by vertical trusses, forming its sides, and suspended to two other cables, which have ten feet more deflection than the upper cables. The mechanical principles upon which the trusses I have devised for this bridge, act, is

not new, but universally applied. On inspection of the plan, you will observe posts, in a vertical position, 5 feet apart, firmly connected with the upper and lower floor beams. Any pressure upon the upper floor will, by these posts, be transferred upon the lower, and vice versa. With the exception of these and a light bridging between, there is no other timber to be used in this truss. Its stiffness is to be obtained from wrought iron rods of one inch diameter, and 27 feet 4 inches long, which are placed diagonally, nearly at right angles to each other, and always connecting the upper and lower end of the first and fifth post. The ends of these rods have screws and nuts, and are screwed up as tight as the strength of the posts will permit. The result of this is a high degree of rigidity and stiffness. The vertical action of any one post is by these tension rods transmitted to two other posts, 40 feet apart.

This plan recommends itself not only on account of its great stiffness, but also on account of its great lightness, and freedom from all timber joints and connections. Consequently no working or opening of joints can take place. The manner in which the posts are framed and connected with the upper and lower floor, and the fact that the rods are only exposed to tension, insure the true vertical plane of the trusses; they are not exposed to the danger of drawing out of line.

All the timber used in this structure, is to be well seasoned, planed, and well painted. The upper floor will be treated like a ship's deck, caulked and painted, it will therefore serve as a complete roof for the lower work.

The trusses are so open that they present but little surface to the action of the wind.

The upper floor stays will be a great additional support to the upper cables, and will add materially to the stiffness of the structure. These and the lower floor stays, which I propose to put up, will in connection with the trusses and girders, produce a degree of stiffness, sufficient, I feel confident, to admit of the passage of the heaviest trains at full speed, without producing any injurious vibrations. The ordinary speed of trains however, is to be limited to five miles per hour.

THE ANCHORAGE

Will be formed by sinking 8 shafts into the rock 25 feet deep. The bottom of each shaft will be enlarged for the reception of cast iron anchor plates of six feet square. These chambers will have a prismatical section, which when filled with solid masonry, cannot be drawn up without lifting the whole rock to a considerable extent. This resistance is further increased by the weight of the superincumbent masonry. My calculations satisfy me, that the pressure upon the anchor plates will be met with a resistance equal to the ultimate strength of the cables, or equal to five times the maximum tension to which they can ever be exposed. To these anchors massive iron chains are attached, which rise vertically through the rock, form a curve in the anchor masonry, and connect with the wire cables at the level of the coping. Each chain will be 66 feet long and composed of 8 links, each link to be formed of 7 or 8 plates of an aggregate section of 72 superficial inches of solid wrought iron. The links connect by means of bolts turned off to 3½ inch diameter, and passing through eyes accurately bored out. The plates will be forged out of the best quality of charcoal blooms, and in one piece without a weld. By the curvature of the chain, a part of its tension is transformed into pressure upon the wall, and will be supported by large cut stone blocks. The chains and pins will be well painted, and embedded in grout, composed of cement, lime, and sand.

SADDLES

Of cast iron will support the cables on top of the towers. They will consist of two parts, the lower one stationary, the upper one moveable, resting upon wrought iron rollers of three inches diameter, accurately turned off, and fitting against the faces of the upper and lower plate, which are to be planed off true. The rollers will admit of a slight motion of the upper saddle, whenever the balance of tension between the land and suspension cables should be greatly disturbed. The saddles will have to support a pressure of 600 tons whenever the bridge is loaded with a train of maximum weight.

TOWERS.

They are sixty feet high and fifteen feet square at the base and 8 feet square at the top; therefore the top course on which the saddle rests, has a surface of 64 square feet. The compact, hard limestone, which will be used in the masonry of the towers, will bear a pressure of 500 tons upon every foot square. The strength of the towers to support the above weights can therefore be depended upon. As regards their lateral stability, I rely solely upon their own weight and the great pressure they have to support, which pressure will ordinarily act in a vertical direction through the centre of the masonry.

WEIGHT OF BRIDGE.

Weight of timber	919,130 lbs.
" Wrought iron and suspenders	113,120 "
" Castings	44,332 "
" Rails	66,740 "
" Cables between towers	535 400 "
Total weight of superstructure	1,678,722 "

As the ends of the bridge rest upon the rock and are firmly connected with the masonry of the abutments, the trusses will support them for *at least* 40 feet, independent of the cables, and together with the loads. Suppose the ends were not suspended to the cables for 100 feet from the center of tower toward the center of the span, but only supported by the abutment at one end and at the other end by the cables, then, I say, there would be strength enough in the trusses to support themselves and loads. The length of bridge being 800 feet from center to center of abutment, there are only 700 feet actually supported by the cables, and 100 feet by the abutments.

Reducing the above weight proportionally, it leaves the weight of superstructure, as far as supported by the cables, 1,564,391 lbs., or 782 tons of 2,000 lbs. each.

WEIGHT OF RAILROAD TRAINS.

One locomotive of 30 feet length weighs, say	25 tons.
27 double freights cars, each 25 feet long, and of 15 tons gross weight	405 "
Make total gross weight	430 tons.

which will fall upon the cables, when the whole bridge is covered by a train of cars from end to ned.

Add to this 15 per cent. increase of pressure, as the result of a speed of five miles per hour, which is a very large allowance, or 61 tons.

Makes total	491 tons.
Add weight of superstructure	782 "
Total aggregate maximum weight.	1,273 tons.

Since the grading of the two railroads will scarcely permit trains to be run of the weight and magnitude above assumed, we are certain that the above maximum can never be exceeded.

TRANSIENT LOADS.

The area of the lowest floor, as far as supported by the cables, is 700×19=13,300 superficial feet.

Suppossing the floor covered with a crowd of people, and allowing 3 superficial feet for each person,

There could be placed upon the floor 4433 men,
Which, at 140 lbs. would weigh 620,620 lbs.
Or 310 tons.

There is, however, no necessity to calculate the strength of the bridge for maximum loads upon both floors. In case an unusual crowd of persons should at any time collect or cross upon the lower floor, there can be no necessity for passing heavy trains over the upper floor at the same time. They can be stopped until the lower floor is cleared, and vice versa. With gates at the two ends of the upper floor, this rule can always be enforced.

CABLES.

There will be four wire cables of 9½ inch diameter each. Two will be suspended with a deflection of 54 feet for the support of the upper floor. The other two will extend down the sides of the trusses, for the support of the lower floor, with a deflection of 64 feet. Average deflection is 59 feet. When a train of cars enters upon the bridge, the upper cables will at once be taxed, but the pressure will, at the same time, be transferred upon the lower ones, so that they will always act in concert. The reason why I do not deflect the outside cables still lower, is because their harmonious action would thereby be disturbed, on account of unequal contraction and expansion, which would take place either in consequence of changes of temperature, or of the depressing action of great transitory weights. The calculations I have made to that effect, have satisfied me, that I may extend the difference in the deflection to 10 feet safely, but no further.

The tension of the cables, which would result from a weight of 1,273 tons, and an average deflection of 59 feet, is

1273×1.76=2240 tons.

Sinne the above assumed maximum tension can but rarely occur, I consider it ample to allow four times the strength to meet it; or,

4×2240=8960 tons.

But assuming 2000 tons as a tension to which the cables may be subjected more frequently, I propose to allow five times the strength to meet it, or to provide for an ultimate strength of

10,000 tons.

The Act of Parliament calls for an ultimate strength of 6,600 tons, for which your former engineer allowed 10,000 wires of No. 10. Now, the best charcoal wire, drawn to No. 10, or measuring 20½ feet for every pound, cannot, upon an average, be depended upon for more than 1,333 lbs.; or at the rate of 1½ wires per ton of 2000 lbs. Being myself engaged in the manufacture of wire, and of wire rope, and having ample experience in the construction of wire cables, the above rate of strength, as the result of my own experience and tests, may be depended upon as correct. The usual mode of testing wire by weights is not to be relied upon.—Common wire, made of puddled anthracite iron, will frequently exhibit the same strength as wire made of good cold blast charcoal iron.

But the difference is in the uniformity, and this can only be examined by suspending a long wire say 400 feet, freely between posts, and reducing its deflection by gradually hauling in the one end by means of a capstan, until it breaks; the tension being the result of its own weight. By noting the deflection, the strength of the wire may then be calculated in pounds for any size or per superficial inch. Thus tested, the wire of course will break at the weakest point, and common puddled wire will thus show its inferiority to good charcoal wire.

Assuming an ultimate strength for the cables and stays of 10,000 tons, we shall require 15,000 wires of No. 10 to construct them.

At each end of the upper floor, the upper cables will be assisted by 18 wire rope stays, and their strength will be equivalent to 1,440 wires, these deducted, leave the number of wires in the four suspension cables, 13,560; No of wires of one cable, 3,390; diameter of cables, 9½ inch.

REMARKS ON A SINGLE FLOOR BRIDGE.

My original estimate for a single floor bridge was made out for a floor of 30 feet wide between the railings, viz:

For railroad track in center	6 feet.
" Two tracks for common travel *a* 7 feet	14 "
" Two footwalks, *a* 4 feet	8 "
" Space occupied by cables	2 "
Total between railing	30 feet.

On such a floor the common carriage travel could not be passed, while the track is occupied by a train, and vice versa, it would therefore only accommodate a limited business.

To render the railroad independent of the common travel, we should want a width of floor of no less than 39 feet between the railings, viz:

For railroad in center	13 feet.
" 2 tracks for common travel, *a* 8 feet	16 "
" 2 sidewalks	2 "
" 2 cables	2 "
Total	39 feet.

The entrance upon this floor between the towers would have to be at least 32 feet, and in consequence an arch would be necessary, to connect them, for the support of the center cables. The two outside cables would fall upon the shafts of the

towers. We should want gateways of large dimensions, no less than 65 feet by 30 at the base, with abutments in proportion, and a mass of masonry three times as great as what is wanted for the double floor bridge. To preserve the character of the work, the wings would have to be carried up to the abutments. The great width of floor, would require heavier crossbeams, these with trusses underneath, which could not be dispensed with, would rather increase than diminish the weight of the bridge. All this satisfies me, that a single floor bridge of the above dimensions would cost considerably more than the double floor bridge.

The appearance of the double floor bridge will not be so beautiful, as that of a single floor, with imposing gateways, erected in the massive Egyptian style, and joined by massive wings, the cables watched by sphinxes, with parapets, and all the rest of the approaches, put up of appropriate dimensions and in suitable style. The double floor bridge, when viewed from the upper floor, where all the foot passengers will resort, will, however, present a very graceful, simple, but at the same time substantial appearance. The four massive cables, supported on isolated columns of a very substantial make, will form the characteristic of the work, and this will be unique and striking in its effect, and quite in keeping with the surrounding scenery.

Niagara Falls, July 28th, 1852.

Ohio Railroads.

The Ohio and Mississippi railway company are now actively engaged on their line, and vigorous measures are in progress to push the work to Lawrenceburgh. The number of hands at work is daily increasing. As soon as the road reaches Lawrenceburg it will begin to pay, for there it unites the railway constructing, and nearly done, from Lawrenceburg to Indianapolis, which, in this connection, will bring passengers hither from Indianapolis and many of the central and most populous counties of the state of Indiana. The president of the Ohio and Mississippi road is confident that by January, 1854, we shall have the cars running from Cincinnati to the Jeffersonville road—crossing most of the important north and south roads in Indiana. The city is looking with great interest to this road, for next to the road from Lexington to Knoxville, opening all the south, the Mississippi road, is the one to bring us a large and new trade.

The Covington and Lexington road is progressing with great vigor. The sickness that drove away many hands from the line, abated some time since, and the work is now pushed forward with unabated ardor.

The Little Miami railway has nearly completed the arrangement for their new track below Fulton street, through which the track is now run. By the new route this street will be avoided for the whole distance, except from five to eight hundred feet, near the Water works, to pass which they have to come on the street. A large gang of hands are now at work clearing the new track and in about four months the new line will be ready and Fulton relieved of the trade and cars. The company are about to erect on the Kugler block, also, a large and handsome passenger station house.

The Cincinnati, Hamilton and Dayton company are about to derive a great advantage from the completion of sundry roads now soon to connect with theirs. The Greenville road will soon make its western connection, so as to carry us to Indianapolis in less than twelve hours. The company west of Dayton have made most advantageous arrangements and combinations, and the cars will soon be on their track. The road from Springfield to London will soon be opened, and enable passengers to reach Columbus and Cleveland as speedily as by the more eastern track. This road is to be opened in a month or so. The recent arrangements for a road from Hamilton, through Oxford, and thence with the junction road to Indianapolis it is expected will succeed. A large freight is now coming down from Eaton, and the passenger list is and has been large beyond expectation. The laying of the T rail on the Mad river road to Sandusky will soon be completed. The Hillsboro' road in a week or so will be in full and complete running order, and thus increase the business of the Little Miami road. —*Cin. Gazette.*

Texas Internal Improvement Convention.

We have already noticed the meeting of this body; we now propose to give an outline of the proceedings, and the conclusions to which the Convention arrived. The magnitude of the plan, and the future wealth of the State, seem to require a record of its first step in Internal Improvements.

The Convention assembled at Galveston on the 14th July. Dr. Wm. R. Smith was elected President, Col. M. B. Menard, Gen. E. B. Nichols, and Edward Hill, Esq., Vice Presidents, and Messrs. W. H Goddard and Oscar Farish, Secretaries of the Convention.

A committee of thirty, of which L. Sherwood, Esq., was chairman, was then appointed to report a plan of internal improvement for the State. At the request of the committee, the Convention adjourned, subject to the call of the President, till such time as the committee should be ready to report. On the 24th July the Convention re-assembled. and the following propositions were submitted in the report of the committee:

1. The construction of Internal Improvements by the State; such improvements to be kept under its exclusive supervision and control; but companies and individuals allowed to engage in the transportation of property and passengers upon them, under such exactions and regulations as may be prescribed.

2. The establishment of a State Internal Improvement Fund, to be kept separate and distinct from the general, school, and all other funds of the State, and faithfully applied to the prosecution and support of internal improvements.

3. The organisation of an Internal Improvement Board of Commissioners, to consist of the Secretary of State, the Comptroller, Attorney General and five acting commissioners; the acting commissioners to have the personal charge and superintendence of the public works, subject, however, to the direction and supervision of the whole board.

4. The construction of four great lines of railway, so located as to accommodate, as far as practicable, each section of the State; and adjusted with reference to future railways necessary to be engrafted upon them—the location and plan of said railways to be nearly as follows:

Commencing at Galveston, crossing West Bay at the most commodious point; thence, running to the head of navigation on Buffalo Bayou, at Houston; thence, northward, through the eastern part of Montgomery county; thence, across the Trinity river, and northward, by the most commodious route, to Red river.

A branch casting off in Montgomery county, and running northward between the Trinity and Brazos rivers.

A branch casting off the Galveston road near the head waters of Highland Bayou, running thence to the Brazos river and crossing near Columbia; thence, up the valley of the San Bernard, and between the Brazos and Colorado to the capital of the State.

A branch casting off the latter road, crossing the San Bernard and Colorado, and running westward on the most commodious route, to San Antonio.

The construction of the said railways to commence at the coast and be prosecuted first to the points where all the branches cast off: then, the four roads to be contemporaneously prosecuted to completion, equal distances as near as may be, until the Southwestern road shall reach San Antonio; the Western road, the State capital; the Eastern road, Red river; and the Northwestern road, an average distance with the other roads from Galveston.

5. The improvement of the inside coast navigation by canals, and the removal of obstructions, so as to afford complete steamboat navigation for river boats from the Sabine to the Rio Grande; also, the improvement of our navigable rivers.

6. The interest on all loans effected for the purpose of internal improvements on the credit of the State, and the interest on all loans contracted for the payment of previous loans, to be faithfully and fully paid by taxation, and from year to year as the same shall accrue. As an additional assurance and security, the present surplus of two millions or more, and its increase, to be added to the internal improvement fund, invested in United States stocks, and pledged to the public creditor for the faithful payment of interest. These provisions both to be secured by amendments to the constitution.

7. After satisfying all just claims against the public domain, fifty million acres of the public lands, or the proceeds of their sale, to be attached to the internal improvement fund, and secured to it by fundamental law.

8. All revenues to arise from internal improvements, after paying expenses of superintendence and repairs, to be set apart as a sinking fund for the exhaustion of the principal.

9. That for the purpose of proposing amendments to the constitution, so as to allow the State to embark in the construction of internal improvements; and for the purpose of proposing other amendments to carry out an internal improvement system, to be adjusted and fixed by fundamental law; we recommend the call of an extra session of the Legislature, to be held as early as January next.

The principal objections urged against the plan were its magnitude and the agency of the State government in it. These the committee thus dispose of:

In answer to the first of these objections, the committee are constrained to say: something less in magnitude would have been proposed, had it been thought that less could have harmonised the popular will. Your committee could not bring themselves to the conclusion that State unanimity could be produced, without proposing the four great trunks of railway indicated in the plan. They could not well avoid proposing a road running the entire route through eastern Texas; another, between the Trinity and Brazos; another, between the Brazos and Colorado; and another west of the Colorado. The construction of one of these roads would afford little advantage to the people or property on the line of another. To apply State bounty to one, to the exclusion of another, would be unjust and a fruitful source of discontent. To overlook the improvement of our river and inside coast navigation would be equally unjust and equally unwise.—Your committee, from these considerations, have felt themselves constrained to recommend the largest scheme practicable, as being the least that can command public unanimity in its favor.

The objection to internal improvements by the State has been carefully considered by the committee. The argument in support of this objection has been mainly urged as a question of economy; on this assumption, that corporations can make outlays in the construction of internal improvements to better advantage than States. In considering this argument, your committee have turned their attention to the particular incidents connected with the construction of railroads. In Texas, it is assumed that nearly one half of the cost of constructing railways, will be the expenses of iron. To purchase this to advantage, requires money only, not skill. The timber furnished must be of a particular description and quality, with specifications for it embraced in the contract. In contracting for it, nearly as much skill and knowledge would be necessary, as is required to make a bill of lumber for a common dwelling house. In building the necessary bridges, the custom of both States and corporations is, to let them by contracts, with full specifications also. Why State commissioners should necessarily err in letting such contracts, more than corporation agents, your committee cannot well conceive. In grading railway tracks, the prices for excavation and embankment by the cubic yard, whether of common earth, clay, rock or quicksand, are as well established as the prices of staple cotton goods; and your committee are unable to see why State commissioners need be wanting in any necessary knowledge on these subjects. In short, the supposed mystery in the incidents of constructing roads and bridges has not appeared very formidable to your committee, or led to the belief that State commissioners would find much difficulty on the score of knowledge or economy.

In the management of railways after their construction, it is believed no difficulty would exist.—It is not proposed that the State should engage in

transportation. That, as in all similar cases would be left to associations of individuals. In forming transportation lines, if the roads are operated with locomotive power, it would require large outlays of capital, open, however, to free competition of companies. All the State would do, would be to construct the roads, keep them in repair, establish its superintending police under strict regulations, and receive its tolls on transportation, by way of revenue. The same rules as to the incidents of running cars, time of arrival and departure, would necessarily be adopted, whether the road was owned by the State or a corporation.

The committee scout the idea that the citizens of the State are not sufficiently intelligent to comprehend the advantages of the plan, and lend it a support by submission to the annual taxation required to keep down the interest on the loans made for the purpose of its completion.

In estimating the increase of public property, consequent on the construction of the proposed improvements, your committee believe that the one hundred millions of acres, left the state after the satisfaction of all just claims, would be enhanced in value many times beyond the proposed outlay of $15 000,000. Under a wise and steady system of internal improvements, it becomes almost impossible to calculate the vast increase of state wealth and state resources. So many considerations cluster to the support of a well balanced internal improvement policy in Texas, that your committee cannot conceive the people of the state so wanting in thoughtful forecast, as not to improve to the utmost their advantages. Your committee are of the belief that a commencement must be made, that a wise commencement may be made, and that the present is propitious for the adoption of some prudent and safe system.

After a parallel between the north and south, on the subject of the prosecution of internal improvement, the report concludes by saying—

The domestic policy of the state, directed by prudence and firm energy, should be the absorbing consideration of all her citizens. We need not wait as long as other states have waited; we are ready to begin now. We need not be embarrassed as other states have been embarrassed in finance We may lay the plan that shall carry us through in safety. Texas is in a situation to emulate the modern impulse of Georgia, Alabama, Louisiana, and Virginia, tempered with the prudence and perseverance of Massachusetts. Texas has the greatest work to accomplish. It behooves the people to be wise in the beginning. Texas is full of the elements of state credit, state progress, state greatness. Our people should accustom themselves to reflect upon, and familiarize themselves with, the manner in which these can be made available. When this is wisely done, internal improvement plans will cease to be formidable, and our citizens will wonder that their accomplishment is so easy.

Accompanying the report, the committee also submitted an address to the people of the state, which was adopted by the convention, as well as the report. It strongly recommends the assumption of these works by the state. In the language of the address:

We see but one way for Texas to engage successfully at present, in the construction of railroads —ONE BASIS ONLY, THE STATE CREDIT. We entertain the opinion, that we shall come to this resort at the end; and we are as firmly of the conviction, that the sooner we associate the energies of the people with the power and credit of the state, for the construction of railways and other public improvements, the better it will be for us. We are in favor of the state's constructing and owning its railroads and other internal improvements. In our opinion, there are more reasons and more healthy example for, than against this proprietorship. We confess to more confidence in the power and integrity of the state, than in corporations. The one has resources extending to future generations—the other has not. The one has no motive to rapacity in conflict with the common interest—the other may have. The one will be active in seizing on thoroughfares most profitable—the other will be governed by the policy of equally diffused benefits. Facilities for settling the remote parts of our country will be the policy of the state, but not of corporations.

Were it practicable to engage associated capital to any considerable amount, in the construction of railroads in Texas, it requires no foresight to know the principle on which the locations would be made. The profitable routes, only, would be occupied for many years. No regard would be had to any general plan of adjustment. The greater portion of the state would remain unprovided for, far into the future, and much of it gain nothing on the score of accessibility. The equitable basis for the location of railways in Texas, should be made analogous to the transportation of the mails, and collection of the revenues for the Union. The routes producing revenue should assist in paying sectional deficiencies. With as much reason might the post office, and important revenue collected within the state of N. Y. be given to the state, as that one part of Texas should be made to yield profits to R. R. corporations, while the larger portion of the state remained unassisted. The state is untracked, as yet, by a single completed railroad. Our judgment is that the state ought to keep in its own hands the adjustment of a great system, commensurate with its present and future requirements, always having in view the most liberal plan of equalized benefits.

It is easy to foresee that Texas cannot long hold together, unless bound by some equitably adjusted plan of internal improvements. As population and business increase, it feels more and more deeply sectional inconveniences and causes of disquietude. Many already consider the state too unwieldy, and assign as a reason, that sectional interests cannot be brought to harmonize. Supposed inability to acquiesce in some general measure, is fast producing impatience, and we may rest assured, that neglect of action, or inefficient action, will increase the sentiment in favor of division.

The credit of the state is insisted on as well from its extent and resources, as from its former independent position.

The State has already assumed an important position in the eyes of the world. She has something of an interesting reputation abroad. Texas, *as Texas*, has a history. Texas is known to the world as an Empire in extent. She has a public domain of more than 100,000,000 of acres. She has a population abounding more in actual wealth and natural resources, than any equal number of people on the globe. She is now receiving an accession to her substantial population faster than any other State in the Union. She holds out incentives to immigration, that, in their combination, are not equaled elsewhere. Her entire soil is a self-swarding, self-resuscitating soil, covered with nutritious grasses. Her numerous herds, unfed by the hand of man, indicate a wealth that runs wild. Her capacity for producing sugar, cotton, tobacco and other staples of the South, is equaled only by her capacity for grazing and for the production of fruits, corn and the cereal grains. We can refer to no country that equals Texas in agricultural capacity; and no country in America, whose climate equals her's in wealth and blandness of atmosphere. But while we refer to the vast extent of the State, the abundance of her resources and the incentives to immigration: it must not escape us that these are to be made available to us through the wisdom of a just and beneficent policy—a policy that shall separate the enterprise of our people from rashness; that shall bind the people in harmony of sentiment and action; that shall be steady and undeviating in its operation, and certain in its results. Texas has too few in numbers to give efficiency to divided territory and population. She has too much to accomplish to allow of divided effort. If sectional tenacity shall be suffered to confuse the plans of action, nothing essential will be accomplished for many years. If the State bold together, and the people harmonize in concerted action and steady effort, there is no financial achievement, consistent with the vastness of its resources, which the State cannot accomplish.

The capital to be obtained by this pledge of State credit the committee believe will come from abroad, and be negotiated in the European markets, where the bulk of the National, State and railroad securities are held. A table of the leading Government and railroad stocks is given, with the market prices, aad it is urged that Texas will have peculiar advantages both in cheapness of construction and profit in the operation of railroads.

In order to preserve this credit the address strongly insists on a system providing for the payment of the interest with scrupulous exactness.

As members of this Convention and citizens of the State, we propose *the construction of Internal Improvements on the credit of the State, and on the basis, that the people shall pay by taxation the interest, annually, on all loans effected for that purpose.* We are willing to make a permanent provision to pay the interest by taxation for the following, among other reasons:

First. It is necessary to any State, as a means to effect loans to the best advantage, and indispensably requisite to a new State.

Secondly. The people can well afford to pay an interest of five per cent. on the outlay, as far as the outlay enures to the benefit of those who pay it.

Thirdly. It is immoral, and inculcates public immorality, to adopt any step in public expenditures that is calculated to lead to public dereliction or repudiation.

Fourthly. It is not only unfair, but *mean* towards posterity, for us to take the benefits of public expenditure, and throw the burden of both principal and interest on our children.

Fifthly. The payment of interest on all loans by taxation will operate as a touchstone to test the question, whether Internal Improvements are beneficial in proportion to their burden, and whether the use of them is worth the interest on the money they cost.

Sixthly. The burden of annual and annually increasing interest, would be a safeguard against the abuse of Legislative power in authorising imprudent and hasty expenditures.

Seventhly. The continually increasing burden of interest would incite the people to stringent watchfulness over the public agents entrusted with the expenditure and disbursement of the public monies.

The provision for the certain payment of interest, as a means of creating, containing and keeping fortified the public credit, so as always to be able to command what money we want, when we want it, and at the cheapest rate, is, and ever will be, the main point on which our success depends. Texas may run through hundreds of millions in providing and disbursing monies, before the State is accommodated in its facilities for travel and transportation; for we have an empire to be provided for.—The time has passed by, if it ever existed, when States can go headlong in effecting loans as principal, and loans to pay interest. Capitalists have grown astute in discerning the real basis of increase in public debt. It has become their business to look into Legislative proceedings, public expenditures, debt, resources, taxation, and every feature, in the financial ability and policy of States. They calculate results with almost mathematical precision; and the rise and fall in public credit are controlled and influenced by the judgment of the interested and experienced. No State in the Union, however great its resources, has yet proved powerful enough to hold good its credit against the disapproving judgment of the public creditor. He, of all persons, reasons most astutely from cause to effect, in estimating the strength of public credit, and its duration under pressure of adverse circumstances. No Legislative imprudence or folly can escape his notice—no Legislative or financial subterfuge can avoid his detection. It is the consideration of millions that sharpens his scrutiny.

After a review of the history of Internal Improvements in New York and Pennsylvania and the policy of lending aid to corporations—the address concludes by the following recommendations.

The first step necessary to enable the State to contract debt beyond $100,000, is an amendment of the constitution. It is unnecessary to discuss the propriety of placing the interdict in the consti-

tution. It may have been wise at the time. The country had but just emerged from Revolution.—The State was feeble in its finances. Much public debt was outstanding. The people were in no situation to embark in any system of Internal Improvements, nor in any position to lay the basis of an advantageous public credit. Great changes have since transpired—changes that wonderfully alter the financial capacity of the State. We have now the ability to use the public credit to advantage. Not a State in the Union, whatever may be its population, equals Texas in its basis of public credit. In the proposed measure of abrogating the constitutional restriction, we see no danger. We think more rational checks on legislative imprudence may be devised: something less stringent than to bind down both Legislature and people. We trust our fellow citizens will not be disposed to keep the Star State a "fixed star" We trust, also, they will be disposed to use the power and credit of the State for the purposes of State beneficence. We will join our fellow citizens in adopting all necessary checks, restraints and provisions in the fundamental law, that may be necessary to guard against imprudence, to hold us to the true policy, and keep us from the pathway of danger. So far we advocate constitutional restrictions on the legislative power. Beyond that, public policy, we think, requires that we should not go. We therefore recommend the call of an extra session of the Legislature, to propose the necessary amendments to the constitution.

The New Crystal Palace in London.

The New York exhibition building will still have a rival in the re-erection of the London palace on a rather less extensive scale of mere area, but improved in its details of general effect. Still, as a work of art, we think the New York edifice will compete favorably with the Transatlantic palace. The following is the description of the London building, given in the Times.

The site chosen for the re-erection of the Crystal palace is an irregular parallelogram of 300 acres, extending from the Brighton railway, where it has a frontage of 1,300 feet; between the Sydenham and the Anerley stations, to the road which borders the top of Dulwich wood, where it has a frontage towards the road of 3,000 feet. The fall from this point to the Brighton railway is 200 feet. It was at once felt that the only position for the new building was on the summit of this hill, and immediately adjoining the road. The building placed in this commanding position will be visible from London on the one side, and from a vast extent of country on the other. In consequence of the rapid fall of the ground an additional story became necessary on the park front of the building, and this will remedy a defect universally felt in the old building, viz., the little elevation of the front.

By the choice of this site, also, a complete change became necessary in the external character, of the building. What in Hyde Park had been the side, here became the front. The great length of the old building prevented it being comprehended in one view; it was therefore shortened by 240 feet. A transept similar to the transept of the old building was placed at each end, and a centre transept, with a vast circular roof 120 feet in diameter, rising majestically over the circular roof of the nave. The transepts, with their aisles, advance from the main line of the building and thus form a most majestsc group; at the intersections of the roofs of transepts and nave will be low towers, adding immensely to the general effect.

A further improvement of vast importance, was the introduction of arched recesses at the ends of these transepts, 24 feet deep; that of the centre transept 194 feet high and 120 feet wide; those of the side transepts, 150 feet high and 72 feet wide.

The improvements which have been made in the interior are not less important, independent of the vast additional effect afforded by the increased height of the nave (14 feet higher than the old building.) Advantage has been taken of the necessities of the construction of this important feature to add greatly to the artistic effect of the interior.

In the old building the effect was secured by the simple repetition of two elements a column and a girder, and although great grandeur was thus obtained, it may be said that there was hardly sufficient variety, and the full effect of the vastness of the structure was not entirely realized. At the extreme ends of the buildings the columns and girders fell so rapidly one on the other that the eye had no means of measuring the length; this defect had to be remedied in the new building, and it has been done in this wise—the column and girders do not keep to one line as before, but every 72 feet, pairs of columns, twenty-four feet apart, advance eight feet into the nave, and from these columns spring arched girders, eight feet deep in lattice work of wrought iron, which support the longitudinal girders of the roof. These advancing columns are tied together, and thus form groups of pillars, like those of a Gothic cathedral. These groups occuring every 72 feet down the nave, thus furnish the eye a means of measuring the building which it had not before.

As regards the contents of the building it has already been announced that the whole of the sides of the nave, transepts, and the divisions on either side between the several courts will be lined with the plants and trees of every clime, interspersed with statues and works of art. On the north-east side of the building will be arranged the historical galleries of sculpture and architecture, with casts of the finest works of sculpture, and portions of buildings of ancient art. On the south-east side will be displayed similar collections of mediæval art; while in the north and south-west portions of the building as well as the whole of a 24 feet gallery round the building, will be devoted to the purposes of exhibition. The machinery will be placed in the lower story on the park side. in a gallery 24 feet wide, extending the whole length of the building.

Bidery, a Metallic Alloy used in India.

The following account is taken from Professor Royle's lecture on the great exhibition of an interesting alloy manufactured in India.

This compound has been named Bidery, from Bider, a city situated about sixty miles to the north-west of Hyderabad, and of which we have had a variety of articles at the exhibition. Most of these have been greatly admired for the elegance of their form as well as for the gracefulness of the patterns with which their surface is engraved. Though the groundwork of this composition appears of a blackish color, its natural color is that of pewter or of zinc. Dr. Heyne informs us that it is composed of copper sixteen ounces, lead four ounces, tin two ounces. These are melted together, and to every three ounces of the alloy sixteen ounces of spelter, that is of zinc, is added, when the alloy is melted for use. But to give the whole the black color which is esteemed, probably from bringing out the pattern, it is dipped into a solution of sal ammoniac, saltpetre, common salt, and blue vitriol.

Dr. B. Hamilton saw of zinc 12,360 grains, copper 460 grains, and lead 414 grains, melted together, and a mixture of resin and bees wax introduced into the crucible to prevent calcination. It was then poured into a mould made of baked clay, and the article handed over to be turned into a lathe. Artists then inlay flowers or other ornaments of silver or of gold. They first rub it over with sulphate of copper and water which gives the surface a blackish color, and enables the artist more easily to distinguish the figure which he draws,—this he does with a sharp pointed instrument of steel, and cuts it with small chisels of various shapes, and then with a hammer and punch fills the cavities with small plates of silver which adhere firmly to the Bidery. It is then polished and stained as described above. The various articles made from it are vases, wash-hand-basins and ewers, hookah-bottoms, spittoons, cups and dishes, small boxes and weights. These are inlaid commonly with silver, but sometimes with gold. The patterns are usually as much to be admired as the forms of the vessels. Though usually called Bidery, sometimes Vidry, it is also manufactured at other places. Specimens have been sent both from Bider and Aurungabad, in the Nizam's territories, from his Highness the Nizam and his minister Siraj-ool-Moolk, which are peculiarly beautiful. Some also from north-west India and from Bengal; the latter, however, was inferior to the others in workmanship. Bidery does not rust, yields little to the hammer, and breaks only when violently beaten. According to Dr. Hamilton it is not near so fusible as zinc or tin, but melts more easily than copper.

Louisiana.

New Orleans, Jackson and Great Northern Railroad.—The board of directors of this road are pushing forward operations with such spirit and energy, that the fruit of their labors will soon be made apparent in the rapid progress of the important work, in the completion of which this city is so largely interested. In this behalf, we have learned a few items of intelligence, which will no doubt be interesting to our readers.

Mr. James Clarke is chief engineer of that portion of the road between New Orleans and Jackson. He has two corps of engineers assiduously engaged in locating the route between New Orleans and the Mississippi state line. It is believed that Mr. Clarke will have the route between the city and Pass Manchac accurately surveyed and located within twenty days, when plans specifications, etc. will be immediately prepared, and contracts advertised for.

Mr. Winchester, with an efficient corps of engineers is rapidly locating the road between Canton and Aberdeen, Mississippi.

Mr. James H. Grant, chief engineer of the road between Jackson, Mississippi, and Nashville Tennessee, notified the board of directors, a few days since, that he would on the 20th instant commence the location of the route between Florence, Alabama, and Aberdeen. He is now, in all probability engaged in pushing forward the work.—*N. O. Bulletin.*

New Orleans, Opelousas and Great Western Railroad.—This company is pushing onward its business with great energy. The board of directors have been actively engaged for a week past, holding daily meetings of the body of its committees. They have located sixty seven miles of the road, starting from the main depot in Algiers, and passing up the river nineteen and a half miles, thence taking the ridge of high land south-westwardly from the Mississippi, (south of lake des Allemande,) and crossing the Bayou des Allemande and striking the high lands of the Lafourche thirty-seven miles from Algiers—thence crossing the Lafourche at fifty-one miles, and passing through the western limits of the beautiful village of Thibodaux, and thence to the high lands of Chuohoula to Tigerville, on Bayou Black, the head of steamboat navigation, the whole distance being 67 miles.

The location and construction of the road to this point is very important, as it developes the whole of the Lafourche, Terrebonne, and Bayou Black country, forming steamboat connection at Tigerville for the Attakapas and Bayou Teche country. By the immediate construction of this section of the road, (which it is the desire of the company to have completed in time to bring out the sugar of the next years crop) an outlet for the sugars and molasses will be secured. The sugar produced last year in this region was over 100,000 hogsheads, and 250,000 bbls. of molasses. The freight heretofore paid has been from $3 50 to $4 50 per hhd. and from 75c. to $1 25 per bbl. for molasses. Besides the advantages secured by the immediate construction of this section of the road to the planters of Attakapas, Terrebonne and Lafourche Interior, etc., a direct communication will be formed for steamboat navigation from Tigerville to all the watering places and islands along the gulf and the Atchafalaya bay. These watering places are destined to be the finest, most agreeable and healthful of any in the United States.

The chief engineer, Mr. Gibbs, with his assistants, will proceed immediately in the execution of the detailed survey, in order to have it ready for contract by the 1st of October. Great reliance is placed in the talents and energy of this able corps of engineers that the work will be completed at the earliest moment—perhaps before the time alluded to.

Judge Overton, the indefatigable and talented president, we understand, will leave the city in a day or two, accompanied by the general superintendent Col. Payne, to canvass the parishes along the line of the road, preparatory to the submission

of the question of tax subscriptions to the people, for the necessary sums to complete the road to the Texas boundary. The city having subscribed $1,500,000 by taxation, the parishes are pledged to an equal amount, to which sums add a million of dollars by private subscription, will complete the sum $4,000,000, the amount required to construct the road three hundred and twenty-four miles, to the crossing of the Sabine into Texas.

The company have bought a tract of land for a turn-out and depot, on the boundary line between the 1st and 4th districts, for the accommodation of the upper part of the city, but the principal or main depot, with all the engine shops, machine shops, and car shops and houses are to be located in Algiers, as has always been the intention, from the first outset of this great enterprise.—*N. O. Com. Bulletin.*

Union Track and Depot at Indianapolis.

There is, perhaps, at no other city in the United States, so perfect a connection of the different railroads, as at our capital. No fewer than eight leading railroads centre here, radiating to every part of the State, of an aggregate length, with their State connections, of over *eleven hundred miles*, all of these when constructed, may be directly tied together, by the Union track, and the interchange of freight, and passengers, between the several roads may be carried on by steam, without delay, and without inconvenience to passengers, or cost to transportation. This Union arrangement has received the sanction, and protection of the Legislature, by a general law at the last session, making it applicable to all other cities and towns where two or more roads connect in business. It is due to the men who projected the system, and have thus far carried it into effect, that it should receive more than a passing notice. The Union track is located across the eastern, and southern sides of the city. The Madison road comes in from the South, the Lawrenceburgh from the South-east, the Centre from the East, the Bellefontaine from the North east, the Peru from the North, the Lafayette from the North west, the Terre Haute from the West, and the New Albany from the South-west. Each road may have a separate freight depot, connected with the main double Union track by a turn out and switch, the track to these depots will, with the Union track, be the common property, constructed at the joint cost, and maintained and cared for at the common expense, of all the companies interested in the Union arrangement. Near the centre of the city, running from Meridian to Illinois streets, three squares south of Washington street, the Union passenger depot building is located on the Union track. This building is now being erected, and will be completed this season. The building is of brick, with rock foundation, 420 feet by 100 feet, with five tracks for passenger trains inside, and two tracks for the passage of freight trains outside. The building will be surrounded by streets on the north, east, and west, and by an open area on the south of sixty feet. The rooms for passengers will be in the north side of the building, next to the Union track. This will be the largest, and most ornamental building, of the kind, in the State, while the plan will afford to passengers arriving in the different trains by day and by night, every facility to take the cars in the same building on any desired line. The whole arrangement is to be governed by the Presidents of the companies interested, who by the late act of the Legislature, form the Union board, and if properly managed must prove highly advantageous to the public, as well as to the companies interested.—*Indianapolis Locomotive.*

Indiana.

Indiana and Bellefontaine Railroad.—We learn that the Bellefontaine railroad is completed about eleven miles east of Muncie, sixty-five miles from this city—leaving only nineteen miles of track to lay, which the contractors are pushing on with a heavy force, at the rate of about two miles per week. This road will be completed in November, by which time the Ohio connection to Cincinnati by Greenville and Dayton will be ready to open the through line—then look out for a change in the line of trade from the east to the west, and between this city and Cincinnati.—*Indiana Locomotive.*

New-York.

Buffalo and New York Railroad.—The following letter from Mr. Magraw, the president of the Baltimore and Susquehanna railroad, in answer to an invitation to attend the celebration of the opening of the Buffalo road, points out the relations which the road holds, as a North and South link between Buffalo and the Lakes and Baltimore and Washington.

OFFICE BALT. & SUS. R. R. Co.
BALTIMORE, August 23, 1852.

RUSSELL H. HAYWOOD, Esq.
Prest. B. & N. Y. C. R. R. Co.

Dear Sir: I am in the receipt of your much esteemed favor of the 18th inst., being an invitation to attend the celebration of the completion of the "High Bridge" across the Genesee river at Portage, and the opening of your road from Attica to Hornellsville on the 25th inst. I have watched with interest the progress of your work, particularly the erection of a bridge over the Genesee river at Portage, which may truly be regarded as a work of the age, and one which in an eminent degree reflects credit on the mind that conceived, as well as the hand which executed the work. The completion of your road will give the New York and Erie railroad, a proper terminus on the Lake. Buffalo has been, is now, and always will be the "City of the Lakes," and it is therefore in my opinion essential to the future success of that great work that it should have an unbroken connection with that city, and which is now secured through the completion of your road. But permit me to say that this is not the only important feature in the location of your road; a glance at the map will exhibit it as the Northern link in the chain of railway connecting the National capital with Buffalo, the North-west and the British Possessions, a work essentially national in its character. Commencing at the seat of Government, dividing by a direct line the States of Maryland, Pennsylvania and New York, and terminating at the Canadas, covering a distance that can be easily overcome in a single day. To perfect this great work, only one hundred and fifty miles remains to be finished—that section is between Harrisburg and a connection with your road. The friends of this Southern link of this chain, (between Baltimore and Harrisburg,) are taking steps to have the line between Harrisburg and Williamsport put under contract; the section between Williamsport and the N. Y. and Erie road remaining unprovided with the means requisite for its construction.

I regret that official engagements previously made will prevent me from being present on so interesting an occasion as the celebration of the opening of your road. Tendering my thanks for your polite invitation.

I am yours, most respectfully,
R. M. MAGRAW.

Maine.

Railroad from Bangor to Lincoln.—The citizens of Bangor have been making a movement towards opening railroad communication northward, along the valley of the Penobscot to Lincoln, some forty miles. This is the route by which they supply the greater part of their lumbering operations, nine-tenths of these supplies being, as we are informed, conveyed on the present country road. A card from some of the most substantial citizens of Bangor has been issued, stating their intention to aid in prosecuting the enterprise, and on Thursday a mass convention was holden at Lincoln, which was well attended, notwithstanding the stormy weather, and the proceedings of which were unanimous in favor of the measure, and solid aid was promised in its favor from thriving towns on the Aroostook river. Many of the Bangor gentlemen connected with the enterprise believe there is no doubt about the opening of a railroad to connect them with the west either at Waterville or Augusta, and they thought it most proper to lend their efforts towards strengthening the communications with their own customers and friends above them. Meanwhile, the excitement produced by the two organisations to control the Penobscot and Kennebec railroad, is likely to forward that undertaking, so that it is confidently expected that operations will be commenced at an early day upon the road to Waterville. At the latter place, on Tuesday evening, over $40,000 were subscribed to the stock.—*Boston Courier.*

South Carolina.

South Carolina Railroad.—As the next business season approaches, it becomes a matter of great and general interest to know what preparation the railroad has made to meet its ever increasing demand for means of transportation. On this point we have received some valuable information. Of new locomotives there have been received and put on the line, four; six are already on shipboard or landing, and two are due on the first of November, making twelve in all. Six new passenger cars have been received, or are on the way.

Of freight cars there have been received since the 1st of January last.....149
To be received before 1st of January next... 50

Making the whole outfit in freight cars, box and platform, from 600 to 650.

The general condition of the road, as we had an opportunity of seeing a few days since, is good, and the new cut, avoiding the in lined plane at Aiken, which has so greatly simplified and facilitated the transportation, is working as well as its best friends could desire.

There are other causes of prosperity to the R. R. speedily to be developed. The tax on the passage of the Savannah river is now to be removed, and the road will very soon be extended into Augusta. Our business with that city will then be placed on a new footing, and cannot but be greatly augmented. Even now, goods landed in Charleston one morning have been delivered in Augusta the next.

The extension of railroads in the upper part of the state, is another cause of increase, already sensibly felt, and to be much more widely felt the coming season. An immense region, heretofore shut out from all but the most difficult and costly communication with Charleston, is soon to be brought within twenty-four hours' pleasant ride of us, and a safe, certain and swift transportation of produce and goods established between regions that were before separated by more than the delays and risks of the Atlantic ocean.

With such a tide of business setting towards our city, it is gratifying to know that the railroad is prepared to do its part.—*Charleston Mercury.*

Galena Lead Mines.

The amount of lead shipped from Galena and other ports annually is about 42,000,000 pounds, according to the register kept in the city of Galena. This amount would be $4 per cwt, the price there worth $1,780,000. The number of miners actually at work does not exceed 2,000, which would show an average of $890 for each man. Now deduct $90 for cost of working and smelting the mineral, and we have the large average production of $800, an amount of prosperity indicated of which no other country can boast. The lead business which for a few years has been declining, is daily becoming more active, and confidence in the mineral resources of this region is continually increasing.—Not one acre in one hundred of the mineral lands has been scratched with the pick or spade, and all the leads (lodes) heretofore worked, lie within a few feet of the surface. Beneath the water, there is every reason to believe, far more extensive deposits lie yet to be explored, when the necessary capital shall be invested in machinery for raising the water. It is currently reported that mineral has been discovered beneath the sand rock which underlies the lead-bearing limestone hitherto worked. If this be so, the mines must rival those of Cornwall in depth and extent. Whether this be so or not, one thing is certain; and that is the fact that all the lead raised up to this time has been raised from very small patches of ground, while the land for miles adjoining lies in its native beauty untouched.—Some of the largest lodes have been struck immediately upon the surface, and most of them within a few feet.

Lead is not the only valuable mineral found there. The most productive ores of zinc and copper, the sulphuret and carbonate of zinc, and the sulphuret of copper everywhere abound. Wherever exploration for lead has been made, more or less of these metals has been discovered. Thousands of tons of

zinc lie to-day upon the surface, for the very good reason that it interferes with the working of lead mines, and is neglected because in the absence of coal, it cannot yet be profitably smelted. It is popularly known there as Dry Bones and Black Jack. Sulphate of iron is found in sheets of large extent, ranging from a few inches to several feet in thickness.

American Railroad Journal.

Saturday, September 11, 1852.

Comparative Safety of Railroads.

The recent melancholy disasters and destruction of life on board steamboats, have excited very general attention to the subject of these accidents, and the comparison in the relative safety of railroads and other modes of conveyance, especially river steamboats, seems fast settling in favor of the railroad as vastly superior in this respect. No topic is more deserving of a rigid analysis than the preservation of human life, and the earnest investigation of the dangers which menace it, and their preventives and remedies is not only of the highest interest but a positive duty. It is, by no means, our intention to extol one mode of travel in a spirit of boastfulness, or point out for selfish interests the manifold dangers of another. This would not only lead to injustice, but would work a double harm, by inducing on one side that careless security which is the most dangerous enemy on the railroad, and beget in those entrusted with the management of an inferior conveyance that recklessness and indifference which is equally fatal.

The comparison is, however, if fairly made, a very proper one, and recent distressing events have forced it on the public mind. At the first glance it would have been thought that the dangers of the two methods, of locomotion by steam on land and water would be analogous in their character—more points of difference than resemblance will be found. Travel by steamboat is certainly one of the most agreeable modes of locomotion. You are not restricted to one seat, you can walk into the open air, select a cool and shady spot, converse with ease and pleasure, read without difficulty, and enjoy the view of passing scenery at a rate which permits the sight of objects and allows the mind to dwell on its beauties. The speed of steamboats, though inferior to that of the locomotive and train, is at all events respectable. A rate of from eight to fifteen miles on the Mississippi and western waters, and from ten to twenty on the Hudson and coast steamers passes the traveller rapidly and most agreeably to the place of his destination. Besides he is able to dine, sup and breaktast, and sleep comfortably while on board. In all respects the steamboat resembles a moving hotel, and if no outward accident happens, the journey is filled with pleasant associations, and the distance has been insensibly glided over with fewer annoyances than are connected with any other method of travelling.

But the question recurs, and just now with fearful import, are steamboats safe? And if the series of accidents of the last few weeks continues, the steamboat would be universally condemned as hazardous in an eminent degree, and prudent persons would chose to travel by railroad, even if they had to pay an extra amount as the fare of an equal mileage. The ratio of hazard to life and limb is vastly greater on board of the steamboat than on the car. The first striking difference is the wholesale carnage which accompanies an accident on the former. The entire loss of life on all the railroads of the United States for a year, is exceeded by the deaths of any one of the recent steamboat disasters. While individual care and prudence on board the rail car operate as an almost perfect safeguard, on the steamboat, the carelessness of each passenger must be gross, or almost suicidical to endanger his personal safety. This is a remarkable difference between the two, and it cannot be too strongly impressed on the railroad passenger, that his life is in his own hands, that if he avoids danger, if he abstains from moving about, does not thrust any portion of his person from the car, does not cross the track, does not stand on the platform, etc., he enjoys a comparative immunity from peril.

On the rail car, the dangers from storm are very trifling, except so far as they may injure the track or break its continuity. It would be a waste of time to do more than allude to the fatal accidents caused by storms and inadequacy of the structure of the hull which have taken place from the time of the ill-fated "Home" to the present time. River steamboats are less exposed to this violence than those which navigate the coast; but it is an element of danger avoided almost altogether on the track, unless we imagine the possibility of a tornado or whirlwind descending on the train while in motion, and wrecking the cars by its fury. It will be seen that the risk in one case is large, in the other is next to nothing.

Danger from fire is possible on a railroad, and the fatal accident on the railroad between Paris and Versailles is a case in point, but we believe that no accident of this kind accompanied by loss of life has occurred in the United States, and the only one in England we remember was the death of the Countess of Zetland's maid, in consequence of the travelling carriage taking fire while carried on a truck. The numerous casualties of this kind on board steamboats and their wide spread fatality are well known. The construction of iron or other fire proof car would reduce the chances of this species of risk on the railroad to an absolute zero.

The danger of explosion is common to boilers of all steam engines, but the chances here of safety are altogether in favor of the railroad. The boiler of the locomotive is smaller than those of steamboats generally, and contains vastly less water and steam; the explosion, if it took place, would be in the open air, and the only danger to those at a distance would be from the projected masses of the boiler. The risk from scalding steam and water is much less than on board steamboats, especially those containing the huge boilers of the condensing engine. The boiler of the locomotive is less exposed to risks of explosion from a variety of causes. The collapse of a tube is not so dangerous as that of a large flue. The locomotive boiler is in continual view, and the fires are open to inspection and notice. Any defect hence is more readily perceived and remedied. The use of the locomotive tends to show these defects, and protects to a certain degree the parts from corrosion and rust.

The risks of danger are diminished and the chances of escape increased by the cars being separated from the engine, on the same principle as it was proposed to make the steamboat tow a safety barge in which the passengers were to be carried. The cutting up of the train into a number of cars, though perhaps rendered necessary by other conditions operates in diminishing the risk. In the steamboat all on board are nearly equally exposed to risk, and forethought strength and skill make very little difference in favor of their possessor.

On the railroad there are few temptations and provocatives to racing, there can be no rivals among the trains and engines of the same road. The time is predetermined and the engineer has his prescribed limits, which it is as much a disobedience to transgress in one direction as the other.

A few obvious differences in favor of the railroad we have pointed out for no selfish ends and to satisfy no prejudiced feelings, we desire standard of care and the respect due to human life to be raised everywhere, and our sole motive is to urge the proprietors of both steamboats and railroads to greater precautions for the protection of their passengers.

It is a shame that more attention is paid to this subject in despotic countries then here, and a larger degree of watchfulness is there required than is generally practiced in our country. The responsibilities assumed by the owners of these vehicles of public travel is very great, and not only the value of their own property but the lives of their fellow citizens are at stake. Thus far our steamboat travel, though so pleasant, has proved itself really dangerous to a degree that may excite well grounded fears of personal safety in a prudent man, and a preference for the rival means of conveyance.—Unless means are at once taken to eliminate these risks, only the inferior grades of travel will be left to the boat and it must become entirely secondary to the more safe and rapid method of transit by the railroad.

Wisconsin.

Madison and Prairie du Chien Railroad.—The Crawford county Courier of the 11th August, publishes the charter of the Madison and Prairie du Chien R. R. company, and gives notice that books for subscriptions to the stock of said company, will be opened at Prairie du Chien on the 15th inst., and at Madison on the 22nd inst. The sum of $100,000 must be subscribed to authorize the organization of the company.

Kentucky.

Covington and Lexington Railroad.—The Common Council of the city of Covington passed an ordinance on the 26th August, authorising the president of the board to endorse the bonds of the Lexington and Covington railroad company to the amount of $200,000. This act is under the authority of a law of the State, which made the endorsement conditional on obtaining the consent of a majority of the votes of the city. The petition presented to the Common Council praying for the passage of the ordinance, was signed by a majority of the voters of the city.

Shelbyville and Harrodsburg Railroad.—We are authorised to say that the whole section of the Harrodsburg railroad, from its junction with the Frankfort railroad, near Hobb's Station, to Shelbyville, is under contract, that a considerable number of hands are now at work upon it, and that the number will immediately be increased to two hundred. Engineers are at work between Shelbyville and Harrodsburg with a view to the location of the route.—*Lou. Jour.*

Ohio and Pennsylvania Railroad.

The following are the earnings for the month of August last.

Receipts from passengers	$23,836,04
" " Freight	8,614,21
" " Mail service	1,044,45
Total	$33,494,80

Which is an increase of 32 per cent. on the receipts of July.

The number of passengers carried in August, was 25,305.

Missouri.

A veritable railroad is now in active operation within the limits of Missouri, and doing a thriving business; illustrating, moreover, the results of kindred enterprises on a grander scale, by building up a town! We have heretofore mentioned that Mr. James R. Allen, was engaged in constructing a road six miles long, on his own hook, from Farmville mills to the Missouri river, in Ray county. The work is now finished, and the cars are running.

Massachusetts.

Palmer and Amherst Railroad.—A large and spirited railroad meeting was held in Amherst on Monday last. The first section of the road from Palmer to Amherst is all graded, with the exception of a small place in the latter town, and the rails will probably commence to be laid at Palmer in a short time. In regard to the section from Amherst to Montague, commendable spirit was manifested to carry it through as soon as possible. The stockholders voted that the directors go forward and make the necessary surveys and location as soon as funds could be procured.—*Boston Courier 7th September.*

Stock and Money Market.

For the past week the fancies have been rising and the slight stringency in the money market has been entirely removed. Though the Steamer of Wednesday took out considerable gold the exportations of specie have not been so heavy as the average. The money market is perfectly easy, and though the current rate of call loans is 5 per cent., a lower rate is in many instances taken. The monthly reports of the leading roads show that an excellent business is doing on all the roads, a steady advance is seen, and the estimates are generally exceeded. These are convincing evidences of the real character of investments based on the security of these corporations.

Thursday, 2nd September.—Stocks remained pretty much in the same position, if anything, slightly falling from the closing price of the day previous. quite a large amount of shares changed hands. Erie closed at 86¼. Harlem at 73. Hudson R. 69¼. Stonington 60¼. Norwich and Worcester 54. Reading 93¼. Long Island 24. Heavy orders for the last named stock have been received during the last few days from Philadelphia. The coal and mining stocks generally seemed firm. Investment railroad stock and bonds are also firm. New York and N. Haven was sold at 113¼. Michigan Central railroad 113. Michigan Southern R. R. 121¼. Albany and Schenectady 106¼.

Friday, 3rd September.—The stationary and inactive character of the stock market continues, the ease with which money is procured gives the power to retain stocks which would otherwise be sold. Erie was 87. Stonington 60¼. Hudson River 69¾. L. Island 23¼. Reading 93¼. The increased receipts on the Hudson River have just given its stock a lift. $9,000 of Erie Income bonds sold at 98¼. $5,000 of Erie convertibles, 1862, at 99¼.

Saturday, 4th September.—No material change in the price of the various stocks sold in the market, though there was evidently more buoyancy of feeling. Erie sold at 89 at the close. Reading at 93¼. L. Island 23¼. Hudson R. 70¼. The recent accidents on the steamers have had a tendency to advance this stock. Stonington 60¼. A large amount of government and state stocks were sold at quoted rates.

Monday, 6th September.—To day considerable activity prevailed and prices improved, sales on time were made more freely than for some time past, which tended to keep up the general buoyancy. Erie was sold at 87¼. Hudson River improved nearly 3 per cent., owing to the causes above mentioned, closing at 73. Harlem 73¼. L. Island 24. Stonington 60¼. Norwich 54¼. The Cumberland Coal Co. improved going to 72, in consequence of the recent advantageous purchase of the mines, etc., of the Maryland Co. Little was done in investment stocks, they were a shade lower than last week.

Tuesday, 7th September—The activity of the day previous continued though as usual there was a falling off in the afternoon. Erie closed at 87¼.—Hudson River at 72¼. Long Island 24¼. Norwich and Wor. 54¼. Harlem 73¼. The coal stocks generally improved and the investment R. R stocks rose in price. Cent. Mich. 113. Mad. and Ind. 107¼. Utica and Schenectady scrip 140. Southern Mich. 123, and North. Indiana 122. $26,000 of Kentucky 6's sold at 110, and other State and Gov. stocks were sold at full quotation.

Wednesday, 8th September.—The improvement in the leading fancy stocks maintains itself, and the premium stocks are firmly held with a slight advance over previous rates. Erie was sold at 87¼. Harlem 73¼. Hudson River 72¼. Long Island 25. Stonington 60. Nor. and Wor. 54¼. Reading 93¼. Government and State stocks were largely sold at full prices. We notice sales on time of Michigan Central at 114. Southern Michigan stood at 123. The steamer of to day took out $756,448, of which $500,000 was in gold.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, SEPTEMBER 11, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	108¼
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¼
U. S. 6's, 1868	118¼
U. S. 6's, 1868—coupon	119
Indiana 5's	91¼
Indiana 2½	52½
" Canal loan 6's	95½
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	81
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	108
New York 6's, 1854-5	108¼
New York 6's, 1850-'61-'62	116
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	108¼
New York 5½'s, 1865	109
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	105½
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	105½
Ohio 6's, 1860	109
Ohio 6's, 1870	115
Ohio 6's, 1875	116½
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	97
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1880	107
Virginia 6's, 1886	110½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	103
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	110
New York 5's, 1858-'60	103
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	98½
Erie convertible bonds, 7's, 1871	98½
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	97½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	88½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 2.	Sept. 9.
Albany and Schenectady	107	107
Boston and Maine	106½	108
Boston and Lowell	—	109½
Boston and Worcester	104	106
Boston and Providence	89	90
Baltimore and Ohio	82½	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	146	—
Delaware and Hudson (canal)	128	131½
Eastern	96	98
Erie	86½	87
Fall River	—	—
Fitchburgh	103	105½
Georgia	—	—
Georgia Central	—	—
Harlem	72½	73
" preferred	111½	111½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	69½	72½
Little Miami	—	—
Long Island	22½	25
Mad River	—	99
Madison and Indianapolis	112½	110
Michigan Central	113	113½
Michigan Southern	121	123
New York and New Haven	114	114½
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	56	54½
Ogdensburgh	26	25½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	97½
Richmond and Petersburg	35	35
Reading	94½	93½
Rochester and Syracuse	121½	122
Stonington	62	59½
South Carolina	—	122½
Syracuse and Utica	135	135
Taunton Branch	115	115
Utica and Schenectady	140	140
Vermont Central	14½	14½
Vermont and Massachusetts	20	23
Virginia Central	—	40
Western	104½	105
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Georgia.

Southwestern Railroad.—The Fifth Annual Report of the President of this company, L. O. Reynolds, Esq., to the stockholders, presents a statement of its operations for the year ending July 31, 1852.

The road was opened on the 1st August, 1851.

The up freight (eastward) for the year.		$43,100 17
Down freight (westward)		37,777 27
Through passengers		28,960 37
Way "		17,056 19
U. S. mail		2,500 00
		129 395 00
The expenses for the year		57,859 83
Net earnings		71,535 17

The expenses are classified into:

Repairs of road, salary of superintendents, hands, etc	$16.354 75	
Motive power and cars	12,799 97	
Fuel and water	2,716 48	
Transportation expenses, including salary of clerks, etc	12.732 95	
Salaries of president and treasurer	3,101 67	
Damage, stock killed, etc	4.645 69	
Incidental	2 008 32	
Interest, including interest on bonds	3 500 00	
Total expenses		57,859 93

From the net earnings, a dividend of eight dollars per share has been declared.

This on 5 567 shares is		$44.536
Interest on bonds		7.000
Annuity to city of Macon		1,250
		52,786

Leaving a surplus of $18,749 17 to be expended on the road and its equipments, which will have to be materially increased in motive power and cars on the opening of the Columbus branch.

The business has been conducted with regularity and success; the travel averaged 116¼ passengers per day, and the number of bags of cotton transported during the year is 45,476. The opening of the Columbus branch will add materially to this trade. An ample engine house and shops are in course of erection at the Macon depot. In the course of the fall the machinery and shops will be complete and adequate to effecting the repairs on the motive power. A general passenger station is now building for the accommodation of the business of the three roads meeting at Macon.

The Columbus branch is in rapid progress, and at the date of the report 580 hands were employed. The piers of the bridge over the Flint river were completed, and the trestle building through the swamp. The Muscogee company were pushing their part of the line, and expected to reach the terminus, 50 miles from Columbus, in November.

Surveys are now in progress for the road from Columbus to Opileka, on the Montgomery and West Point road, and it is expected to have that line under contract early in the ensuing fall; and from the known energy of the present head of the Montgomery company, a speedy completion of that important link in the line of improvements may be confidently expected. When this shall be accomplished, we shall possess the means of successful competition, for the through travel between the north and south, with any other line in existence.

The extension of the road further into the cotton region of Southwestern Georgia, has tecently been strongly urged, and the board of directors of the Southwestern road have adopted a resolution to the effect, that on the subscription of $75,000, and the payment of 25 per cent at the time of subscribing by the people along the line, the company would issue bonds for $125,000, provided arrangements could be made with contractors to receive pay two-thirds in such bonds and one-third in stock of the company at par value. The object of these arrangements is the extension of the road to Americus, a distance of about 20 miles. This is considered an eligible spot for business, and a favorable point of departure, whether for the Flint or Chattahoochee rivers.

The following account furnished by John T. Boifeuillet, Esq., the Secretary and Treasurer, exhibits the state of the company's financial affairs:

RECEIPTS.

Received for capital stock, 5,567 shares.		$556 700 00
" Forfeited " 922 "		30,016 00
" Amounts overpaid		6 61
" Balance due contractors in stock		165 00
		586 887 61
Bond account, issued		150,000 00
Premium and discount on bonds and notes		1,626 66
Freight earnings since August 1, 1851	80 934 92	
Passenger do	46,159 00	
		127.093 92
Post office department		1,789 81
Central railroad freight and pass. ac't		4,813 82
Daniel Griffin (Columbus stage)		147 50
		$872,359 32

DISBURSEMENTS.

Construction		$667,180 76
Locomotive engines	$15,820 32	
Passenger cars	7.288 67	
Freight cars	32,915 15	
Macon depot	19,275 41	
Tools	1,045 28	
		76,344 83
Current expenses		48 465 08
Balance		80,368 65
		$872,359 32

Maryland Mining Company.

The property of this company was sold on the first September inst. in Cumberland. "The first bid was $335,000, which, after a few minutes, was increased by a second to $385,000. After this the trustees held a consultation, and, through Wm. Price, Esq., announced that they had concluded to bid $500,000. Whereupon David Leavitt, Esq., President of the American Exchange Bank of New York, in behalf of the Cumberland coal and iron company, bid $500,100, and thereupon it was struck off to the Cumberland coal and iron company.—This property consists in part of two tracts of land called the "Maryland Mining Company," and "Fountain Inn," located in one body, containing about 1,900 acres of land, a large part of which is underlaid by the great vein of coal, fourteen feet in thickness, likewise by many other veins, varying in thickness from two to four feet—the whole located in the very heart of the great semibituminous coal fields of Maryland, with mines opened at great expense, besides various other lots of ground, with the village of "Echart Mines" on the National road, near Frostburgh, containing about one hundred houses, of which seventy are dwellings, the rest shops for carpenters, blacksmiths, engineers, etc. Also, two railroads: one 9¼ miles long, extending from the mines to the Mount Savage railroad, which gives a continuous railroad connection to the Baltimore and Ohio depot at Cumberland; and another, one mile long, extending from the Mount Savage road to the property of the Cumberland Basin company, at Cumberland. These two roads originally cost $250,000. In addition to all this property, there were included in the sale a vast amount of personal property, such as locomotives, several hundred cars, carts, horses, oxen, wagons, farming utensils, machinery, tools, mining implements, etc., all for the sum of $500,100, an amount insignificant when compared with the original vast outlay, which must have been several millions of dollars. The Maryland Mining company, it will be remembered, failed some time since, and its affairs went into the hands of Trustees. Mr. Leavitt made the purchase for the Cumberland coal and iron company, who own the adjoining property.—The junction of the two estates under one ownership will, no doubt give a prompt impetus to the coal trade, as it will obviate the necessity of the Cumberland company building a new railroad, as they had proposed doing, and enable them at once to enter upon an active and extensive transportation of coal from their mines to the depots of the railroad and canal companies.

Ohio.

The following projects of roads are very earnestly advocated by the people of northern and northeastern Ohio.

The Painesville and Hudson railroad, running nearly in a southerly direction from Painesville, abont 39 miles, to Hudson, there to unite with the Akron branch, and ultimately forming a connection with roads quite direct through to Cincinnati.—The papers and people of Painesville are discussing this project with considerable earnestness, and, if carried out, the road cannot fail to benefit Painesville and business at the mouth of Grand River.—The country along the proposed road to Hudson, does not present serious obstacles to its construction.

The charter of the road provides that the capital stock of the company is to be $1 000,000; and the corporators, Storm Rosa, Benjamin Bissell, Aaron Wilcox, T. Rockwell and Seth Marshall, have given notice that books of subscription to the stock at various points on the line will be opened from the 20th to the 30th of September inst. If the capital stock is not then taken the books will be opened at Painesville, Buffalo, New York, Boston, etc., etc.

The Clinton line railroad appears to be the favorite enterprise with the people of Hudson, Public meetings have been held, and at the meeting on Saturday the Observer says "the books were opened and a large amount was immediately subscribed to the stock, and gratifying assurances of further subscriptions were given." It is proposed to construct a road from Hudson, of the N. Y. and Erie guage, to Olean, so that cars loaded in Hudson will run to New York without transhipment. The link to be built is about 130 miles. At the meeting Judge Humphrey stated that he had visited the towns along the line between Hudson and Pennsylvania, and gave a flattering account of the interest manifested. He had assurances from the friends of the project in Pennsylvania that the Eastern section of the line will be immediately commenced and prosecuted to an early completion. Crawford county, Penn., has already subscribed $75,000 to the capital stock of the road. Prof. Day stated that responsible parties were prepared to construct the road with the pledge of an early completion, and on the most favorable terms.—*Cleveland Herald.*

Liabilities of Telegraphing.

The last legislature of Maine passed an act making telegraph companies liable for error in despatches, either in transmission or writing out, to the amount paid for its transmission to its destination, both in and out of the state. In case of unreasonable delay to transmit or deliver, affecting the value of the despatch, the whole amount paid shall be refunded. Damages for falsifying a despatch from twenty to one hundred dollars. Operators, agents, clerks, and other officers are also held liable for any fraud committed or attempted by means of the telegraph.

Ohio.

Cincinnati, Hillsboro' and Parkersburg Railway.—We are informed, on reliable authority, that the board of directors of the above named company, at their late meeting in this city, instructed their engineer forthwith to prepare for contract 56 miles of their line from Hillsboro' to Jackson, there to connect the city with the coal and iron region, and that Mr. Morris, the engineer, will commence the work at Hillsboro' to day.

The board consider the financial condition of the company such as to justify energetic action and onward movement. They consider it beyond doubt that Baltimore will join hands with them on this important line, at the coal region, thus connecting the two cities of Cincinnati and Baltimore by the shortest route, over the line which Mr. Latrobe, the chief engineer on the Baltimore and Ohio road denominates "*The great coal railway of Cincinnati.*" —*Cin. Gazette.*

Cincinnati and Zanesville Railroad.—The western termination of this important road is at Morrow, about 35 miles this side of Cincinnati, where it connects with the little Miami railroad. It is 125 miles long, and terminates at Zanesville, where it connects with the Central Ohio railroad. At Zanesville it will also connect with the Akron branch road, now being rapidly constructed from Hudson via Akron, Ohio, to Zanesville, by means of which a railroad route from Cleveland to Cincinnati will be created, giving to the local business of this road a direct communication with Cleveland. The road completely and fully equipped, will cost not to exceed $20,000 per mile, or $2,500 000. Ninety miles, from Morrow to Lancaster, are now under contract, to be finished by October 1853.—*Cleveland Herald.*

Akron Branch Railroad.—We learn from the Huron Observer that twenty-three miles of the Akron Branch of the Cleveland and Pittsburg R. R. R., from the Ohio and Pennsylvania railroad to Millersburgh were let for grading and bridging last week at Millersburg. The bidding was very spirited, and the work was let at moderate prices to good contractors. The average price per mile was less than forty-three hundred dollars. The work north of the Ohio and Pennsylvania line is in vigorous progress.

Illinois.

Illinoistown and Belleville Railroad.—We learn that the board of directors of the Belleville and Illinoistown railroad company have concluded a contract with Messrs. Page & Bacon, bankers, by which the means will be furnished for the immediate construction of the road from Illinoistown direct to Belleville, a distance of 14 miles. The road is to be a first class road, and will cost, we learn, with full equipments, about $340,000.

Colonel Morrison, of Belleville, has been elected President of the board of directors.

The contract for building the road will be given to parties well known for their experience in these enterprises. The track will be laid with heavy T rails, and it is contemplated to have the whole completed in twelve months or less from this date.

This road will be of great importance to the interests of this city, as well as Belleville, and when extended into the interior of Illinois, which we learn is contemplated, will develop the resources of that rich region of the State.—*St. Louis Intel.*

Jacksonville and Alton Railroad.—We daily witness that a very general desire is felt by the people of Jersey, Greene and Morgan counties, for a railroad connecting them. The farmers, merchants, mechanics, and property holders, are very solicitous, and we believe are prepared to enter into the work most cheerfully and liberally. The people along the route know that something in this way must be done, to afford them market facilities, and to throw open their country to the travelling public. This road would pass through one of the finest sections of country, if not the finest in the State. The citizens are intelligent and wealthy, as a community and able to accomplish this undertaking, if properly entered into. The Illinois river has proved of scarce any benefit to this section, as regards transportation, the past two years, and the want of a thoroughfare is most directly and severely felt.

This road, it is urged by its friends, will connect with the Springfield and Alton road, at Brighton, and thus avoid the broken Piasa country. The road will be constructed over a smooth, level country, requiring no blasting, and but comparatively little grading. It is supposed that the road can be built at a less than average cost.

Some friends have assured us, that the feeling throughout Greene county alone is so strongly in favor of the project, that sufficient stock would now be subscribed in that section, to warrant capitalists to engage in it.—*Alton Courier.*

Brown county has decided, by 450 majority, in favor of taking $50,000 stock in the Northern Cross railroad.

Missouri.

We learn from W. Cole Bailey, Esq., that engineering corps are organized for the survey of this road, at both ends, and that it is expected to have 25 miles ready for contract at each end early in the fall. At the recent meeting of the president and directors in St. Josephs, they entered into a contract with Mr. Duff, a gentleman representing a Boston company to build the entire road, depots, locomotives, cars and everything complete, the work will be commenced at both ends of the route as soon as the locations are made, and to be finished in four years.

Pacific Railroad.—We learn that the county of Franklin has subscribed $50,000 to the capital stock of the Pacific railroad. This result has been obtained after a general canvass of the county, made by Capt. G. L. Nuckolls, of the Moselle iron works who is entitled to great credit for his exertions. Mr. Allen, president of the road, returned from the east last evening, in good health.—*St. Louis Republican.*

Maryland.

Baltimore, Carroll and Frederick Railroad.—The meeting of the commissioners of this road, which is designed to connect Baltimore with Westminster, Carroll county, and thence through Frederick Co., with Hagerstown Washington county, held in Westminster on 2nd Sept., we learn from the Carrolltonian, was not only largely attended but the spirit manifested was such as to augur most favorably for the prospects of the road. Notice was directed to be given that books for subscription of stock would be opened on Monday, the 11th of October, and kept open for the six succeeding days at the following places:—Baltimore city, at Barnums city hotel; Westminster at Moul's hotel; New Windsor, at the store of Mr. Jonas Ecker; Emmitsburg, at the hotel of Mrs. Agnew; Hagerstown, at Doyle's hotel,

The road is an important one, not only to those places which it will afford the means of communication with Baltimore, but also to our own city, to the trade of which it will prove a valuable auxiliary. Traversing a highly cultivated and wealthy agricultural country, and connecting with several points of local importance, there can be no doubt that the road would receive from its very completion a remunerative amount of trade and travel. The route which it is destined to pursue is highly favorable to railroad construction, whilst the bonus which the state has given in granting the right of way over that part of the Westminster road already constructed, will render the cost of the road but little over half what is ordinarily demanded for the completion of similar improvements.—*Balt. American.*

Portland Locomotives.

The Montreal Herald, of August 30th, says:—"We understand that the locomotive which conveyed the pic nic party to Melborne, on Thursday last, had been only a few days previous received from the works of the Portland Company, (Maine) and was then on her first and trial trip to Richmond. She is a noble specimen of workmanship, and performed her work admirably. She is said to be as fine an engine as is to be found in North America, and does credit to her manufacturers."

New York.

Lebanon Springs Railroad.—This road when finished, will complete the chain of roads leading northwardly, connecting the city of New York with the city of Montreal via the Harlem railroad. The Lebanon Springs railroad chartered by the state of New York, with its laterals, the Williamstown and Hancock railroad, chartered in Massachusetts, and the New York and Bennington railroad, in Vermont, form a line of 53 miles in length, and will cost in its construction and equipment the sum of $2,000 000. The company is organized, under the presidency of Moses V. Tilden, Esq.; Martin Green, chief engineer, and R. C. Root, secretary and treasurer. The following named gentlemen are directors: Geo. Baker, Gov. Morris, John Sharper, Philip Dater, Alexander Hamilton, Jr., Samuel H. Cornell, Samuel J. Tilden, R. C. Root, Saml. Wilbor, Benoni Sherman, Moses Y. Tilden, David Campbell and Alex. H. Holly.

The Tanneries of the United States.

From the vast and various mass of statistics returned with the late census, and now undergoing classification and condensation in the census bureau, the National Intelligencer has been favored with a complete view of the tanneries of the United States. The total number of establishments in the United States, is 6,263; capital invested, $18,900,557; value of hides prepared, $6,128,970; skins, $2,653,865; value of raw material, $19,613,237; number of hands employed, 20,909 males and 102 females; monthly wages, $416,214 to the males, and $970 to females; number of skins produced, 2,653,865; sides of leather, 12,257,940; aggregate value of annual products, $32,861,796. There are about 6,000,000 sheep, goat, and other small skins tanned and dressed annually, which are not included in the above.

Baltimore and Susquehanna Railroad.

At the monthly meeting of the directors of the Baltimore and Susquehanna railroad, which was held on the 1st inst., R. M. Magraw, Esq., the president, resigned his office, and Robert C. Wright was appointed in his stead.

Mr. Magraw has held the office of president of the company for many years, and under his management its affairs have prospered, and the travel on the road greatly increased. His familiarity with the operations of the company, and the high ability with which he discharged the responsible post he held, must cause general regret at his resignation; but the company will not lose his services altogether, as Mr. Thompson, one of the directors on the part of the stockholders, resigned on the same day, and Mr. Magraw was elected a director in his place.—*Balt. Patriot.*

A Model Engineer.

JEREMIAH K. GUILE, an engineer on the Rochester and Buffalo railroad, commenced work for the company in 1837, and has run an engine up to the present time, more than fifteen years; has not lost more than three months time from sickness or other causes; has had but one passenger killed on his train, and he, in a fit of intoxication, fell from the platform of the cars while they were in motion; has lost one fireman (killed) by running off the old "strap rail" track; has been upon his engine 5475 days and nights; has run more than 488,000 miles.

East Tennessee and Virginia Railroad.

Washington county, Tenn., on the 14th August last, voted by a large majority to subscribe $50,000 in bonds to this company. The bonds are redeemable in thirty years, interest payable at the bank of America, N. Y.

The company have advertised for contracts for the graduation and masonry of the road from Jonesborough to Bull's Gap, embracing twenty-nine sections. The signs show that Tennessee will, without any avoidable delay, bring her road to the Virginia line, to conect with the Lynchburg and Tennessee road.

Height of Mt. Washington.

Mr. Goodwin, one of the engineers of the Atlantic and St. Lawrence railroad, has just completed the admeasurement of Mt. Washington, and makes it 6285 feet above the level of the sea. This accords very nearly with the altitude as given by other scientific men.—*Portland Advertiser.*

Notice to Contractors.



Sodus Point and Southern Railroad.

PROPOSALS will be received at the office of the Engineer, at Sodus Point, until Tuesday, the 5th day of October next, for the construction of the Sodus Point and Southern Railroad, including Grubbing, Graduation, Masonry, Bridging, and the laying of the superstructure, complete for operation.

Plans, Profiles and Specifications will be exhibited, and all requisite information given, at the office of the Engineers, on and after the 25th of September inst.

Contractors should be prepared to state what proportion of the stock of the company they will take at par in part payment.

The company reserve to themselves the right to let the work in items and sections, and in such manner as may appear most advantageous to their interests.

Dated Sept. 4th, 1852.

WM. D. COOK, President.

S. CUHER, Secretary.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

Old Railroad Iron.

PARTIES having Old Rails, either flat or any other pattern, suitable for re-laying or manufacturing, and wishing to dispose of the same for CASH, will please address G. H. WALBRIDGE, Box 2250, Postoffice, New York City, stating *quantity, pattern* and *price*, at what seaport, and when they would be delivered.

New York, Sept. 11, 1852. 2t*

To Contractors.

PROPOSALS will be received at the office of the Alabama and Mississippi Rivers Railroad Company, in Uniontown, Ala., until the first of October next, for the Graduation, Masonry, Bridging and Cross-ties of said road, from the west bank of Valley Creek to Uniontown, 28 sections about one mile each. Bids proposing the entire payment, or a percentage thereof, in the stock of the road, will receive the most favorable consideration. Specifications can be seen at the office of the company in Uniontown, and also at the office of the Chief Engineer in Selma, Ala. J. J. DRAKE, Secr'y.

Uniontown, Ala., August 16, 1852. 4t*

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,

31st July. 1m

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

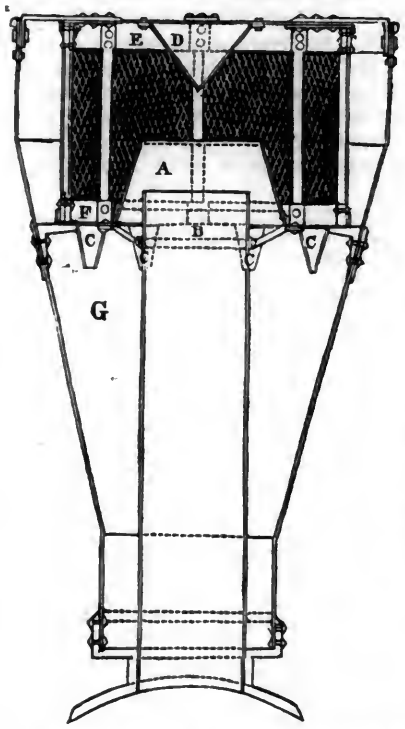
MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M W. MASON, Supt. of Machinery.

To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,

DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs. Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton. Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Kilby St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.

2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.

3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.

4. It must be finished in three holes, or nearly as hard as spring-wire.

5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.

6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.

7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.

8. The wire must be drawn on blocks of no less than 2 feet diameter.

9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.

10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.

11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.

12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.

13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.

14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.

15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.

16 Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.

17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"

18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,
Importer of Stationary 191 Pearl st., N. Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south. JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th, 1852.

Notice to Contractors for Masonry and Bridging.

ALABAMA AND TENNESSEE RIVER R. R.

PROPOSALS will be received at the office of the Alabama and Tennessee River Railroad Company, in Selma, Alabama, until the 15th September next, for the Masonry and Superstructure of "Coosa," "Waxahatchie," "Tallasseehatchie," "Talladega" and "Chockolocko" Bridges, and also for the other masonry required on 90 miles of this road.

The work comprises about 3,000 lineal feet of Timber Bridging and 20,000 perches of Masonry, and is situated in a healthy country, where materials, provisions and labor are abundant and cheap.

Plans and specifications may be seen, and all information will be furnished at the offices of the Engineer Department in Selma and Talladega, Alabama.

Satisfactory evidences of ability and responsibility will be required from those proposing for the work. LEWIS TROOST,
Chief Engineer.
New York, August 3d, 1852. 5t32

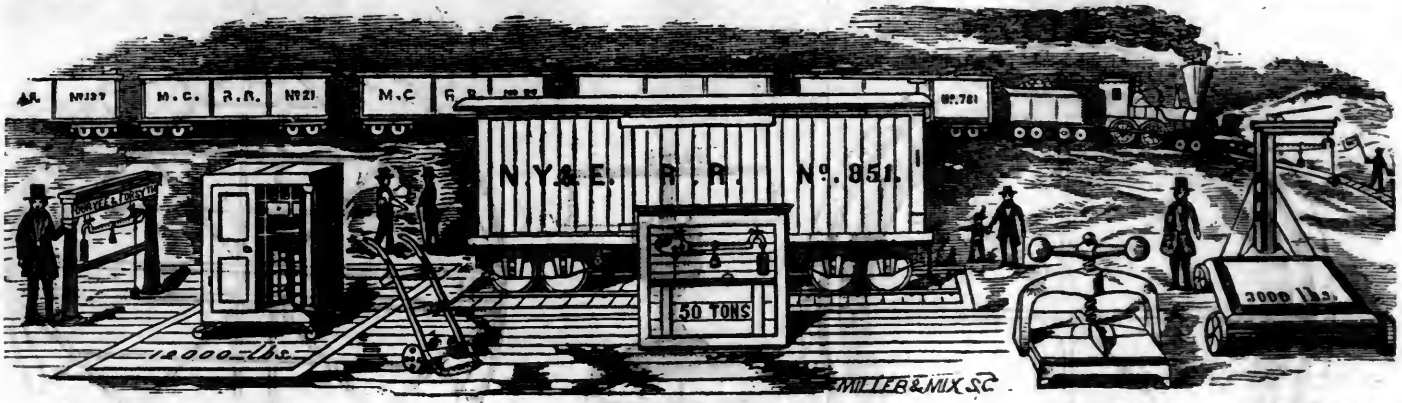
LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. | TRACK SCALE, 100,000 LBS. | RAILROAD MANIFEST PRESS. | IRON SCALE, 1 1-2 TONS.

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	" Chicago, Ill.
Crawford & Reynolds,	" Cleveland, Ohio.
Joseph E. Elder,	" St. Louis, Mo.
Byram, Miller & Shreve,	" Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Ha lem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.	Michigan Southern, American Express Co.,

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

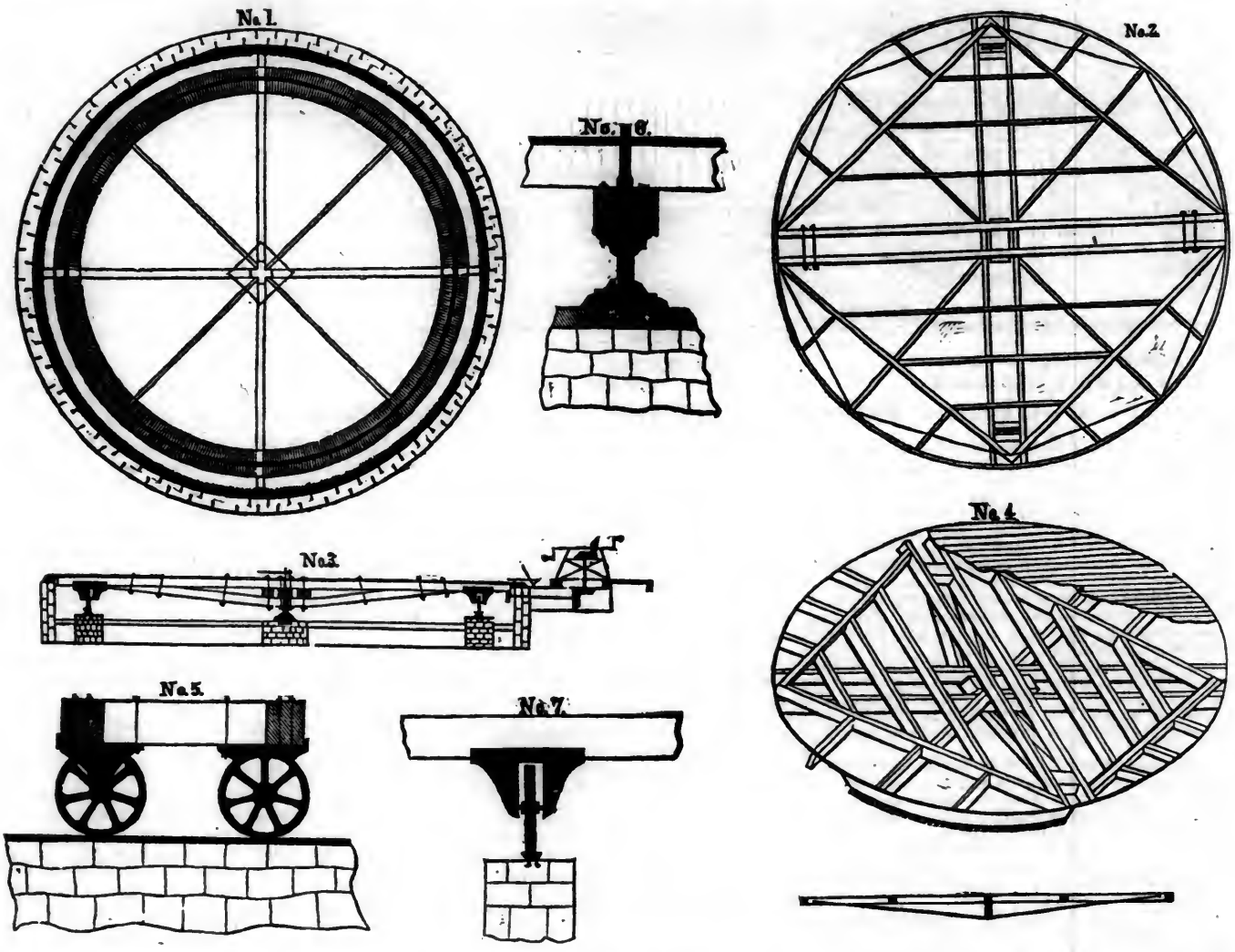
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.

The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous rail road, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,
6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.
March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer.*
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 38] SATURDAY, SEPTEMBER 18, 1852. [WHOLE No. 857, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Buffalo and Brantford R. R.....593
Springfield and Bloomington R.R. Extension..594
Northern (Ogdensburg) Railroad.....594
Lead Mines of Northern New York.....595
Statistics of Gold.....596
Railway Statistics of United Kingdom.....596
Exhibit of the Buffalo and Brantford Railroad.597
Brunswick and Florida Railroad.....598
Indiana Central Railroad.....598
New Postage Law.....498
Baltimore and Ohio Railroad.....598
Springfield and Columbus R. R.....599
Great Western (Canada) Railway.....599
Effects of the Earth's Rotation on Locomotion.....599
Wabash Railroad.....599
Lawrenceburg and Indianapolis R. R.....599
Camden and Atlantic Railroad.....599
Stock and Money Market.....600
Railroad Lands in Missouri.....602
Earnings of Railroads.....602
Railroad Subscriptions.....603
Scioto and Hocking Valley Railroad.....603

American Railroad Journal.

Saturday, September 18, 1852.

Buffalo and Brantford Railroad.

We give this week the recent exhibit of this company, to which we invite attention.

By reference to the map annexed to the report, or to any map of the United States and Canada, the importance of the above enterprise will at once be appreciated. The great lakes now control the commerce of the west. The city of Buffalo holds the key to this commerce, and is, and must always remain, the great *eastern*, as Chicago must be the great western, lake port.

The amount and value of this commerce will be seen from the appendix to the report. Taking its extent as a test, Buffalo already occupies the foremost rank among our leading commercial cities.

This commerce, though already swollen to a vast volume, is yet in its infancy. Every year adds to its amount. Every mile of new railroad or canal opened in the west is an additional feeder to the great northern route, by way of the lakes and the New York improvements.

The city of Buffalo, therefore, by virtue of its position, commands and attracts to itself the business travel between the western States and the seaboard. As is well known, it is the greatest point of pleasure travel in the United States.

The most important and attractive town on the lakes, west of Buffalo, is Chicago, which is, and which forever must remain, the great western city of the lakes. Situated on the south shore of Lake Michigan, it is the point at which will centre all the lines of railroad extending west, from all our great Atlantic cities.

From Buffalo to Chicago two routes present themselves; one following the south, and one following the north shore of Lake Erie. The former line is nearly completed, being made up of the Lake Shore, and Southern Michigan lines; the latter is to be supplied by the Brantford and Buffalo, Great Western, and Michigan Central roads.

Taking Buffalo as a starting point, the northern is the best, and most direct route to the traveller, going either to Detroit or Chicago. The only incomplete portion of this line is that embraced in Canada, to be made up of the Great Western, and Brantford and Buffalo roads.

Both of these roads are in a forward state, and are rapidly advancing toward completion. Their importance as links in the great line already described, and to the lines of road centering at Buffalo, and their flattering business prospects, have secured the efficient aid and co-operation of American capital, and the services of some of our most efficient and experienced railroad men, among whom may be named Mr. Corning of Albany, Mr. Forbes of Boston, Mr. Brooks of Detroit, and Mr. Wadsworth of Buffalo.

The city of Buffalo takes a deep interest in the Brantford road, as a work which she regards as indispensable to the maintenance of her commercial position. That city is now the focus of all the roads extending west from Boston and New York. It will soon stand in similar relations in reference to Baltimore and Philadelphia. To secure to herself the travel from all these cities going west, it is necessary that she should provide for it a suitable channel, so as to render that city a *convenient* point for such travel to make. This object will be most fully accomplished by the above work. By taking the north shore of Lake Erie, an almost straight route can be had from Buffalo to Chicago. As a through route, therefore, the above road coincides with the one not only shortest in *lineal* distance, but the most *convenient* to the traveller.

The prospect of a lucrative local traffic is equally flattering. It is well known that the peninsula of Canada is by far the finest portion of the Province, as well as of this continent. It is well settled by an industrious and enterprising population, and filled with large and flourishing villages. There is no agricultural community in the country that can furnish a greater amount of local traffic for a railroad. Buffalo, by virtue of being by far the largest city within convenient reach of the country traversed by the above road, is the appropriate market for the products of this region, and would command a large portion of its trade; and should "reciprocity" in trade between the United States and Canada be effected, Buffalo must become the principal market for no inconsiderable portion of Canada West.

We believe, therefore, for the reasons given, that the above project offers a very attractive opportunity for the investment of capital. We know of none better among all the enterprises before the public. It connects one of our largest and most flourishing inland cities with an exceedingly rich and productive district, while at the same time it occupies the convenient line of one of the greatest routes of pleasure and business travel in the country.

The statistics annexed to the company's exhibit, and which are all copied from official sources, show the vast commerce of Buffalo. The growth of this commerce has been rapid beyond all precedent. If possible, it must continue to increase in still greater ratio from the rapid construction of railroads and canals in the west, all of which are the tributaries to the northern or Lake Shore route. During the winter season, railroads take the place of canal and lake navigation, and for about four months in the year the entire movement of property is upon railroads, a matter of no small account, as far as the income of railroads is concerned. During the winter season, the whole internal commerce of the country must be transacted over our railroads.

For the year 1851, over 400,000 passengers were carried to and from Buffalo by one line of railroad only. There are now *three* important lines running into the city from the *east*. Within a year more there will be three others. All these must more than double the arrival and departure to and from the east. For all this immense movement, the Buffalo and Brantford will constitute the only outlet west upon the north shore of Lake Erie.

It is ascertained from authentic sources, that the total arrivals of passengers to and from Buffalo, by all routes for 1851, were 629,000. The only routes then existing were the Lake, the Central line of road, and the Niagara Falls road. This number must be vastly increased by the increased number of avenues that have been, and are to be, opened. The routes to take this mass of travel West will be the Lakes, and the Northern and South Shore railroads. It is reasonable to expect that the land routes will take by far the greatest amount of it.

The favorable opinion which we have expressed in reference to the business prospects of the above project, will, we believe, be fully confirmed by the conviction of every person who will sufficiently inform himself in reference to it.

It will be seen that the route is a most favorable one as far as grades are concerned. The whole cost is estimated at $1,118,236, or about $14,500 per mile.

As an evidence of the income that may be expected from the above road, we give, by way of illustration, the following statistics of the operation of the Attica and Buffalo railroad for the year 1851.

Length of line	31½ miles.
Cost,	$906,915,16
Gross receipts	229,710.04
Net "	158,206.91

or more than 17 per cent. upon the whole cost of the road. It will be seen that the cost of the Attica and Buffalo road is nearly double that of the estimated cost of the Brantford and Buffalo. The latter occupies one of the easiest routes in the country following the margin and general level of lake Erie, and avoiding entirely the valley made by Lake Ontario. With its low cost, and strength of position as a local, and through route, we cannot otherwise regard it than one of the most promising projects before the public.

Illinois.

Springfield and Bloomington Extension.—The unparalleled dispatch with which the Chicago and Alton railroad is being pushed forward to completion must be a source of extreme gratification to the citizens of this place and vicinity. The division between Alton and Springfield is just about finished, and will be in running order in the course of another week. The extension north to Bloomington, a distance of sixty-three miles—is all under contract and the work of construction will be prosecuted with the utmost vigor and dispatch. The specifications in the contracts entered into, require of the contractors the completion, in readiness for the rails, of all the light work on the division on or before the 1st of December next, and the heavier jobs are to be finished early in the Spring. The grading, masonry, bridging and cross ties, for this division, are all to be completed in less than a year from this time, so that nothing shall thereafter remain to be done, to complete the work, save the laying down of the rails.

All the money required is already in the hands of the company, and subject to the drafts of those who have charge of the work. These men are not only capitalists, but they have all had a large experience in railroad building, and the best opinion is that they will finish their jobs in the time specified, and pocket a fair consideration for their labor.

The *route* of this division of the road is remarkably direct, and with the exception of a few miles in the vicinity of the Sangamon, Fancy creek, Salt creek, Kickapoo, Sugar creek and Blooming Grove, the work is, even for Illinois, unusually light. The deepest excavation between Bloomington and Salt creek, is but 21 feet; and the highest embankment or filling, thirty feet. The cutting and filling thro' the heavier portions of the work, are for short distances only, except some two or three sections on the north side of Kickapoo.

The route over which this division of the road passes, commencing at Springfield, pursues a N. E. course, in the direction of Bloomington, crossing the Sangamon a little above the bridge on the Peoria road; thence in an almost right line, to a point on Salt creek, about one and a half miles south-east of Postville, leaving the Elkheart Grove some three or four hundred yards to the south-east; thence pursuing the same course, it crosses the Kickapoo about three miles below the present crossing of the Springfield and Bloomington road; thence crossing the east fork of Sugar creek, it proceeds in an almost direct line to Bloomington.

A large portion of the country through which it passes is almost entirely prairie, so level or so gently rolling that in many places it will be hardly necessary to break the sod.

By the time that this road shall be completed to Bloomington, the Central railroad will be built from LaSalle to the same place, which connecting with the finished portion of the Chicago and Rock Island railroad, will give us a railroad in full operation to Chicago, in less than a year from this time. While the works we have named are progressing, the Central railroad will also be constructed from LaSalle towards Galena, and by the next summer the "Aurora Extension" will connect with it, which will give us two finished routes from Peru to Chicago.—*Alton Telegraph.*

New York.

Northern R. R. Company (from Ogdensburg to Rouse's Point).—The report of the directors of this road submitted 16th June, 1852, discloses the following facts. The road was opened on the first of October, 1850. Since that date it has been in constant and successful operation, at present but a small amount of ballasting remains, and the excavation on the Ogdensburg depot grounds is all of that species of work unfinished. The work has been very substantially constructed, and this has led to an increase of the expenditure over the original estimates. Considerable additions have been made however to the plan then contemplated, among these are especially the wharf and bridge at Rouse's Point, and the side tracks for lumber etc., in the vicinity of the stations. Large purchases of land beyond what was required for roadway and depot grounds, have been made for wood and gravel, and when the report was made, about 2700 acres of land was thus held by the company.

In consequence of these additions, and the expenditures deemed necessary to secure the permanency of the road, as well as the increased cost of doing portions of the work, consequent upon the failure of several contractors, the cost of construction to May 1, including all expenses of gravel and material trains, and incidental expenses of every kind, amounts to $3,360,041 95

To this add the cost of buildings	339,396 69	
Engines and cars	649,895 34	
Amount of interest paid to stockholders and on loans, and loss on sale of bonds	672,787 33	
Making a total cost of		5,022,121 31
This sum has been realised from payments on stock subscriptions	$1,551,311 61	
First issue of mortgage bonds	1,500,000 00	
Second issue of mortgage bonds (now paying in	1,500,000 00	
Balance of floating debt	470,809 70	
		5,022,121 31

In addition to the above amount of $5,022,121 31, there are sundry unsettled claims and accounts, so that the cost of the road will ultimately reach about five millions and a quarter of dollars. The floating debt is to be provided for from unpaid stock amounting to $448,688 39, and from unsold bonds, for which, it is expected, the company will be able to obtain the par value.

The average cost of the railroads in New York, with their equipments, is stated as exceeding $42,000 per mile, not including interest, discount on securities, etc. The cost of the Northern road, including such items, does not exceed this sum per mile, a circumstance which must be taken into account with the completeness and extent of its equipment, and the fact that no one of them, with the single exception of the New York and Erie, possessed so many cars and engines as this road now owns. The twenty-three other roads in operation last September have an entire length of 1,605 miles, and they had 327 engines and 3,607 cars of all descriptions, equal to 20 engines and 225 cars for each 100 miles; while this road of 118 miles, now owns 28 engines and 545 cars, exclusive of gravel and hand cars, equal to an equipment of 24 engines and 463 eight wheeled cars to each 100 miles.

This equipment has been rendered necessary by the actual and anticipated business of the road.

The northern railroad constitutes the first and most important link in one of the great chains of communication between the west and the Atlantic sea board. From its eastern terminus, at Rouse's Point, various lines of railway and water communication diverge towards Boston and New York, searching out in their course most of the important towns and villages in all the New England States, and in the eastern part of New York. To enable us successfully to perform the duty thus demanded of us, it was indispensable that this road should have an ample stock of engines and cars; and it has accordingly been procured. And it is now believed that no important additions will be needed for several years, unless the business of the road should continue to increase (as it has already done) in a more rapid ratio than has been anticipated.

The same considerations have influenced the erection of extensive buildings at Ogdensburg and Rouse's Point, for the storage of property intrusted to us for transportation. No other railway in the state possesses buildings of equal capacity; and although not of expensive structure, they are of good general appearance, and are capable of sheltering an immense amount of property. No important additions to the buildings already erected will be required for a considerable period except the completion of a building now in progress at Ogdensburg, which is of great extent but of cheap construction, and will make all the addition to the present facilities for storage that is now in contemplation.

The following is a statement of the earnings in each month from Oct. 1850, to May 1852.

Months.	1st Year.	2d Year.	Increase.
October	$22,732 06	40,549 46	17,817 40
November	30,464 19	38,192 40	7,728 21
December	17,258 87	29,617 94	11,749 07
January	9,134 89	17,578 53	8,443 64
February	10,634 17	12,942 37	2,308 20
March	16,246 28	14,631 60	*1,614 68
April	27,117 22	23,974 74	*3,142 48
May	37,058 81	57,196 85	20,138 04
June	30,150 87		
July	29,451 94		
August	26,441 64		
September	34,477 92		

* Decrease.

The falling off in the earnings of March and April 1852, was caused in part by the late opening of navigation in the St. Lawrence and lake Champlain, when compared with last year.

The road is known as the favorite route between northern New England and the west, and much of the travel between Montreal and western Canada, passes over it. With proper connections it is be-

lieved that it will become a leading avenue both for pleasure as well as business travel. It is already distinguished for ease and comfort enjoyed by travelers over it, and the civility, order and cleanliness of its passenger trains. The earnings of the passenger department for the year ending Sept. 30th, 1851, were $83,560 85; the increase up to 31st of May over the corresponding period in the previous year, was $9,672 74, or near 25 per cent.

As a freight road the Northern appears to best advantage. The following table of the leading freight roads in the state exhibits the Northern as the fourth in the state in the number of tons, and second only to the Erie railroad in thetotal movement.

	Miles.	Tons hauled.	Total movement	Earnings.	Expenses.	Earnings per mile.	Expenses per mile.
New York and Erie.....	464	250,096	34,790,480	$1,108,138	$586,858	3.18	1.68
Albany and West Stockbridge ...	38	185,119	6,479,165	.....	.....	....	....
Utica and Schenectady	78	115,750	5,579,150	251,599	101,319	4.51	1.81
Northern	118	109,700	8,319,043	200,049	120,175	2.40	1.44
Albany and Schenectady.....	17	92,058	1,564,986	87,432	46,599	5.38	2.98
Syracuse and Utica.....	53	86,849	3,734,507	111,090	61,098	2 97	1.63
Rochester and Syracuse.....	104	83,569	5,416,094	237,530	89,916	4.38	1.53
Buffalo and Rochester.....	76	48,890	3,010,730	90,349	46,942	3.00	1.55

The tonnage hauled during the present year exceeds those of the corresponding months of the previous by sixty five per cent.

The directors after expressing the prevalence of an opinion that the rate on freight on many lines, including the Northern, go on to give the reasons which induced them to adhere to the present rates.

For the year ending March 31, the through freight was 63,568 tons, and the amount sent from or received by way stations was 50,202 tons. A portion of the through freight was destined for Ogdensburgh and Rouse's Point, but at least one half of the amount transported was foreign, and this is susceptible of almost indefinite extension as no limits can be set to the productiveness of the vast and fertile West. This foreign traffic could not be at higher rates without risking its discontinuance. The local tonnage is more under control but here too the policy of low rates is approved. The bulk of this consists of coarse unwrought materials of cheap value which from their nature will not bear high rates of transport. The low grades and easy curves of the Northern allow an engine to move a heavy train, while cheapness and abundance of fuel and labor lessen the direct cost. These considerations have induced the directors to put the rates at the prices charged.

The various connections both existing and in progress are next enumerated.

A fleet of over thirty steam and sail vessels runs regularly with freight to our wharves in Ogdensburgh, under arrangements with this company, besides the transient vessels which now seek this route. The numerous passage steamers of the several companies on Lake Ontario and the St. Lawrence, make our station a point of arrival and departure. The eastern terminus, at Rouse's Point, connects with the Champlain and St. Lawrence road to Montreal, and with the Vermont and Canada road, extending southerly and easterly through all parts of New England to New York and Boston. The steam passage boats on Lake Champlain make Rouse's Point the northern limit of their voyages, instead of extending them, as formerly, to St. Johns. A large number of freight vessels also seek our wharves, and take thence the heavy deposits of property destined to the markets of New York and New England.

In addition to these existing connections, a new road from Montreal to Plattsburgh will soon be in operation, crossing our road at Mooer's station, which will give us a route to Montreal at a saving of several miles from the present one, and will facilitate the transit of passengers by way of this road to Western Canada. The Bytown and Prescott road is in a good state of progress towards completion. This road, when in operation, will open a very large and productive field to business with our own; and beneficial results to us are confidently anticipated.

The contemplated road from Watertown to intersect the Northern near Potsdam station would give easy access in winter as well as summer to the West. The other road is designed to connect Lake Huron at the head of Georgian Bay, with the St. Lawrence river at Prescott, opposite the terminus of our road at Ogdensburgh. This line was surveyed last winter, and profiles and estimates are in preparation. Should this road be built, the advantages to be derived by our own can scarcely be estimated. Not only will it open to us an extensive and fertile territory in Western Canada, but the countries bordering on Lakes Huron, Michigan and Superior, will find this their shortest, quickest and cheapest route to market.

The Great Western road in Canada, which commences at Detroit and terminates at Hamilton, when completed, next year, will aid materially in turning the trade and travel of the West to Lake Ontario. Should the friends of this and the connecting roads place superior passenger boats on the line between Hamilton and Ogdensburgh, to run solely in connection with the railways, it is not too much to expect, that our passenger income, from this source alone, will double our present receipts.

The report concludes by a brief summary of the benefits of the road to the farming and other interests of Northern New York, and the encouraging business prospects of the road itself.

The summary of the doings of the road in 1851 are:

Mileage of engines with passenger trains.	124,222
" " " freight " ...	139,801
" " " gravel, etc.....	123,223
	837,246
The total mileage of cars.....	4,324,126
Tons of freight hauled.....	131,442
Total movement for custumers.....	9,938,771
" " for the Co.....	403,826
	10,342,597
Passengers in cars.....	73,577
Total movement of passengers.....	3,204,669

The following is the abstract of earnings and expenses of the road in the year 1851.

Earnings..		
Freight department.....	$230,017 96	
Passenger ".....	92,296 85	
Miscellaneous.....	3,160 48	
		$325,475 29
Expenses.		
Freight department.....	130.757 41	
Passenger ".....	46,159 52	
		176 916 93
Balance of earnings over expenses..		$148,558 36

The report of the Superintendant, Chas. L. Schiatter, Esq., gives a table of the locomotive engines owned, amounting to 28—of which 22 were in good condition. The total number of miles run by these engines was 631,607, and the total cost of running $103,968, including wood, oil, repairs and firemen's wages, being an average of 16.27 cents per mile. The tires of the locomotive suffer severely from the rigidity of the road during the winter months. It is quite noticeable that not a single trip either of freight or passenger trains was lost during the past winter, though remarkable for its severity and the amount of snow which fell.

The Lead Mines of Northern New York.

We copy from the Herald the following account of the mines, etc., of the Northern Lead Mining company.

This company will work the celebrated Rossic lead mines of St. Lawrence county, which in 1837 and 1838 yielded nearly three thousand tons of metallic lead, valued at more than two hundred and fifty thousand dollars. There are two mines within three hundred fathoms of each other, nearly parallel, containing four veins, and extending a distance of one mile. They are sufficiently contiguous to be worked by the same set of machinery.—Under the old management, fifteen thousand tons of ore, yielding twenty-six hundred tons of metallic lead, worth $241,000, were taken from a space measuring three hundred and eighty feet long, by one hundred and eighty feet deep, and four feet wide. The extraction amounted to thirteen hundred and ninety-six square fathoms of the vein, or ten and a half tons per fathom of twenty per cent. raw ore. Consequently, every six feet square produced $172, and every square foot nearly $5. The celebrated Cliff copper mine, of Lake Superior, only yields $118 to every cubic fathom. We have not the most remote idea of the mineral wealth of this country. The magnitude of mining operations in Great Britain is greater than we imagine. In the year 1851, about fifty thousand tons of metallic lead was produced in Great Britain. More than twenty thousand tons of lead, valued at a million and a half of dollars, were imported into the United States; a fact more astonishing when we consider that we have within the limits of this State the richest lead mine in the world. The supply of lead from the West decreases from year to year; which must be expected when reliance is placed upon irregular deposits of ore, instead of regular veins.—So skilfully are the great mines managed in Cornwall, that at East Rose a lead mine yielding only half a ton of ore, or $38 per fathom on the average, has been worked sixteen years, and paid a profit of about two millions of dollars, being now nearly one thousand feet deep. The shares originally cost £50. In the London Mining Journal, of July 24, 1852, they were quoted at £290 each. There is no reason in the world why we should import a pound of lead, and we shall not in a short time if our lead mines are properly worked. The Great Northern Lead Mining company will, we believe, be managed upon proper principles. Mr. R. P. Remington, the originator of this company, is a thorough practical judge of mines and mining operations in all their ramifications, and there is no doubt but that he will successfully develope the resources of the mines owned by that company. There is a wide field for the operations of practical and experienced miners in this country, and we understand that the emigration from Cornwall has for some time past been quite active. Mining will, before the lapse of many years, be one of the most important interests in the United States.

The Statistics of Gold.

The New York correspondent of the The Washington Union gives the following statement in regard to the stock of gold and silver in the United States and its progress of increase:

The increase of the precious metals in the country has become very great, and the demand for the coin is apparently on the increase. From Australia and California together the amount of gold to be turned into coin will probably reach $100,000,000 per annum—a large figure; but if we observe the large quantity which has been absorbed in the United States, without apparently filling, as yet, the wants of the community, the figure will be less important. The official returns give the import and export of the precious metals into and from the United States only since 1820, and the total results of that movement are as follows:

IMPORTS AND EXPORTS OF THE PRECIOUS METALS FROM 1821 TO 1851.

	Import.	Export.	Excess of Imports.
Gold coin..	$89,231,367	$38,724,830	$50,506,537
Gold bullion	6,304,822	524,311	5,780,511
Total gold..	95,536,189	39,249,141	56,286,948
Silver coin.	162,351,546	138,007,617	24,343,928
Silver bul..	11,015,487	1,170,796	9,844,691
Total silver.	173,367,033	139,178,413	34,188,620
Total gold & silver.....	268,904,222	178,427,544	90,475,568

This gives by importation an increase of $90,475,568 in the specie of the country during the period mentioned. In the same period the supplies of domestic gold have been very much larger. The yield of the mines in the Atlantic States became important first in 1824, and the first supply of California gold was in 1848. The deposits from all these sources at the mines, down to July 31, 1852, were as follows:

DEPOSITS OF UNITED STATES GOLD AT THE MINTS.

	Atlantic mines.	California.	Total.
1824 to 1847..	$12,808,575	$.....	$12,808,575
1848..	851,374	45,301	896,675
1849..	927,784	6,151,360	7,079,044
1850..	665,217	36,273,097	36,938,314
1851..	602,380	55,938,232	56,540,612
7 mos. 1852..	481,030	31,297,853	31,778,883
Total supply.	17,336,360	129,705,843	146,042,203

The excess of gold imported, and the domestic supply, make together $202,329,151. The supply of silver has, in the last ten years, been apparently on the decrease—that is to say, the exportation has been $3,000,000, or 10 per cent more than the importation; but this has been more apparent than real, because the silver has largely come into the country unannounced. The total coinage of gold in the United States, up to 1821, was $7,431,545; and of silver, $1,089,431; and the amount of specie then in the country was estimated by Crawford, Gallatin, and others, at about $30,000,000, including the circulating Spanish coin and the foreign moneys imported at New York and remaining in bank for the want of an accessible mint at which to coin it. The whole United States coinage up to August, 1852, has been as follows:

COINAGE OF THE UNITED STATES.

	Gold.	Silver.	Total.
1793 to 1820..	$7,431,545	$10,898,431	$18,420,976
1891 to 1851..	172,752,745	66,972,977	239,725,722
7 mos. 1852..	31,951,751	455,545	32,407,296
Tot. coinage	$212,136,041	$78,417,938	290,553,994

The official tables do not distinguish between gold and silver in the United States coins exported. The amount of both metals up to June, 1851, was, however, $39,874,357. The figures for the fiscal year ending June 30, 1852, have not yet made their appearance; but the export of the United States coins from New York has been about $40,000,000 for the year. The whole export of United States coins would then be, in round numbers, $80,000,000 since 1820; and as the coinage since that year has been $272,133,018, it follows that the increase of coins in the country has been $192,000,000, and amount now circulating, including foreign, is not short of $225,000,000. The treasury reports of the Hon. Levi Woodbury estimated the whole specie in the country in 1840 at $83,000,000, of which $33,000,000 were in banks. Under this estimate the increase in twelve years must have been $142,000,000. But this is undoubtedly far within the truth, inasmuch as that, notwithstanding a continued excessive export of foreign coins, the supply in the market remains good. Thus, take the exports of specie from the port of New York for the months of July and August this year and last:—

EXPORTS OF COIN FROM NEW YORK IN JULY AND AUGUST.

	1851.	1852.
United States gold.....	$6,548,580	$4,763,489
U. S. gold dust.....	15,627	6,000
U. S. silver.....	1,037,935	110,000
Mexican dollars.....	131,288	240,000
English gold.....	313,894	85,157
Other foreign gold.....	80,481	23,531
Doubloons.....	127,004	33,195
Foreign silver.....	405,168	598,607
Total	$8,659,999	$5,859,979

It will be observed, that while both United States gold and silver have decreased in exportation, the amount of foreign silver continues large, although the importations would indicate no supply. For ten years there has been a constant excess of exports, yet the supply in the market is good, and affords an export of three to four hundred thousand dollars per month without raising the price. The source of the supply is obvious, viz: the large immigration; and one great reason that it goes abroad in its original shape is, that there is no mint to coin it here. When in the shape of United States small coin, it would command three per cent. premium. Inasmuch as that the exports are thus supplied from an officially unreported source, it may be fairly estimated that the amount of coin in the country is much greater than it appears from official data. Again, the supply of gold has been, from the above data, as follows:

Excess of importation.....	$56,286,948
Product of U. S. mines.....	146,042,203
Total supply 1821 to 1852.....	$202,329,151
Total coinage 1821 to 1852.....	204,704,596
Excess coinage.....	$2,375,445

This has been derived from recoinage, old jewelry, bullion, etc., and coins supplied from immigrants.

Immense as has been this increase in the metallic currency of the country, it has not exceeded, even if it has equaled, the demand for currency.—The population of the country has increased, in the same time, nearly 8,000,000 souls, which alone, at the average currency per head in 1840, would require an increase of $40,000,000. The revenue of the railroads has increased $30,000,000 per annum, and the great staples of the country have increased in a far higher ratio, as seen by census tables.

LEADING PRODUCTS OF THE UNITED STATES IN 1840 AND 1850.

	1840.	Value.
Wheat, bushels.....	84,823,272	$69,840,000
Corn, bushels.....	377,531,875	94,333,000
Cotton, bales.....	1,976,198	59,285,940
Sugar, lbs.....	155 100,809	10,500,000
Hay, tons.....	20,248,108	18,240,546
Dairy.....	.....	33,787,008
Wool.....	35,862,114	11,740,634
Coal, tons.....	359,686	3,680,000
Total.....		$208,407,162

	1850.	Value.
Wheat, bushels..	104,799,230—80 cts.	$83,839,384
Corn, bushels....	591,586,053—25 cts.	147,896,513
Cotton, bales.....	2,474,214— $40	97,968,540
Sugar, lbs.....	350,403,263— 5 cts.	17,897,755
Hay, tons.....	13,605,384— $5	68,026,920
Dairy.....	.....	37,412,303
Wool.....	52,422,797—30 cts.	15,726,839
Coal, tons.....	4,000,000	16,000,000
Total.....		$384,768,254

This gives a difference of $90,000,000 in the productive value of eight articles of raw produce. The manufacturing and trading operation has increased in a far greater ratio, and every excess of industrious production requires a more active volume of money for its circulation into the hands of consumers. This process has been very rapid in the United States, and with the appearance of California gold the country was prepared to absorb a very large amount without affecting prices. This has been done thus far; but the supply will soon be full, and then the process of inflation may be expected to take place.

In this connection we may conclude by presenting the estimated production of gold in California.

Messrs. Halsey, Bond & Hale, of San Francisco, have made an estimate, the particulars of which we give below, of the yield of gold from the mines, which they make from 1848 to the 30th June, 1852, $174,780,877, and for the six months to the same period, $33,849,774. Taking the same amount as likely to be yielded in the six months to the close of the present year, it would make the year produce $67,700,000, That it will exceed this amount is believed by many.

OFFICIAL REPORT OF DEPOSITS OF GOLD FROM CALIFORNIA.

At the various U. S. Mints in 1848.....	$44,177
" " " " 1849.....	6,147,509
" " " " 1850.....	36,074,062
" " " " 1851.....	55,938,232
Manifested shipments to U. S. ports in Dec., 1851, which did not reach the mints in 1851.....	2,910,214
Importations to Chili in 1851.....	2,372,000
Estimated exports to foreign countries for 4 years up to Dec. 31, 1851.....	19,544,000
	$120,658,194
Amount taken over land to Mexico and by passengers to foreign countries not included in mint deposits.....	6,032,909
In hands of bankers, etc., in San Francisco.....	5,000,000
In other parts of California.....	2,500,000
Amount at mines not brought forward..	2,500,000
In circulation in California estimated...	4,240,000
Estimated product from Jan. 1 to June 30th, 1852.....	33,849,774
Total estimated product to June 30th, 1852.....	$174,780,877

Railway Statistics of the United Kingdom.

A report of the railways of the United Kingdom has just been published by Capt. J. L. A. Simmons, Government Inspector, from which it appears that the number of miles open for traffic at the close of 1851 was, in England and Wales 5,306 miles; in Scotland, 960; Ireland, 624; total 6,890. The sums raised annually for railway purposes, previous to the year 1848, cannot be ascertained, but since that period Parliament has required returns, which show the calls for 1848 to have been £33,234,418, in 1849 £29,574,720, in 1850, £10,522 867. The diminution is remarkable. The return of the sums raised in 1851 have not all, as yet, been received, and therefore cannot be stated. The number of passengers conveyed on all the railways in the kingdom during the past year amounted to 85,381,095, being an increase of 17 per cent over the previous year; value of passenger traffic £7,968,764, an increase of 16 per cent; and value of goods traffic, £7,056,696, an increase of 10½ per cent over previous year. Aggregate revenue of all railways for 1851, close on 15 million pounds sterling, an increase of 12½ per cent on the receipts of 1850.

The usual return relating to railway accidents for the half year, ending 31st of December, 1851, has been printed. The number of passengers was 47,509,392. The number of persons killed was 113, and 264 injured. There were 8 passengers killed, and 213 injured, from causes beyond their own control; 9 passengers were killed and 14 injured owing to their own misconduct or want of caution; 30 servants of companies or of contractors were killed and 17 injured from causes beyond their own control; 32 servants of companies or of contractors were killed and 11 injured owing to their misconduct or want of caution; 33 trespassers and other persons, neither passengers nor servants

of the companies were killed and 9 injured by crossing or walking on railways. There was one suicide.

Canada.

Exhibit of the Brantford and Buffalo Railroad.—The railway projected by this company and now in progress, is designed to supply the only remaining link yet wanting to complete the system of railway communication which centres at the city of Buffalo. On the one hand the New York and Erie and the Buffalo and New York city railroads, extending through the southern counties of the state of New York, form a continuous line of broad guage railroad from Piermont on the Hudson river (within 16 miles of New York) to this city; on the other. the central New York line constructed on the narrow guage, passes through Rochester, Syracuse, Utica and Schenectady to Albany, and again connects this city by means of the Hudson river railroad with New York, and by the Western railroad with Boston and the manufacturing towns and cities of the New England states; leaving nothing to be desired to complete the eastern railway connections and facilities of intercommunication with the Atlantic sea-board.

In addition to the freight and passenger traffic which these stupendous and successful railway lines draw to Buffalo, the shipping and commerce of Lake Erie and of the Erie canal, (constantly upon the increase,) which also centres at Buffalo, have already attained a magnitude which may compare favorably with the leading Atlantic sea-port towns. The official returns of Mr. Barton, compiled for the year 1850, give the following aggregate of the tonnage entered at the port of Buffalo:

	Vessels.	Tonnage.
Foreign vessels from foreign ports, arrived	473	75,640 02
Foreign vessels from foreign ports, cleared	366	73,897 40
American vessels from foreign ports, arrived	156	20,740 93
American vessels from foreign ports, cleared	192	24,084 80
Coasting trade arrived	3,558	1,255,430 58
Coasting trade, cleared	3,599	1,263,907 03
	8,444	2,713,700 86

These returns also show that the import commerce of Buffalo in 1850 amounted to $22,525,781
The exports to 44,501,737

Forming a valuation of $67,027,518

without taking into consideration the immense passenger trade.

The returns filed for the year 1848 in the topographical bureau at Washington show the lake commerce of the port of Buffalo to have then amounted to $60,140,062
While in 1850 it was 67,027,518

Being an increase in two years of. $6,887,456

The growing magnitude of this commerce which constitutes Buffalo the *entrepot* of the manufactures and imports of the east and the products of the west, has long demanded a line of communication by land to connect the railroad east of Buffalo with those extending west from Detroit. To the passenger travel which throngs the city at all seasons, and the commercial relations of the business community of the western states during the winter months, it is becoming daily more necessary.

Had the American territory presented ordinary facilities for the construction of such a line of railway, one would long since have been in operation; but the geographical features of the south shore of lake Erie preclude the formation of a line to Detroit, within the limits of the U. States, which will not be quite one hundred miles longer, at the least, than if constructed on the opposite shore. Nature has designed the western peninsula of Canada, which occupies a central position between the north-western and the south-eastern states of America to be the great highway of western travel. It forms a continuous plain of elevated table-land rising in rear of the city of Hamilton and the Queenstown Ridge (which borders the western shore of lake Ontario) and extends unbroken to the Detroit river, at the western extremity of Upper Canada. No country can, in fact, be found better adapted to railway enterprise.

So far as a direct line to connect Detroit with the city of Hamilton at the head of lake Ontario is concerned, the ground is already well and advantageously occupied by the Great Western railroad, now in process of construction. But the descent of this road from the higher level in rear of Hamilton to Burlington bay, in connection with its extension to the Niagara river, involves a departure from a direct route, and also an ascent of Queenstown Ridge, but a short distance from the proposed eastern terminus, which deprives this portion of the line of the advantages which are undeniably possessed by the main trunk.

The citizens of Buffalo feeling alive to the necessity which existed for a direct route to Detroit, in conjunction with the inhabitants of Brantford and the municipalities bordering upon the line, have undertaken the construction of a railway to connect this city with the Great Western railroad at the Paris depot—an important station, distant thirty miles from Hamilton, and beautifully situated on the Grand river, at nearly the summit level of the table-land, which stretches westward from there to the river Detroit.

The line selected for this railroad passes through a rich and well settled country; its eastern division extending along the borders of lake Erie, and its western division along the banks of the Grand river. The former terminates at Dunville, and the latter at Paris. The country traversed is exceedingly well adapted to the construction of a railway with easy grades, as will be seen by the following table, taken from the engineer's report of 1851.

TABLE OF GRADES.

26 miles level and 2 to 5 feet per mile.			
14	"	5 to 10	"
13	"	10 to 15	"
4	"	15 to 20	"
6	"	20 to 25	"
3½	"	25 to 30	"
8	"	30 ft. per mile—maximum grade.	

It will be seen that there are 8 miles of 30 feet grade. This distance is made up of eight distinct grades which occur in overcoming the undulations of the country on different parts of the line. *More than one half* of the entire distance is level or under ten feet per mile. The sharpest curve has a radius of one mile, and seventy miles of the whole distance *is straight line.*

The company was established and incorporated under the provisions of the Acts of the Parliament of Canada, 12th Victoria, chapter 84, and 13th and 14th Victoria, chapter 72, at Brantford, on the 3d of June, 1851. The capital stock, divided into 30,000 shares of £5, Halifax currency, each, is held as follows:

The town council of the town of Brantford.	£25,000
Municipality of the township of Brantford.	12,500
" " Bertie....	10,000
" " Wainfleet.	5,000
" of Sherbrooke and Moulton.	5,000
" of the township of Canboro.	2,000
P. C. Van Brocklin, Esq., in trust to be transferred to A. de Graff, on the completion of his contract with the company...	25,000
P. C. Van Brocklin, in trust to be transferred under appointment by the company, in payment of land required for roadway, etc	5,025
The common council of the city of Buffalo	37,500
Held by individual shareholders resident in Canada and the United States	12,975
	£150,000

JAMES WADSWORTH, President.
Brantford, 1st September, 1852.

APPENDIX TO EXHIBIT.

Commerce of Buffalo.—The following statements of the commerce of Buffalo are extracts from a report compiled from official and other authentic sources for Hon. Thos. Corwin, Secretary of the Treasury, and by him presented to Congress.

Buffalo is situated in Buffalo Creek, which debouches into Lake Erie, just at the point of its outlet into the Niagara river, and is therefore the eastern terminus of Lake Erie, and the western terminus of the Erie canal, which connects the waters of the former with the Hudson river, and thence with the Atlantic Ocean. It is the great eastern gateway for the passage of the commerce of the Western Lakes. Its commerce is carried on chiefly through the Lakes and the Erie canal, assisted by various lines of railway. Its population was 1 508 in 1810—2,095 in 1820—8,668 in 1830—18,213 in 1840, and 42,261 in 1850, showing an average duplication once in eight and a half years, during the whole period of forty years. The uniformity of the period of duplication is the best evidence of a healthy and permanent growth. On the same basis there is now a population of 50,000, and will be in 1860, at the same rate, about 100,000. The progress of her commerce has been in much the same ratio as that of her population. Previous to 1825, the year when the Erie canal was opened, it was confined pretty much to a few vessels trading with the Indians. In 1825 the whole tonnage of the Lakes above Niagara Falls all of which traded with the port of Buffalo, consisted of three steamers of 772 tons, and 54 sail of 1,677 tons, or an aggregate 2,449 tons measurement. In 1830 it was 16,300 tons—in 1835, 30.602—in 1841, 55,181—in 1846 90,095, and in 1851 to 153,426 tons, being an increase of 113 per cent. per annum, from 1825, 1830—18 per cent. per annum, from 1830 to 1835—13½ per cent. per annum from 1835 to 1841—12½ per ct. from 1841 to 1846, and 14 per cent. per annum from 1846 to 1851. Add to this astonishing increase the enlarged capacity of a measured ton resulting from greater speed attained from improved models, and a substitution of steam for sail, together with the time saved by the use of machinery, in receiving and discharging cargoes, amounting to at least tenfold greater capacity than in 1825, and an adequate idea is presented of the progress of Lake commerce. In 1835 the Western States commenced exporting produce, and the figures in the following table show the amount of several articles received at Buffalo during the years named, and re-shipped on the Erie canal:

Articles.	1835.	1840.	1845.
Flour, bbls.	86,233	633,790	717,406
Wheat, bush	98,071	881,192	1,354,990
Corn, "	14,579	47,885	33,069
Provisions, lbs.	6,502	25,070	68,000
Ashes, "	4,419	7,008	34,602
Staves, lbs	2,565,272	22,410,660	88,296,431
Wool, lbs	140,911	107,794	2,957,761
Butter, lard and cheese	1,030,632	3,422,687	6,597,007

Articles.	1850.	1851.
Flour, bbls	984,430	1,106,352
Wheat, bush	3,303,647	3,668,005
Corn, "	2,608,967	5,789,842
Provisions, lbs	146,836	117,834
Ashes, lbs	17,504	25,585
Staves, lbs	159,479,504	75,927,659
Wool, lbs	8,805,817	7,857,907
Butter, lard and cheese	17,534,981	11,102,282

These enumerations now comprise but a very small proportion of the articles received at Buffalo by Lake shipping. 68,000,000 feet of lumber, 11,000 bbls. seed, 10,000 bbls. lake fish. 48,000 hides, 28,000 pigs lead, 17,000 tons coal, 3,000 bales hemp, 1,140,000 bushels oats, and 66,000 bbls. whiskey were among the receipts of 1851, the whole forming an estimated aggregate of 731,462 tons, valued at $31,889,951
And the exports amounted to 204,536 tons, valued at 44,201,720

Making the aggregate commerce of the port for 1851, according to the official returns 76,091,671
In 1850 the valuation was 67,027,518

Increase in 1851 ..... $9,064,153

Imported from Canada, 1851.	$507,517
Exported to Canada, "	613,948
Total commerce with Canada	$1,121,465
Do. in 1850	527,270
Increase in 1851	594,195

The tonnage entered and cleared during the year 1851, was as follows:

	Vessels.	Tons.	Crews.
Entered	4,490	1,550 584	67,601
Cleared	4,560	1,536,315	67,191
Aggregate	9,050	3,086,899	134,792
Do. 1850	8,444	2,713,700	125,672
Increase	606	373,830	9,120

This array of tonnage would suffer little in comparison with that of any other port in the world.—It is composed of 107 steamers and screw steamers, and 607 sail vessels, which vary in size from steamers 310 feet in length, and 1,600 tons burden, to the smallest class sail and steam vessel. Screw propellers are rapidly becoming favorites as freighting vessels. It is a significant fact that of 7,000 tons of shipping on the stocks at Buffalo on the 1st of January, 1852, only 230 tons—a clipper schooner—were sail, showing that in these waters steam is rapidly achieving the victory over sail.

The Erie canal from Buffalo to Albany is 363 miles in length. The following table will show the total movement of property upon it in tons from 1837 to 1851 inclusive.

	Shipped from tide water. tons.	Buffalo. tons.	Intermediate points. tons.	Total movement.
1837	172,692	73,194	421,265	667,151
1838	187,434	105,460	451,954	744,848
1839	200,544	156,164	488,299	845,007
1840	161,211	177,607	491,142	829,960
1841	194,446	248,471	463,525	906,442
1842	141,836	225,173	345,301	712,310
1843	165,044	279,008	375,164	819,216
1844	208,699	319,682	417,543	945,924
1845	224,013	309,115	405,662	1,038,790
1846	239,216	478,918	546,274	1,264,408
1847	329,761	710,943	620,874	1,661,578
1848	313,814	602,250	653,901	1,599,965
1849	368,580	613,347	640,617	1,622,444
1850	337,813	574,905	722,371	1,635,089
1851	454,741	673,774	827,750	1,955,265

The total movement on all the State canals in 1851 was 3,582,733 tons, yielding to the State a revenue in tolls of $3,329,727. In 1851 there arrived at tide water from the Erie canal 1,508,677 tons. There were 40,396 lockages at one lock. Of the above 1,508,677 tons, 254,983 tons were wheat and flour shipped from Buffalo alone. On these canals were employed 4,047 boats of 283,290 tons capacity.

The net money value of all the property transported on the lakes was in 1841 $32 913,011—in 1846 it had grown to $62,000,000—in 1848 to $93,-000,000, and in 1851 to $161,000,000. By this it will be seen that nearly one half of the whole lake trade passed through Buffalo in 1851. The contemplated enlargement of the Erie canal to about three times its present capacity, and the completion of the numerous lines of projected railway cannot fail to make Buffalo one of the most important cities west of New York.

English Railroads

The largest railway company in England is the London and North Western. It has a capital paid in, consolidated stock entitled to the general dividends of £14,851,097; and a total capital, including long loans at various rates of interest amounting to £29,550,767; or $141,843,681.

The company is the proprietor of railways in operation, chiefly consisting of a double track of 540 miles in extent, partly built by the company, and partly acquired by purchase, by virtue of various special acts of Parliament; in addition to which it works under special contracts with other companies other railways, using its own stock and machinery, and under its exclusive management, making the entire extent of railway operated by the company 866 miles. The value of the working stock for this extent of line at cost with deduction for depreciation is $2,103,010; which is equal to an average of £2,427, or $11,650 per mile of the road worked.

The working expenses for the past six months of the present year, amounted to £423,304. The total income of the six months amounted to £1,-196 071; of which £668,799 were derived from passenger trains, $390,892 from transport of merchandize, £50,916 from the coal transportation and £25,563 for live stock. The dividend declared for the six months was at the rate of 5½ per cent. per annum. The two preceding semi-annual dividends amounted to 6 per cent.—*Daily Advertised.*

Brunswick and Florida Railroad.

We yesterday conversed with our friend Alexander Scranton, Esq., of Brunswick. He is the agent of the railroad company for procuring subscriptions and the right of way, and we take pleasure in inserting his statements relative to the projected work, because it enables us to correct some things which we have said on the information of others.

It appears then, that the cash subscriptions in Southern Georgia, New York, and Boston, amounted, on the 17th of June last, to $1.283,000. The subscription in the small county of Glynn, amounts to $40,000. These subscriptions are regarded as perfectly good, and they were made without any provision that the subscribers should work out their stock. On the contrary, several of these subscribers have taken yet more stock, which *is* to be worked out. This a different aspect of the case from the one already presented by us, and one much more encouraging.

The first meeting of the stockholders was held at Brunswick on the 17th of June last, since which date many other subscriptions have been taken.—All the counties along the line appear to have been ably represented by such men as Gen. Blackshear, and Mr. Mitchell of Thomas, Gen. Knight from Lowndes, Messrs. Cheever and Collier from Baker, Sermons from Clinch, McDonald from Wayne, Judge Scarlett from Glynn, and others.

We have in our possession a memorandum which estimates the cotton destined to pass over this road the first year after it is built, from Georgia, a portion of Florida, and two or three counties in Alabama, at 200,000 bales. We put down this as an over statement, on the general principle that such prophecies never turn out to be true of other roads, but that such will be the case eventually, we have no doubt. Although the counties of Baker, Thomas and Lowndes are pretty well known, we append some statistical information about them which may not be familiar to all our readers. There may be some over-estimates in the statement, but we presume it affords a pretty good basis for calculation.

Lowndes County.		
Contains	acres	1,166,200
Suitable for cultivation	"	777,400
Usual proportion in cotton, ⅓	"	291,525
At ¼ bale per acre, yields	bales	72,881
Thomas County.		
Contains	acres	1,039,780
Suitable for cultivation, ¾	"	779,835
Proportion in cotton, ⅓	"	292,468
At ¼ bale per acre, yields	bales	73,109
Baker County.		
Contains	acres	900,000
Suitable for cultivation	"	750,000
Proportion for cotton, ½	"	375,000
At ¼ bale per acre, yields	bales	93,750

Savanna Daily News.

Indiana.

Indiana Central Railroad.—The consolidation of the above road "with the Dayton and Western," is an admirable arrangement; the Journal states the terms were perfectly satisfactory to both parties. In Wall street, as we have reason to know, this will materially enhance the value of the line, destined, there is no doubt, to be capital stock.—Frequent inquiries from those interested in Western roads were made as to the best line for the "through travel," and the central position, as well as the wonderful agricultural resources of the consolidated roads, freely discussed and understood.

The road will be 106 miles in length, Dayton and Indianapolis the respective termini. To the Junction it is already completed, and DeGraff has contracted to have the rails laid to the State line by the 1st of October—a distance we believe of about 29 miles. Thence to Richmond the grading is completed, and the company fully expect to reach Indianapolis by the spring of '53.

This we trust, will be effected, and the certainty of liberal returns would authorise the board to a liberal expenditure.—*Spring. Gazette.*

The New Postage Law.

This law goes into operation on the 1st day of October next. By its provisions—

Newspapers, periodicals, unsealed circulars, etc., weighing not over three ounces, are to pay one cent each, to any part of the United States, or half that rate when paid quarterly or yearly in advance at the Post Office where they are mailed, or at the Post Office where they are delivered.

Newspapers and periodicals, weighing not over one and a half ounces, half the above rate, when circulated within the state where published.

Small newspapers and periodicals, published monthly or oftener, and pamphlets of not more than 16 pages, 8 vo., when sent in a single package of not less than 8 ounces, to one address, and prepaid to be charged half a cent an ounce, without regard to the number of pieces.

Postage on all transient matter to be prepaid, or charged double the rates above mentioned.

Books bound or unbound, not weighing over four pounds, one cent per ounce, under three thousand miles, and two cents over that distance. Fifty per cent to be added when not prepaid. All printed matter, chargeable by weight, to be weighed when dry.

Weekly newspapers free in the county of publication.

Bills for newspapers, and receipts for payment of moneys, therefor, may be enclosed in subscribers' papers.

Exchanges between newspaper publishers, free.

Newspapers, periodicals etc., to be so enclosed that the character can be determined without removing the wrapper—to have nothing written or printed, nor marks on the paper or wrapper beyond the direction, and to contain no enclosure other than the bills or receipts before mentioned.

Letter postage will remain as at present.

☞ By the above, it will be seen that the postage from and after the 30th inst., on our large and small sheet is *one cent* only, to any part of the U. States—or one half this rate, if paid quarterly or yearly in advance, either at the office of deposit or delivery.

On TRANSIENT PAPERS, (those not sent from the office of publication,) the postage is one cent each, to any part of the United States, if prepaid, or two cents, if not prepaid.

Baltimore and Ohio Railroad.

In less than four months the Baltimore and Ohio railroad will be completed and opened for operation to the Ohio river at Wheeling. Then we shall commence to realize,—to more than realize—all the advantages which its projectors and founders promised, more than twenty years ago, when they embarked in the then wonderful and starting enterprise of commencing to make a railroad from Baltimore to the Ohio river.

We learn from a gentleman who has recently returned from a visit of business to the West, that every preparation is making there for the opening of the road, and that the amount of produce and other articles of Western production, which will be in readiness to be transported over the road, as soon as it is opened, will give full employment to all the means of transportation which the company can command. The amount of produce which will then come upon this city, it is hardly possible now to realize, even in fancy but certain it is, that whatever preparations our business men and capitalists may make for the increase, which the road will then bring to the city, full employment will be given to it.

In view of this increased trade, the railroad company have made the fullest preparations possible to accommodate it. They are now having constructed a large number of cars and locomotives, so that on the commencement of the new year, when the road is to be opened, they will be prepared to go right on with the work.

To the end, that there may be no impediment to the greatest facility in doing the trade which will then come to the city of Baltimore, It has been suggested to us that there should be no time lost in removing the bars to the free navigation of our harbor and river, which have been allowed, by the negligence of Congress in not making appropriations for their removal, to increase in our harbor. It is apprehended that the recent appropriation made

by Congress may not be available in time to have these bars removed by the close of this year; and if this is so, are there no other means which may be used to accomplish that great object in time?—It is a question which concerns all our business men, and should engage the attention of the public authorities.

In this increased business over the Baltimore and Ohio railroad, since its opening to Fairmont in June last, we have an indication of what will take place when the road is opened to Wheeling.

We publish below a statement of the business of the road for the month of August. Taking the business of July and August of this year and comparing it with that of the corresponding months of last year, and we have the following results:

The receipts of July, 1851, were $94,948.17 for the main stem, and for the Washington branch $24,115.19. For July, 1852, the receipts on the main stem were $106,922.06, and on the Washington branch $28,665.57 showing an increase of $11,-973.89 on the main stem, and $4,550.38 on the Washington branch—the total increase being $16,-524.27.

The receipts for August, 1851, were $102,672.31 on the main stem, and $24,173.84 on the Washington branch. For August, 1852, the receipts were $117,215.85 for the main stem, and $30,167.38 for the Washington branch, total $147,383.23 showing an increase of $15,543.54 on the main stem, and $5,993 54 on the Washington branch, and making a total increase of $21,537.08.—*Baltimore Patriot.*

Ohio.

Springfield and Columbus Railroad.—Mr. Fish, the engineer of this road, has made a brief, but very satisfactory exposition of the present condition of the road. From it we glean the following items:

The length of the road to Columbus and Xenia connection at London is 19 miles 2280 feet, thence to Columbus, 23 miles 3,760 feet—very near the distance by the Netional road, but with an immense saving in regard to the facility of draft. The figures below are remarkable:

	Miles.	Feet.
Length of the road	19	2,280
" " Straight line	18	21
" " Curved "	1	21
		Feet.
Degrees of curvature		58
Minimum radius		4,500

The gradients present quite as curious results. Under 15 feet to the mile there are over 38,000 feet nearly one third of which is level. A slight increase of expense—slight at least for so desirable an object—would have reduced the whole under 30—the highest is 39.6.

In August a contract was made with Mr. De Graff, who seems fairly to have earned his *sobriquet* of "Railroad King," for the clearing, grading, masonry, ballasting and laying track the whole distance, the total cost of which will not exceed, right of way inclusive, $118,000, or $6,051 29 per mile. Estimating chairs and rail at $6,000 per mile makes the average cost $12,051 29.

These statements speak the most intelligible language to our Wall street friends, which they will understand and truly appreciate.

The contract required the completion of the road in September next. Circumstances will prevent its fulfilment. Mr. Fish thinks if there is no delay in forwarding the iron, it may be opened by the middle of December next. As it is expected that the Zanesville and Columbus road will be opened by November, the company will find it in accordance with their best interests to meet it at the capital city. It can be done surely—then why not? Give Mr. Fish the iron in season, and we would underwrite the execution.

Mr. Fish left for New York, on Monday last, in company with the president, to complete the necessary arrangements. We improve the opportunity to say that the company has been exceedingly fortunate in the selection of their engineer. With abilities of a high order he unites the most courteous bearing, securing the prompt services of all those connected with the service. Equally fortunate has been the company with their contractor, who has had entire charge of the work. Mr. Wallace fully sustains the high character he brought with him, as equally efficient and honorable in the discharge of his varied and important trusts.—*Springfield Gazette.*

The Great Western (Canada) Railway.

A few weeks ago we took a drive to examine the works of the railway in the neighborhood of this village. The progress made since our last visit is very great—in many places the road being ready for the ties, is fenced in, wanting but the rails and dressing to be completed and ready for the cars. The road west to Woodstock is in the hands of Messrs Farrell and VanVoorhis, and they are certainly pushing the works along at a great rate—the bridge over Smith's creek is being built by them it will be a very permanent work, it is for a double track. The Paris station is also being laid out—and the buildings are to be erected in the spring. Some idea of the extent of business the company expect to do here may be gathered from the fact that they have secured 10¼ acres of ground for the station, which is looked upon as the most important between Hamilton and London. A large number of men are at work on this section of the line, and are conducting themselves in a very orderly and creditable manner.

The Grand river bridge next attracted our attention. It is situated about two miles from Paris. This work is let to Mr. Brown, for the masonry, and to Mr. Gould for the carpenter's work. Favoured by the low state of the river, in consequence of the drought, the bridge is progressing fast in face of the many difficulties the contractors have had to contend with. When the excavations for the abutments were made, a quick sand was come upon instead of rock as was expected, and the abutments had to be built on piles driven twenty feet into the ground. A large coffer dam had to be made in the river for the centre pier, and the foundations for it, built in the best manner of solid masonry, are now above the water and out of danger. The abutments and pier are built of limestone, brought from the Beverly quarry near Troy, a distance of 12 miles. The mason work will be 69 feet high, and upon which is to be erected a bridge on the Burr principle, 360 feet long and for a double track. The carpenter's work is in a very forward state, and the erection of the bridge will commence as soon as the pier and abutments are ready. There are over one hundred men employed on this work, which is expected to be completed in six months.

The section of the road east of the Grand river, is under contract to Mr. Zimmerman, and is fast progressing. Our time being limited we did not go east farther than St. George, but to that place the works were also in a very forward state, we hope soon to pay another visit to that section of the road. We were greatly pleased with all we saw, and the spirit evinced at the several works.—*Paris (Canada) Star.*

Effects of the Earth's Rotation on Locomotion.

Mr. Uriah Clark, of Leicester, has called our attention to an article in the Mechanic's Magazine, written by himself, on the influence of the earth's rotation on locomotion. It is well known that, as the earth revolves on its axis once in twenty-four hours, from west to east, the velocity in any point on its surface is greater nearer the equator, and less farther from it in ratio of the cosine of latitude.—Mr. Clark says:—Some rather important conclusions in relation to railway travelling arise out of the view now taken. The difference between the rotative velocity of the earth in its surface motion at London and at Liverpool is about 28 miles per hour; and this amount of lateral movement has been gained or lost, as respects the locomotive in each journey, according to the direction we are travelling in from the one place to the other; and in proportion to the speed will be the pressure against the side of the rails, which, at a high velocity will give the engine a tendency to climb the right hand rail in each direction. Could the journey be performed in two hours between London and Liverpool, this lateral movement of rotative velocity of the locomotive would have to be increased or diminished at the rate of one quarter of a mile per minute, and that entirely by side pressure on the rail, which is not sufficient to produce violent and dangerous oscillation. It may be observed, in conclusion, that as the cause above alluded to will be imperative while we travel along the parallels of latitude, it clearly follows that a higher degree of speed may be attained with safety on a railway running east and west than on one which runs north and south. There is no doubt of the tendency Mr. Clarke speaks of on the right hand rail, but we do not think it will be found to be so dangerous as he says. It will be greatest on the Great Northern and Berwick lines, and least on the Great Western.—*Herapath.*

Indiana.

Wabash Railroad.—We perceive by the Vincennes Gazette, that at a meeting of the stockholders of the Wabash railroad company, at Meroe, on the 19th inst., nine directors were elected. At a meeting of the directors, Mr. D. Griswold of Vigo, was elected president. The board ordered a survey of the route without delay, preparatory to an active prosecution of the work.

The board also resolved, "That this board approve the measure of consolidating the charter of this company with the Evansville and Vincennes railroad company, and that the president of this company be requested to hold communication with the president and directors of the Evansville and Vincennes railroad company, for the purpose of making the necessary preparatory arrangements to consummate said consolidation.—*Evansville Journal.*

A railroad meeting will be held at Point Commerce on Monday, the 27th day of September, 1852. This meeting is called for the purpose of consiuering measures for the furtherance of the contemplated railroad from Evansville to Indianapolis.—*Evansville Jour.*

Lawrenceburg and Indianapolis Railroad.—This route to Cincinnati is now going ahead finely, there being a heavy force of hands along the whole line, and the iron being put down at the rate of a mile and a half a week.

The prospect now is, that the Ohio and Mississippi road will be ready to join at Lawrenceburg, by the time our road reaches there, as we see by a late number of the Cin. Gazette. We have never had a doubt about this *shortest line to Cincinnati* being among the very best roads in this country; and if a liberal spirit is shown, as we suppose will be the case, by the Ohio and Mississippi company laying their track to correspond with the gauge of our roads, there will be a stream of travel and freight on the line, that will exceed all present expectations. Every traveler from the different points west of us asks, When is the Lawrenceburg and Cincinnati road to be done? And nobody doubts what the result will be, when the answer is, that the cars are ready to take you over the short distance (109 miles) in *three hours.*—*Indiana State Sentinel.*

New Jersey.

Camden and Atlantic Railroad.—We are gratified to learn that upwards of $150,000 have been subscribed to the stock of the Camden and Absecom railroad, and that operations will soon be commenced and the road hastened to completion. If there is a railroad in the country that promises to pay a heavy dividend to the stockholders it is this favorite one of our citizens. The travelling on it during the warm or pleasure season alone will return an enormous profit. But aside from this there will be a large and increasing traffic through the whole year, and many will be the comforts and conveniences our citizens will derive from this important railroad. We hope that a liberal spirit will prevail, in the way of extending and multiplying subscriptions, and that in a year hence we shall have the pleasure of announcing the completion of an iron road from Camden to Absecom Inlet.—*Philad. Com. Register.*

Depot Locomotive.

The Central railroad of Georgia is about to receive an engine which will be quite a curiosity.—It is called the "*Spring Hill,*"—cost, with tender attached, about $3,000. Weight about four tons. It will be permanently stationed at the Savannah depot for the purpose of pushing about those loaded cars which are now hauled so slowly and laboriously by the hands about the depot. For this ob-

ject, it will be a most valuable servant, saving both time and expense.—*Savannah Republican.*

Cumberland Coal Trade.

The Alexandria Gazette mentions as a new feature in the Cumberland Coal trade, that there is now at New York, a vessel from Genoa, waiting for a cargo of this coal for the use of the Sardinian Government.

Springfield and Mansfield Railroad.

This company will sell on the 24th instant $250,000 convertible road bonds. The advertisement of sale will be found in another column. We have recently spoken of this, which we regard one of the best of our new projects. The sale offers an excellent opportunity for the purchase of securities which must soon rank among the best in Ohio.—Those who wish to buy at first hands and realize a handsome advance will do well to look into this project.

Railroad Bonds.

We call attention to the sale of Dayton and Michigan railroad bonds advertised in our columns, and shall take occasion in our next number to give them a further notice.

To Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Freehold and Jamesburg Agricultural Railroad, at Jamesburg, Middlesex County, New Jersey until Wednesday the 6th of October; for the grading of 11¼ miles of said road, from Jamesburg to Freehold.

The line will be ready for examination by Sept. 20th; when an Engineer will be at the office to give such information as may be required.

The road will be divided into sections of a mile, to a mile and one half.

WM. COOK, Engineer.

ENGINEER'S OFFICE,
Jamesburg, Sept. 13, 1853.

American Railroad Journal.

Saturday, September 18, 1852.

Stock and Money Market.

We are able still to report a very easy money market. We have now got along so far in the season, that we can predict with considerable accuracy, a continued abundance of money for some months to come. We have had an easy market during all the summer months, which is usually a period of stringency; and now, that our great agricultural staples, of which the supply is large beyond all precedent, are coming to market, together with increased receipts of gold, we have a right to expect that money must continue plenty for a number of months, to say the least.

This state of things has been most fortunate for the railroad interest of the country. The present season has been the turning point in their favor.—Our system of railroads may now be said to be out of harms way, as far as any commercial or financial revulsion is concerned. During the present year, the detatched portions of this great system have been rapidly drawing toward completion, so that by the close of it, the formerly isolated and detached portions will form themselves into a compact and well defined whole.

The advantages of our present position will hardly be appreciated by any other, than a person well acquainted with the actual condition of our railroad enterprizes. To a superficial observer it would appear to require years for their completion, and he would feel that they would not be beyond the reach of financial embarrassment, until the entire aggregate of them should be completed. Hence the distrust felt by many, lest some revulsions should overtake, and prostrate our vast undertakings in the same manner that they were overwhelmed by the financial embarrassments of 1836 and '7.

We still live in dread of a recurrence of the extravagancies, and consequent disasters, of the period alluded to; and many fancy that they see a similarity between that and the present, for no other reason, than that now, as then, we are investing large sums of money in internal improvements.

There is in fact no similarity between the two periods. In the former the money expended upon public works, was to a very great extent *wasted.* Our people were then in their infancy, as far as experience in railroad construction was concernedt A work at that period cost nearly double what i. would at the present time. What was then a work of many years, could now be execnted with ease in one or two. The financial embarrassments of 1837, took our enterprizes in the bud before our important lines approached even a completion. *Now* the completion of our lines in progress is achieved, and the most distant portions of the country will soon be united by railroad, whatever may be the future condition of the money market.

With the abundance of money that we have had for two or three years past, one season only is necessary to mature and secure the success of any ordinary railroad project. For our roads in progress, only a comparatively small amount of money is called for. It requires no great length of time to mature a scheme, and place it before the public, in a condition entitling it to a reasonable credit. So favorable has been our money market, that all legitimate and well based projects have been able to effect their loans with very little delay; and so uniform has been this rule, that we may now state, perhaps without any qualification, that all our projects which have been before the market for money, and which were in a condition entitling them to credit on the first of May last, have already secured the necessary means for their construction and will be built whatever may be the future condition of our monetary affairs. Under no contingency therefore can the accomplishment of our works in progress be defeated or postponed. We have now reached a point where we can count with certainty upon the completion of at least 20,000 miles of railroad, which will connect the extremes of the country from east to west and north to south, by numerous and independent lines. The railroad investments which we have been making, are certain to come into immediate and profitable use, and with this, will secure to us all the incidental advantages arising from these works.

A financial revulsion therefore can only affect projects which do not possess sufficient strength to command a credit, or which have only recently been brought before the public, and upon which but little or nothing has been yet expended; or such as are yet to be brought out. A scarcity of money can only affect the *future*, not the *past.* The past is already provided for. Upon such as would be affected by an unfavorable change in our affairs, too little has yet been expended to work any mischief, should the entire amount of such outlay be entirely sunk. As far as the completion of our works in progress is concerned, we are now beyond the reach of financial embarrassment.

The next point to be considered is, not whether our works in progress will be completed, but whether the amount we are investing in them will create embarrassment in the ordinary channels of business. The answer to this question depends upon the success of our roads. Should they prove productive, no injurious result can follow from the vast expenditures which we have been making, and we must measure this productiveness partly by their actual income, and partly by the incidental advantages arising from them.

There can be no doubt that the aggregate investment in railroads in the U. S. is a profitable one, as far as their *direct* revenues are concerned.—There are of course exceptions to this rule, but these do not affect the general result. Such being the fact, our railroad investments have no injurious tendency because we possess the same amount of property as formerly, only in a different shape. So long as the stock and bonds of our roads command a premium, no person is ever harassed by holding them, because he can always convert them into money, at will, and such securities will command par or a premium, so long as they hold out the prospect of a fair and steady return upon their cost.

As we have often stated, the roads we are building promise to be our most productive works, for the reason that they cost much less than those that were first built, while at the same time their business prospects are equally flattering. This statement is fully confirmed by the experience of the new projects after they go into operation. The stocks and bonds of the railroads of Ohio and Indiana bear a much better price in this market than those of any of the eastern States, when we take into consideration the comparative length of time they have been in operation. In five years from this time the railroad investments in Ohio will command in this market a price 20 per cent higher than those of New York; and there can be no doubt that the entire investment in the former State will be at a very large premium. What is true of Ohio will be equally so of all the western States. Judging from the experience of the roads already in operation, we believe that we are safe in estimating the net income of the whole railroad investment in the western States for ten years to come at ten per cent per annum. The income of those in operation already exceed this average; and the revenues of the whole must be vastly increased when the different lines now in progress shall be completed, and constitute a grand and connected system.

In considering the probable effect of any financial revulsion upon our railroad projects, it should be borne in mind that the debts of our companies contracted on account of construction, are for periods extending all the way from ten to thirty years. As soon as these loans are negotiated, they are beyond the reach of any immediate financial crisis. To pay the interest on such loans will not require on an average more than $700 per mile for our new works. The average net earnings of such works will more than quadruple this sum, as we showed in a recent article in our paper, taking the net receipts of those already completed.

In no possible way, therefore, can our railroad interest be prostrated by any revulsion in the money market, should any such occur. Most of our roads in progress have already secured sufficient means for their construction. Those in operation are already earning a very large return upon their cost. A pressure in the money market can only affect *projected* works, upon which little or nothing has been yet expended.

We see no reason to anticipate any such pres-

sure. We have no idea that our railroad projects are calculated to cause one. But as we are pursuing a path, where we have but few lights of experience to direct us, the more conservative and timid may anticipate danger when none really exists. To such this article is addressed; and we will add, we believe it will show that their fears are entirely groundless.

We may here state, that so long as we confine ourselves to *paying* projects, we can command any amount of foreign capital for their prosecution. A good demand already exists from Europe for all our good securities, and is taking them from our market nearly as fast as new ones are introduced. Here lies our great safety. Every well informed foreigner, who examines into the character of our projects, becomes convinced of the soundness of the great mass of them. The growing conviction as to their safety, added to the high interest we are paying, is certain to take from us all our best securities, and we are now, in fact, building our roads with foreign capital, and the supply from this source can be increased to keep pace with all our legitimate works.

A slight depression succeeded by a slight rise is the feature of the fancy stock market for the last week, a very considerable fall took place in most of the coal stocks evincing some distrust of these enterprises as permanent investments. The solid railroad securities and stocks held their own firmly, and the fluctuations were very unimportant—an upward movement seems to be slowly and steadily going on. Their securities are largely bought at private sale mostly for home investment. The receipts on the roads generally have had the tendency to inspire confidence. Money continues abundant and the rate is still 5 per cent. on loans at call.—Less money was shipped to Europe than during the previous week, the steamer on Saturday taking out but $23,000.

Thursday, 9th Sept.—The fancies fluctuate every day, and the improvement of one day is succeeded in a day or two by a fall. To-day stocks were rather dull, especially at the first board, closing however at better prices than they had been sold for during the day. Erie stood at 86¼. Reading 93¾. Hudson R. 72½. Harlem 73. Very heavy sales, amounting in all to $2,500 were made in L. Island closing at 25¼. Norwich and Wor. 53¼. Stonington 59½. The coal and mining companies were largely in the market, especially the Cumberland coal Co. This stock closed at 74¼. The investment stocks are very firm or rather slowly advance. Mich. Southern 123. New York and N. Haven 113½.

Friday, 10th Sept.—Very little was done to-day in stocks. Mr. Draper sold $224,000 of bonds of the Buffalo and New York city R. R. netting $202,-100 on the sales. $2000 of bonds of the town of Huron Ohio, issued to the Junction R. R. Co. were sold,—the rest withdrawn. $7000 stock of the Rutland and Troy R. R. sold at 33½. We quote Erie at 86¼. L. I. 25 ¼. Reading 94½. Hudson R. 72. Harlem 72½. Investment railroad stocks are firmly held.

Saturday, 11th Sept.—More activity prevailed in the stock market, but the fancies generally were depressed. Erie closed at 86½. Reading 94. L. Island 25½. Norwich and Wor. 53¼. Stonington 58¼. Government and state stocks were largely sold at full quotations. Money is not quite so plenty as heretofore. $86,000 U. S. 5's sold at 108¼. Penn 5's 103½. Of the premium railroad stocks Roch. & Syr. R. R. scrip sold at 118½—stock 122. Madison and Ind. R. R. 105¼. N. Ind. 122½. Mich. South. 123. Mich. central 113. Cleveland, Col. and Cin. 117.

Monday, 12th September.—The market was more buoyant to-day and considerable animation prevailed. Erie was 86. Harlem 72¼. Nor. and Wor. 54. L. Island 26. Stonington 59. The coal and mining companies have generally fallen. Cumberland coal closing to-day at 71¼, a fall of 2¾ per cent since Thursday. Dauphin Co. stock fell about the same amount.

Sales of the following R. R. stocks were made. Roch. & Syr. 122. N. Y. and N. Haven 113¼. Utica and Schenectady 143. Mich. central 113¼. N. Ind. 122½. Madison and Ind. 106.

Tuesday, 14th Sept.—No change in the general aspect of the stock market. The fancies generally were pretty active. Erie advanced to 86¾. Reading closed at 94½. L. Island 26¼. Harlem 72½. Stonington 60½. Nor. & Worcester 53½. Hudson R. 72½. Among the investment stocks we notice Mich. Southern and Northern Ind. both at 123¾. The latter has ranged lower until to-day. Madison and Ind. 106.

Wednesday, 15th Sept.—Considerable buoyancy appears in the stock market, and all the leading fancies improved. Erie stood at 86¾ Norwich and Worcester 54. Hudson R. 72½. Stonington 60½. Harlem 72½. The bids on the bonds of the city of Wheeling were opened to-day. The $300,000 were taken at a premium of from 105.17 to 108.10. Sales of Michigan central were made at 112½. Madison and Indiana 105¼. Rochester and Syracuse 122½.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, SEPTEMBER 18, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¾
U. S. 6's, 1856	108¼
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¾
U. S. 6's, 1868	118¾
U. S. 6's, 1868—coupon	119
Indiana 5's	94¾
Indiana 2½	52¼
" Canal loan 6's	95¾
" Canal preferred 5's	48¾
Alabama 5's	95
Illinois 6's, 1847	81
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	108
New York 6's, 1854-5	108¾
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	108¾
New York 5½'s, 1865	109
New York 5's, 1854-'55	105¾
New York 5's, 1858-'60-'62	105¾
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	105¾
Ohio 6's, 1860	109
Ohio 6's, 1870	115
Ohio 6's, 1875	116¼
Ohio 5's, 1865	103
Ohio 7's, 1851	105¾
Pennsylvania 5's	97
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1890	107
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	103
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	110
New York 5's, 1858-'60	103
New York 5's, 1870-'75	104
New York 5's, 1890	106¾
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	98
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	98
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 16.	Sept. 9.
Albany and Schenectady	107	107
Boston and Maine	107½	108
Boston and Lowell	—	109½
Boston and Worcester	104	106
Boston and Providence	89½	90
Baltimore and Ohio	82½	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	131½
Eastern	98	98
Erie	86¾	87
Fall River	—	—
Fitchburgh	105½	105½
Georgia	—	—
Georgia Central	—	—
Harlem	72½	73
" preferred	111½	111½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	72½	72½
Little Miami	—	—
Long Island	26	25
Mad River	—	99
Madison and Indianapolis	105¾	110
Michigan Central	113	113½
Michigan Southern	123¾	123
New York and New Haven	114	114¾
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	55	54¾
Ogdensburgh	26½	25½
Pennsylvania	46¾	46¾
Philadelphia, Wilm'gton & Balt.	32½	32
Petersburg	—	—
Richmond and Fredericksburg	100	97½
Richmond and Petersburg	35	35
Reading	94½	93½
Rochester and Syracuse	122	122
Stonington	60	59½
South Carolina	—	122½
Syracuse and Utica	135	135
Taunton Branch	115	115
Utica and Schenectady	139	140
Vermont Central	18	14½
Vermont and Massachusetts	20	23
Virginia Central	—	40
Western	105	105
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Railroad Lands in Missouri.

GOVERNOR'S MESSAGE.

A session of the legislature has just commenced in Missouri, specially convoked for the purpose of conveying by proper legislative acts, the lands granted by the general government in aid of internal improvements in that State. The Governor of Missouri, Hon. Austin A. King, has sent in a message to the legislature on the subject.

After a statement of the importance of a speedy commencement of the work of internal improvement in the State, and that the lands thus granted, amounting as is estimated to a million of acres to each road, will go far towards their completion if judiciously disposed of—the Governor presents the following suggestions for legislative action in the premises:

It is an undeniable proposition that these lands do not belong to the respective railroad companies, but are vested in the State of Missouri, and to "be subject to the disposal of the legislature."

The policy of investing the proceeds of these lands as stock in the respective roads, and to this extent, the State to become a stockholder, may be suggested for your consideration. I doubt the policy of such investment, and suggest, as the object and wish of all must be the most speedy completion of these important works of internal improvement, that by no act of legislation shall the State be made to engage in them in any direct manner whatever, but that the benefits, pecuniarily, to be derived to the State, shall be of an indirect character, such as may result from a disposition of these lands to the respective companies, and upon such terms as will hold out proper inducements to capitalists to engage in the completion of the roads, at the earliest practicable period.

By the terms of the grant, the lands along twenty miles of the road may be disposed of first, and when finished for this distance, steps are to be taken for the sale of lands for another twenty miles further on the road, and so on, until it is completed.

If the lands are, therefore, sold by the company, in order to raise means to pay for the work as it progresses, the sales must necessarily be for only twenty miles along the road at a time; and, as the road progresses, subsequent conveyances are to be made upon terms contemplated by the grant.

This view of the subject, it is believed, will not prevent the enactment of a law, which by its terms will authorise the road to be laid off in sections of twenty miles, and to allow contracts to be made for each section at the same time, if the proper interest of the road seem to require it.

Taking another view of the subject, and to which it is believed, the law making the grant, presents no obstacle, I suggest that a provision be made, authorising the company to hypothecate these lands, if necessary, upon which to create a loan by the issue of its bonds, on such terms and conditions as will enable the company to supply the means for the entire completion of the road prior to making any absolute sale of the lands. and to consummate which, the company should be authorised to secure the payment of any bonds it may issue, by a deed of trust upon the lands, taking care to recite in the deed, or otherwise secure the prior lien of the State, to which it will be seen allusion is made in a subsequent part of this communication.

The faith of the State should in no wise be pledged for the redemption of the bonds, nor should the State be connected, in any manner whatever, with such loan, further than to allow the company full power to hypothecate the lands for the redemption of any bonds it may issue.

If the lands are thus disposed of, then, in order to prevent a monopoly of them, which may prove detrimental to the best interests of the country, the company should be required, after a given time and at stated periods, to offer these lands for sale, and from time to time to do so, until all are sold.

As counter security to the State, the company, to which any of these lands are conveyed, should, simultaneously with the conveyance, execute a deed of trust to the State upon the lands thus conveyed, and the appurtenances in anywise appertaining to the same, in such manner as will fully and in every respect secure and oblige the faithful performance of the company in the application of the money, and property arising from the sale of these lands, to the constructing, completing and finishing the road in such manner and time, and upon such conditions, as may be agreed upon; a release of the deed of trust, and a removal of the incumbrances thereby created, only to be executed upon a full compliance with the contract or stipulations contained in the deed.

In consideration of the grants, privileges and immunities thus to be conferred, the company should be required to pay into the State treasury, semi-annually, a fixed per centum on the gross proceeds, receipts or income derived from the road, to be ascertained and definitely fixed by law.

The uncertainty as to the terms upon which contracts may be made with capitalists or contractors for making the roads, renders it necessary that the law should be so framed as to provide against any contingency of this kind, and at the same time protect the interests of the State, and guard against the letting of contracts, by which these lands are to be disposed of in any manner, which, by any possible contingency, would put in jeopardy the completion of the roads at the earliest practicable period.

I submit these matters with deference to your enlightened consideration, confident that your deliberations will take such a direction as will tend to promote the public interests, in making a wise disposition of the important subject, to which I have felt it my duty alone to call your attention at the present session, with the assurance of my cordial co-operation in all your efforts to promote the public good.

The act granting lands to the state contains 6 sections. The first grants the right of way through the public lands for the construction of railroads from the town of Hannibal to the town of St. Joseph, and from the city of St. Louis to the western boundary of the state, and also grants the materials for the construction on the public lands adjacent to the road, and grounds for buildings, turn-outs, etc. The locations to be forwarded to the proper local land offices, and to the general land office at Washington.

Sec. 2nd, grants to the state in aid of the roads, alternate sections, for six sections in width, along the lines of road if not sold or subject to pre-emption rights, in which case other lands are to be selected, not to exceed a distance of 15 miles from the lines.

Sec. 3, Fixes the prices of the remaining lands at double the minimum price.

Sec. 4, Gives the disposal of the lands to the legislature for the sole purpose of aiding in the construction of the roads, and reserves a right to use them by the government for the transportation of the property or troops of the U. S.

Sec. 5, Provides that the lands hereby granted to said state, shall be disposed of by said state only, in a manner following, that is to say; that a quantity of land not exceeding one hundred and twenty sections on each road, and included within a continuous length of twenty miles of said road may be sold; and when the governor of said state shall certify to the secretary of the interior, that said 20 miles of said road is completed, then, another like quantity of land hereby granted may be sold; and so from time to time until said road is completed; and if said road be not completed within ten years, no further sales shall be made, and the land unsold shall revert to the United States.

Sec. 6, Provides for the transportation of the mails at prices to be fixed by congress.

The amount of land along the line of the Pacific railroad is stated by A. M. Tutt, the register at Clinton, Mo., to be:

On the route commonly known as the river route, running from Jefferson city via Boonville, Lexington and Independence to Kansas, which is presumed will enter the Clinton land district in T. 49, R. 21, there are on the south side of the Missouri river, 158,520 acres, of which the company would receive one-half, 79,260 acres.

On the route commonly known as Kirkwood's survey, entering the Clinton district near the corner of townships 45 and 46 of ranges 20 and 21, thence by the high point of Tebo, along the dividing ridge between the Missouri and Osage rivers to the south west corner of section No. 30, T. 46, R. 33, on the west boundary of the state of Missouri, 688,730 acres.

On the same route to near the head waters of Little Blue, and thence to Kansas, 618,950 acres.

Beginning with the same route, diverging at a point near Georgetown and running by Warrensburg and intersecting the route again near Pleasant Hill, 574,930 acres.

These estimates include all the vacant lands within 15 miles of the routes, except on the river route, on which the vacant land lying within the Clinton district alone is exhibited.

Earnings of Railroads.

The receipts of the Harlem railroad for August were:—

August, 1852	$77,134 49
August, 1851	61,290 79
Increase	$15,843 70

The receipts for the Long Island railroad were:

August, 1852	$26,622
August, 1851	24,383
Increase	$1,639

Saratoga and Washington railroad receipts:

August, 1852	$28,417 18
August, 1851	23,236 32
Increase	$5,180 86

Ogdensburg Railroad.—Official statement of earnings August, 1852:

Freight department	$36,524 10
Passenger "	10,786 28
Miscellaneous	730 53
	48,040 91
Earnings August, 1851	26,441 64
Increase, (nearly 82 per cent	$21,599 27

The receipts of the New York and New Haven road for August are as follows:

Passengers	$72,666 63
Freight estimated	9,000 00
Total	$79,666 63
Deduct paid Harlem road for 70,224 passengers	5,247 04
Net receipts	$74,419 59
August, 1851	66,002 15
Increase in 1852	$8,417 44

The receipts in August, 1850, were $54,803 73.

The receipts of the Cleveland, Columbus and Cincinnati railroad for August reached $80,454 11, which is an increase on the estimate.

Boston and Maine Railroad.—The annual report gives—

Net earnings for 18 months to May 31, 1851	$466,032 44
From which have been paid three semi-annual dividends of 3½ per cent	436,348 50
Surplus of earnings for 18 months	$29,683 94
Add surplus of previous years and balance reserved for losses by fire	56,663 01
Total of reserved profit	$86,346 95

The receipts of the Cleveland and Pittsburgh railroad for the month of August, are as follows:

For passengers	$18,995 67
For freight, mail, etc.	11,433 13
Total	$30,427 80

Railroad Subscriptions.

Twenty thousand dollars stock has been subscribed at Walton and Verona, Boone county, to the Covington and Louisville railroad.

We learn that Yelobusha county, Miss., has just voted by a majority of five to one in favor of the railroad tax.

The Eastport (Miss.) Union is informed that Mr. Wheeler, agent of the Mobile and Ohio railroad, was in Rienzi, on the 1st instant, soliciting subscriptions. He had then some $40,000 subscribed, but was yet lacking $100,000 of the sum expected from the county. The Union appeals zealously to the people to subscribe the deficiency.

The Sacramento Valley railroad company is the name of a joint stock association just formed at Sacramento city, with a capital of $1,500,000, divided into $15,000 shares. Much of the stock has been subscribed for, and the per centage paid in.

A railroad mass meeting and barbecue was held at Greenwood, Caddo Parish, on the 14th ultimo, at which a resolution in favor of the Police Jury of the Parish subscribing $200,000 worth of stock in the Vicksburg, Shreveport and Texas railroad was unanimously adopted. The Shreveport Gazette predicts that the Parish will vote by a large majority for the subscription.

The last Miltonian says:—The Town Council of the Borough of Milton passed a resolution in favor of subscribing $25,000 to aid in building the Sunbury and Erie railroad.

In Gallatin county the subscriptions to the Covington and Louisville railroad amount to $60,000. It is supposed $100,000 will be obtained.

The city of Erie has subscribed $200,000 in addition to the $300,000 previously subscribed to the capital stock of the Sunbury and Erie railroad. The second subscription is however conditional, and to be binding on the subscription of one million dollars by the city of Philadelphia to the same company.

The board of directors of the Buffalo and Brantford railroad, have resolved to unite with the Canada (Great Western) road at the town of Paris—the citizens of that place having taken £10,000 of the stock.

Ohio.

Scioto and Hocking Valley Railroad.—A communication in the Newark *Times*, states that the counties of Perry, Hocking and Vinton are now engaged taking up the stock among their people to fill the gap between Jackson and Newark. It is proposed that if those counties subscribe $300,000, that the residue will be raised by the friends of the road north, to put it through. The whole will cost $1,600,000.

The Short Line Railway and Tunnel.—The Times of Saturday evening, states "that the talking of this road is about done with" and the work about to commence. It states that the board of which Mr. Samuel Goodin is president, on Friday last elected E. Gest, chief engineer, John C. Thorpe, secretary, and Pulasky Smith, book-keeper. The engineer was instructed immediately to put the line in condition to be let, from hence to Dayton. The tunnel 5500 feet, to be worked on during the winter. "It is contemplated to build four tracks to Sheron, and one thence to Dayton—all to be fenced in."—*Cin. Gazette.*

We are requested to state that an assignment of the old Buffalo and Mississippi charter for Ohio has been procured by an association of gentlemen in this city, that they have formed an organization, elected officers, etc., in conformity with its provisions, and that, under this charter, they intend to construct a road from this city, in the direction of St. Louis, to the Indiana line.—*Toledo Republican.*

Babcock & Fennell,
NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To Chief Engineers.

A YOUNG MAN is desirous of a situation, either in Field Work, or as Practical Draughtsman. Has just completed an engagement in this country; before which, was engaged for six years with an Engineer in Scotland—part of the time as Draughtsman. Is in possession of all instruments necessary for Surveying, Leveling, etc. Please address J. H. STEWART, Box 70, Post Office, New York.

Dayton and Michigan Railroad Company.
PROPOSALS FOR LOAN.
$100,000

DAYTON AND MICHIGAN SEVEN PER CENT. FIRST MORTGAGE CONVERTIBLE BONDS.

The Dayton and Michigan Railroad Company offer for sale $100,000 of their Mortgage Bonds, with Coupons.

They are in sums of $1,000 each, payable the 1st July, 1867, with interest at 7 per cent. semi-annually, in the city of New York, on the 1st January and 1st July in each year, where the principal sum is also payable. They are secured by a first and only Mortgage, or Deed of Trust, to Joseph B. Varnum, of the city of New York, in trust for the Bondholders. They are issued under acts of the Legislature of Ohio, authorising them and the mortgage to secure their payment. The amount of bonds thus to be issued under the mortgage is one million of dollars. They are convertible into the capital stock of the company at the option of the holder.

The amount of Bonds at present to be issued under the mortgage is $300,000, of which only $100,000 will now be offered for sale.

The mortgage covers the entire line of the company, their property real and personal, commencing at the termination of the Cincinnati and Dayton Railroad, at the city of Dayton, Ohio; thence by Troy, Piqua, Sidney, Lima, Perrysburgh, Maumee City and Toledo, to the Michigan State line, in the direction of Detroit, 140 miles long.

The mortgage provides that the company shall only issue and the Trustees certify under it, $800,000 of bonds, until after the road is finished and in operation to Sidney, 38 miles; $200,000 more after the same is finished and in operation to Lima, 65 miles, and so on as the road is completed from point to point, and the money needed to purchase iron, rails, etc.

It is the first and only lien thereon, and the only debt of the company.

The part of the line lying between Dayton and Sidney is nearly graded and bridged, the rails having been purchased and now in the course of arrival—will be completed and in operation by the first of June next.

An arrangement has been made with the Cincinnati and Dayton road to run it for the present.

The entire line from Dayton to the Michigan State line, equipped for one year, is estimated to cost $2,500,000. That part lying between Dayton and Sidney $650,000.

It is the purpose of the company to complete the line to Sidney first, the residue point to point continuously as the means of the company will permit.

To complete the road to Sidney, the company has an available stock subscription of about $400,000, which has been mostly collected and expended on the line. To raise the remaining means this loan has been resorted to.

Active measures are in progress by the company to raise the necessary stock subscription to complete the entire line. A considerable sum has already been subscribed. The entire line, it is expected, will be placed under contract for graduation and masonry early next year, and completed within the year following.

The mortgage gives full power to the Trustees to take possession of the road, its personal effects, franchises, depot grounds, etc., and to sell the same to the highest bidder, to raise money to pay either interest or principal in case of default.

The country through which the road passes, with its connecting link to Cincinnati, is not only unsurpassed but unrivalled by any other of equal extent in the Union, in fertility of soils, capability of sustaining a dense population, and in all the elements of wealth and prosperity.

The report of the Auditor of the State of Ohio for 1851, shows that about one-fourth of the entire taxable property of that State was found in the twelve counties through which this line passes from Toledo to Cincinnati.

The southern portion of the line passes through the most populous and fertile portion of the United States; half a century ago it was an unbroken forest.

At Sidney this line crosses the Bellefontaine and Indiana railway; at Lima, the Ohio and Indiana, which will prove a valuable tributary, opening to it the immense trade of the region around Fort Wayne, and that west and north of it.

At Toledo it connects with the Michigan Southern and Lake Shore roads. The line will soon be extended to Detroit. At Dayton it connects with the road to Cincinnati south, and to Indianapolis west, and Columbia east.

This road will probably pay its shareholders quite as well as the Cincinnati and Dayton road, whose stock is now at or above par.

An examination of a map of this line will show that it occupies a most important position, nearly, if not quite, equal to any other in that state.

Sealed proposals will be received for any amount not less than $1,000, until Saturday, the 25th day of this month, at 3 o'clock P. M.

Proposals will be addressed to the Agents of the Company, Messrs. WINSLOW, LANIER & Co., No. 52 Wall st., endorsed "PROPOSALS FOR DAYTON AND MICHIGAN RAILROAD BONDS."

Twenty-five per cent of the purchase money will be required to be paid on accepting the bids, the remainder in equal monthly instalments of 25 per cent. Any purchaser will be at liberty to pay in full at once. Interest on the Bonds will run from the day of payment.

The above $100,000 will be sold absolutely and without reserve to the highest bidder.

A printed exhibit, with a map and all necessary information in relation to these securities, can be had by calling at the office of the Company's Agents, No 52 Wall st., New York.

JNO. G. TALFORD, President.

New York, Sept. 6th, 1852.

Oxford Furnace, N. J.
ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

Old Railroad Iron.

PARTIES having Old Rails, either flat or any other pattern, suitable for re-laying or manufacturing, and wishing to dispose of the same for CASH, will please address G. H. WALBRIDGE, Box 2250, Postoffice, New York City, stating *quantity, pattern* and *price*, at what seaport, and when they would be delivered.

New York, Sept. 11, 1852. 2t*

To Contractors.

PROPOSALS will be received at the office of the Alabama and Mississippi Rivers Railroad Company, in Uniontown, Ala., until the first of October next, for the Graduation, Masonry, Bridging and Cross-ties of said road, from the west bank of Valley Creek to Uniontown, 28 sections about one mile each. Bids proposing the entire payment, or a percentage thereof, in the stock of the road, will receive the most favorable consideration. Specifications can be seen at the office of the company in Uniontown, and also at the office of the Chief Engineer in Selma, Ala. J. J. DRAKE, Secr'y.

Uniontown, Ala., August 16, 1852. 4t*

Springfield, Mt. Vernon and Pittsburgh Railroad Co.

SALE OF BONDS BY

C. ANTHONY, President.

SPRINGFIELD, MOUNT VERNON and PITTSBURGH RAILROAD.—PROPOSALS for LOAN.—SPRINGFIELD, MOUNT VERNON and PITTSBURGH SEVEN PER CENT. FIRST MORTGAGE CONVERTIBLE BONDS.

The Springfield, Mount Vernon and Pittsburgh Railroad Company offer for sale $250,000 of their Mortgage Bonds, with Coupons.

The Bonds are in sums of $1,000 each, payable the 1st day of January, A. D. 1868, with interest at 7 per cent., semi-annually, in the city of New York, on the 1st day of January and July of each year, where the principal is also payable. They are secured by a first and only mortgage, to George S. Coe, Esq., of the city of New York, trustee for the bondholders. The amount of Bonds thus to be issued at present under the mortgage is limited to $500,000. They are convertible into the stock of the company at the option of the holder.

The mortgage covers the line of road from Springfield to Delaware, a distance of 48 miles, reaching, at the latter point, the Cleveland, Columbus and Cincinnati railroad, and on the real and personal estate of the Company between and at both places. This part of the road is under contract, and the greater part of the work is done, and it will be finished and brought into use about the 1st of June next. The local subscriptions applicable to this division of the road amount to a little upward of $500,000, of which about three quarters has been paid up. And the entire cost of this division—including two costly bridges each costing about $100,000—will be about $870,000; and the Company have a further subscription of upward of $400,000, applicable to the Eastern Division of the road, extending to the Ohio and Pennsylvania Road near Loudonville, a distance of 64 miles.

This road passes through the central part of Ohio, densely peopled, and as productive as any other part of Ohio; and it forms an important link in a through line from New York to Cincinnati, by way of Philadelphia and Pittsburgh. An examination of the map will show that it occupies a position equal to any other in the State.

Proposals will be received for any amount not less than $1,000, until the 24th day of September at 3 o'clock. Proposals to be addressed to Messrs. DELANO, DUNLEVY & CO., No. 18 Wall-st., indorsed "Proposals for Springfield, Mt. Vernon and Pittsburgh Railroad Bonds." Ten per cent. of the purchase money will be required on accepting the bids, the remainder in equal monthly instalments of 10 per cent.—purchasers at liberty to pay in full. Interest on the bonds to run from day of payment.

A map of the road and an exhibit of the affairs of the Company may be had at the office of DELANO, DUNLEVY & CO., No. 18 Wall-st. And all necessary information will be given by them in relation to the road and its securities. C. ANTHONY, Pres't. S., M. V. and P. R. R. Co.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Railroad Iron.

1,000 TONS, 56 lbs. per lineal yard, shipped, and to be shipped, from London in July and early in August, T pattern and of best quality.

Apply to DAVIS, BROOKS & CO.,

31st July. 1m

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

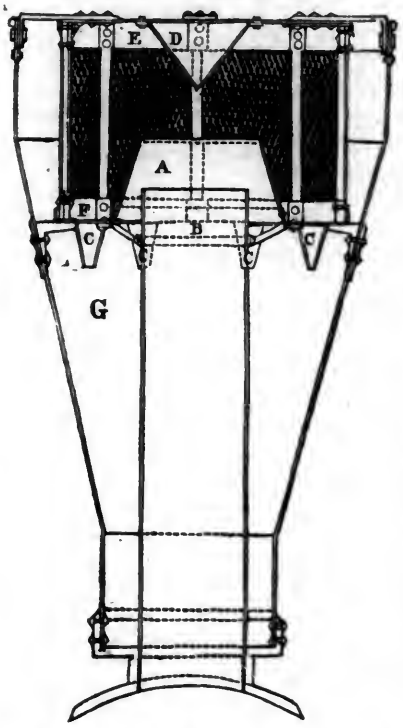
MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.

To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,

DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Scheuectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs , at the site of the bridge, on the following conditions :

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.

2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.

3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.

4. It must be finished in three holes, or nearly as hard as spring-wire.

5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.

6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.

7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.

8. The wire must be drawn on blocks of no less than 2 feet diameter.

9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.

10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.

11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.

12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.

13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.

14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.

15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.

16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.

17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"

18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R.R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,
Importer of Stationary 191 Pearl st., N. Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S,—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south. JOHN CHILDE,
Chief Engineer and General Agent.
New York, June 14th. 1852.

Notice to Contractors.

Sodus Point and Southern Railroad.

PROPOSALS will be received at the office of the Engineer, at Sodus Point, until Tuesday, the 5th day of October next, for the construction of the Sodus Point and Southern Railroad, including Grubbing, Graduation, Masonry, Bridging, and the laying of the superstructure, complete for operation.

Plans, Profiles and Specifications will be exhibited, and all requisite information given, at the office of the Engineers, on and after the 25th of September inst.

Contractors should be prepared to state what proportion of the stock of the company they will take at par in part payment.

The company reserve to themselves the right to let the work in items and sections, and in such manner as may appear most advantageous to their interests.

Dated Sept. 4th, 1852.
WM. D. COOK, President.
S. CUHER, Secretary.

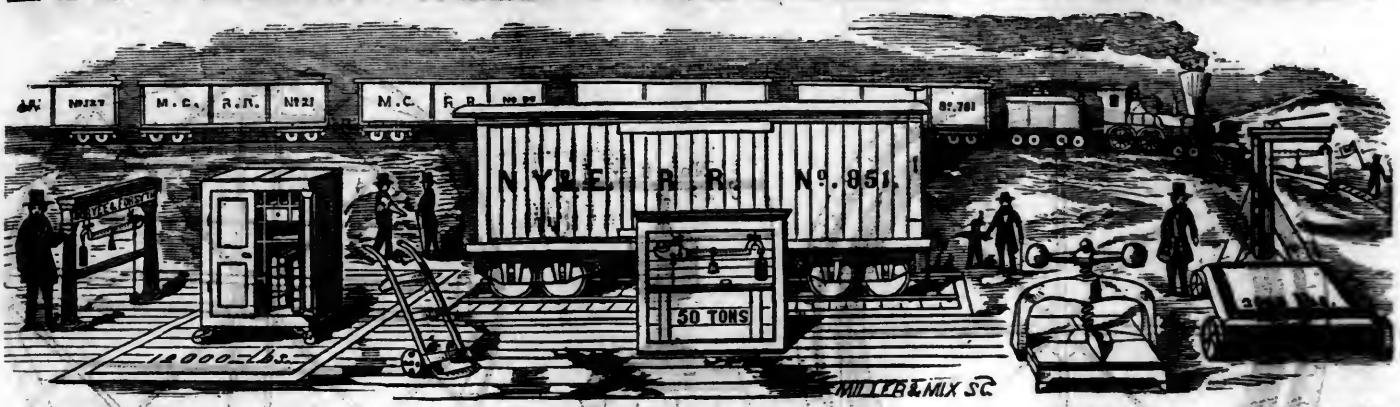
LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. | TRACK SCALE, 100,000 LBS. | RAILROAD MANIFEST PRESS. | IRON SCALE, 1 1-2 TONS.

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LF[illegible].

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1849, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

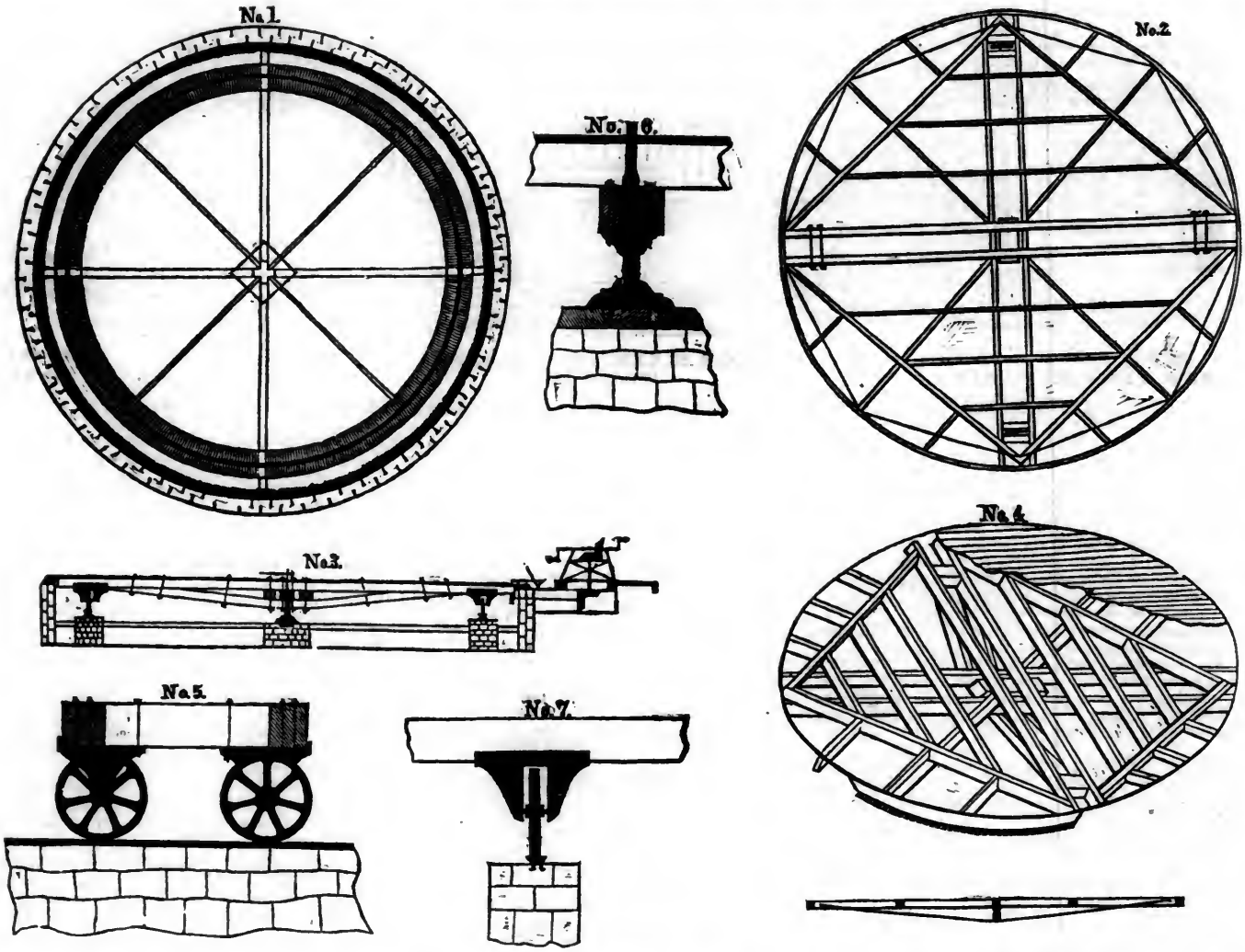
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Com panies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.



CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6. 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Mat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 39] SATURDAY, SEPTEMBER 25, 1852. [WHOLE No. 858 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Influence of Railroads on the Course of Trade. 609
Lexington and Big Sandy R. R. 611
Extension of the Indiana Railroad 611
Pittsburg and Erie Railroad 611
Penobscot and Kennebec R. R 612
Railroad Law 612
Southwestern, Ga., Railroad 612
York and Cumberland, Penn., Railroad 612
Madison and Indianapolis Railroad 613
Railroad Subscriptions 613
Railway over the Ohio Falls 613
Earnings of Railroads 614
Belleville and Illinoistown R. R. 614
Dayton and Michigan Railroad 615
Ship R. R. across the Isthmus of Florida 615
Baltimore and Ohio Railroad 615
Memphis and Charleston Railroad 615
Mobile and Ohio Railroad 618, 615
Alabama and Tennessee Railroad 615
Sodus Point and Southern Railroad 616
Stock and Money Market 617
Ship Canal from St. Lawrence to Lake Champlain 618

American Railroad Journal.

Saturday, September 25, 1852.

Influence of Railroads upon the Course of Trade.

As the rapid progress of our works of internal improvement will soon secure to every portion of the United States the choice of all our great markets, it is becoming a very interesting subject to inquire how far the positive and relative position of such markets—among which may be enumerated the cities of Boston, New York, Philadelphia, Baltimore and New Orleans—are to be affected by that *practical* freedom of trade, which will soon render each accessible from every portion of the Union. It by no means follows, because these cities have maintained, for a series of years, a somewhat uniform position toward each other, that such will continue to be the case. A town may grow up and become the depot of a large trade, not because it is the best market for the adjoining country, but for the reason that it is the only *accessible* one. Such town may owe its trade and importance to the absence of railroads, which, if built, would carry off this trade to other and better markets. This state of things is fast passing away. Railroads, by allowing a perfect freedom of movement in every direction, renders the *best*, the market of *convenience*, whether removed one, or one thousand, miles from the customer. For the future, our net work of railroads will allow commerce to move with the freedom of water, and in every portion of the U. States it will flow toward the best market, with the unerring certainty that the sources of the Mississippi follow the natural inclination of the continent toward the Gulf of Mexico.

With the exception of New York, none of the towns named owe their growth, or present position, to the existence of great channels of commerce connecting them with the interior. To be sure, their growth has been aided by such works, but not in a pre-eminent degree, as has been that of N. York, by means of the Erie canal. They all would have been important towns, and would to a great extent have remained in possession of the trade they now enjoy, without the aid or influence of the works of which they are the termini. Such works were not of the character to enable them to become great channels of commerce in competition with the Erie canal, which rendered New York the more convenient market for the most remote portions of the country. Hence the vast superiority of New York over all her rivals, in population, wealth and commerce. Her greatness is directly referrable to the trade secured to the great work already alluded to, an advantage which none of her rivals have, up to the present time, possessed.

It may be considered a grave question whether the superiority which New York owes to the Erie canal, is not endangered by the railroads which will soon bring all our great cities into intimate relations with the more distant and remote portions of the country, which have been heretofore enjoyed almost exclusively by the former. There can be no doubt that railroads are to supplant, to a great extent, other kinds of artificial improvements as instruments of commerce, and that they are calculated to effect a very great revolution in the course and direction of trade. They constitute a *new* element in the calculation, which has never been considered before, and which is just beginning to be felt. Only one city of those named—which is Boston—owes any considerable portion of its wealth and population to railroads. She alone is brought into intimate relations by these works, with all the country naturally belonging to her. New York has just begun to use her railroads, as a means of extending and facilitating her domestic commerce. Of her two great lines, that from Albany to Buffalo has, for the present season only, been allowed to compete with the canal in the carriage of freight; while only a year has elapsed since the opening of her other great line, the Erie railroad. These two great works have yet added but little to the commercial importance of New York, except through the influence that the former has exerted upon the travel of the country. Philadelphia is still further behind in the railroad projects which are to connect her with the west, and will be the last to reach the Mississippi valley with a continuous line of railroad. As far as convenient avenues for the western trade is concerned, Baltimore is still behind Philadelphia; as the latter has for years enjoyed the advantage of a compound work, made of railroad and canal, which, though far from being what was needed to meet the wants of the commerce of that city, yet has added vastly to its trade. Baltimore has had no such channel for its trade, but on the first day of January next will have completed her great line of improvement to the Ohio river, the prosecution of which has absorbed her energies and capital for the past 25 years. Within about a year from this, Philadelphia will have completed her great road to the Ohio railroad, so that within that period all the great Atlantic cities will have pushed their systems of railroad into the Mississippi valley. All will then start anew in the race for commercial supremacy, and all depending upon similar agencies for success.

The cities placed nearest to the western States, viz: Baltimore and Philadelphia, assume the proposition, that a large portion of the commerce of the country is to be attracted from the old artificial routes, which are canals chiefly, to railroads. This being admitted, the consequence follows as a necessary corollary, that all other things, such as grades and curves, being equal, *cost* of transportation is measured by *lineal* distance. Thus—it will be, say 600 miles from Cincinnati to Baltimore by railroad, and 860 miles from Cincinnati to New York. Estimating cost of transportation at two cents per ton per mile, the Baltimore route would have an advantage over that leading to New York, equal to $5 10 per ton, no inconsiderable item upon the value of the coarse and cheap products of the west. Admitting another point, and allowing Baltimore to be an equally good market for western products,

with New York, a case is fully made out in favor of the former, which must certainly supplant the latter in the present monopoly she enjoys of western trade.

We admit that railroads are calculated to effect, and must effect, a great change in the routes and direction of the commerce of the country. And we believe we have correctly stated the grounds upon which the city of Baltimore, and we may also add Philadelphia, expect to secure to themselves a large portion of western trade now enjoyed by New York. Both of these cities, in the prosecution of their appropriate lines of improvement, are proceeding upon the assumptions already stated, and both are constructing their works, and equipping them upon a scale commensurate with the objects proposed to be accomplished; and both are fully confident of success. It may be argued that all the positions assumed are not tenable, and that New York has other elements of strength, which are to be found in the excellence of her harbor, in the convenience of her position, in the start which she has already acquired over all competitors, and in the extent of her commerce and wealth, which must in the end leave her mistress of the field. But it is not our purpose to argue this question ourselves, only to state the ground upon which the cities named are constructing their lines of improvement, and the objects proposed to be effected. In the contest for eventual commercial supremacy, which is now going on between our leading Atlantic cities, we may have to await the results of experience to decide which shall bear off the prize. At any rate, neither Baltimore nor Philadelphia are by any means prepared to admit the unquestioned superiority of New York.

Both of the former are preparing to make themselves the depots of western trade. On the first day of January next, the Baltimore and Ohio railroad will be completed to Wheeling, and will then, through the Ohio river, be brought into direct communication with western trade. The charges on that road are, at the outset, to be put at a rate to compete with the Erie canal, or as low as 1½ cents per ton per mile; making the charge per ton only $6 from Wheeling to Baltimore, a distance of about 400 miles. It is calculated by western merchants, that produce can be forwarded from Louisville, say to New York, via the Ohio river and the Baltimore and Ohio railroad, for 55 cents per 100 lbs., as follows:

From Louisville to Wheeling, by water.	12½ cents.
From Wheeling to Baltimore by railroad.	30
From Baltimore to New York by the inland route	12½
	55 cents.

The above estimates are furnished to us by Mr. Webb, of the well-known house of E. Webb, Rowland & Co., Louisville, Ky., which is now organising a large traffic for the above route, as soon as it shall come into operation. Mr. Webb has for a long time been engaged in mercantile pursuits in Louisville, and there is probably no man in the southwestern States better informed as to the commercial wants, or of the tendency of the trade of that portion of the country, when the lines of improvement now in progress shall secure to it an entire freedom of movement in the direction of the demand. From a very careful investigation of the subject, aided by numerous experimental shipments by the northern route, Mr. Webb is of the opinion that the produce of the entire Mississippi valley, north of Memphis, Tenn., and including that important point, will take the New York route to market, in preference to that by way of New Orleans. In proof of this, we give the following *pro forma* invoices furnished by Mr. Webb in the Louisville Courier, of a given quantity of cotton and tobacco, forwarded over both of the above routes, viz:

"Pro forma invoice of 100 hhds tobacco purchased for account of whom it may concern at N. Orleans, and shipped to Liverpool, viz:

100 hhds averaging 1200 lbs each, 120,000 lbs at 8c $9,600

CHARGES.

Commission 2½ per cent. purchasing.	$ 240	
Discount on bills on New York, 60 days at 2½ per cent.	246	
Drayage and shipping at 75c per hhd.	75	
Freight to Liverpool from New Orleans at $10 per hhd.	1000	
Insurance to cover prime cost and charges laid down in Liverpool, 1½ per cent	167	
		1,728
Costs and charges of 100 hhds tobacco in Liverpool		$11,328

We give now a pro forma invoice of the same quantity of tobacco purchased at Louisville:

"Pro forma invoice of 100 hhds tobacco purchased in Louisville for account of whom it may concern, and shipped *via* Ohio and New York canal route to New York, and thence to Liverpool:

100 hhds, 1,200 lbs each, 120,000 lbs at 8c. $9,600

CHARGES.

Warehouse fees $1 25, commission for buying $1 per hhd	$225 00	
Drayage 25c per hhd	25 00	
Discount on New York, at 60 days, on $9,725 at 1 per ct.	97 25	
Transportation to New York at 50 cents per 100 lbs.	650 00	
Shipping and drayage at New York 40 cents per hhd	40 00	
Freight to Liverpool from New York $3 per hhd	300 00	
Insurance by steam ¼ per ct.	83 39	
		1,370 64
		10,970 64
Difference in favor of Louisville		357 36
Amount of invoice above		$11,328

In explanation of the above Mr. Webb says:—

It will be seen that a tobacco buyer, say for the Liverpool market, gains by purchasing at Louisville, and shipping *via* our canal and railroad routes to New York, thence to Liverpool, $3 57 on each hogshead, in place of buying at New Orleans at same rate and same class, say 8 cents per pound. In making up the above statements I have been careful not to overcharge New Orleans, while at the same time I have credited Louisville with every legitimate expense, predicating, however, the rate of freight from this port to New York upon a reduction in rates of tolls and transportation on both the New York and Ohio canals the ensuing season.

The estimates of Mr. Webb were made for the New York routes. The Baltimore route, if our estimates are correct, is yet cheaper; making a still stronger case in favor of the Northern, or Eastern route.

With the tobacco coming out of the Tennessee and Cumberland rivers, the advantage is still greater in favor of the Northern, over the New Orleans route. Upon such shipments, Mr. Webb makes the difference equal to $597 on the 100 hogsheads in favor of the former.

So with the article of cotton, Mr. Webb furnishes a *pro forma* invoice, in which he shows a saving, equal to $56 on a shipment from Vicksburgh to New York of 50 bales by the Northern over the Southern route. The following are the items that make up the aggregate in both cases.

Freight from any of the above rivers to Louisville, at $1 per bale	$50 00
River insurance, ½ per cent; fire insurance for one month, ¼ per cent.	18 75
Storage in Louisville, 12½ cents per bale; drayage, 6¼ cents per bale	9 50
Freight from Louisville to New York, at 50 cents per 100 pounds	125 00
Forwarding commissions, 10 cts. per bale; drayage from warehouse, 6¼ cents.	8 12
Insurance on the lakes and rivers above Louisville, at ¼ per cent	12 50
Total charges on 50 bales to New York, via Lakes	$223 87

Charges on the same, shipped by way of New Orleans to the same destination:

Freight from the most favorable points to N. Orleans, at $1 per bale	$50 00
River insurance, 1 per cent; fire insurance for one month, ¼ per cent.	37 50
Drayage, storage, etc., at 40 cents per bale	20 00
Drayage to ship, at 25 cents per bale.	12 50
Forwarding commissions, at 20 cents per bale	10 00
Freight to New York, at ¼ cent per pound	125 00
Marine insurance, 1 per cent	25 00
	$279 50

The correctness of the above estimates are generally received by Western and Southwestern business men, and they are making arrangements to accommodate themselves, to the change in the current of trade. We met a few weeks since with a gentleman from Clarksville, Tennessee, who had just made a shipment of tobacco to this city, by way of the Lake route, and he assured us that he realized about two cents per pound, over what he could have obtained in the New Orleans market.

In addition to its being cheaper, there are great advantages in the northern over the southern route in *climate*; a matter which every business man will readily appreciate. In the eastern cities the market is uniform throughout the year, and with the use of railroad, which will allow daily access to them, the planter will become his own ware-house-man and will be enabled to forward his products to meet the *demand*, instead of sending them as he does now, in mass, to distant parts, subjecting himself to all the onerous charges of warehousing, commissions, insurance, in addition to the deterioration of the staple in value from effect of climate, delays in shipment, etc., etc.

We give the above estimates, not upon our own authority, but upon that of persons who are fully conversant with, and who are directly interested in the subject. The opinion is general, that the eastern cities will draw to themselves the trade of the Mississippi valley. How this trade is to be shared between them becomes another, and a very interesting and important question. We have, in this article, given a prominence to the Baltimore route, only for the reason that it is on the eve of going into operation, and because its managers assume that it is at once to become the great channel of commerce between the east and the west. In their preparation to accommodate, and secure this commerce, they are acting upon this assumption, and if they do not meet with complete success, it will not be because they have not deserved it by unwearied perseverance and industry in the execution of a stupendous work, and by the boldness, comprehensiveness and completeness of the plans, by which their objects are to be accomplished.

The artesian well which the Louisville and Frankfort railroad company are making at La Grange, has been sunk to the depth of 800 feet. At the last accounts they were boring through a solid bed of limestone.—*Covington Jour.*

Lexington and Big Sandy (Ky.) Railroad.

The following is an extract from the report of Samuel Gill, Esq., Engineer of the Lexington and Big Sandy railroad.

I doubt whether there could be found in a mountainous country another route so favorable for the construction of a road. The route I consider not only practicable but a much less expensive one than I expected to find it.

Coal is first reached in veins from twelve to fifteen inches on the head water of Triplett creek; no veins however of sufficient thickness to render the working of them profitable, will be found short of ninety five or one hundred miles. The great cost of transportation has heretofore rendered the coal worthless, it being only used by the blacksmiths through the country. I saw but two veins open, one of them having been opened very recently and not entered sufficiently far to develope the quality of the coal. It was from five to five and a half feet thick with several layers of slate intervening between the beds of coal. The other pit has been entered some forty or fifty feet, showing about the same thickness as the other with two thin layers of slate between the coal. The coal is seen cropping out in numerous places along the line of the road in veins from four to six feet in thickness. The streams in forming their channels have cut through the coal indicating its presence in every hill. In the construction of the road, numerous veins would be cut through from which the coal could be deposited in the cars and delivered at Lexington and all points along the line of the road, at from seven to ten cents per bushel.

Cannel coal is said to be found in great abundance; specimens of which were shown me, taken from beds near the line of the road.

In the valley of Little Sandy, salt works have been operations for a great number of years. It being once the source from which for a long time the interior of the State was supplied, they were, however, worked to a very limited extent, supplying only the demands of the neighboring population.

Iron ore is first reached in the county of Bath, a distance of only fifty miles from Lexington, in quantities sufficient to supply the demand of this country for centuries to come. These mines were once worked, but competition, with greater facilities for getting to market, forced their abandonment. From this point to the mouth of Big Sandy evidences of the presence of the ore are seen everywhere, but no furnaces are in operation until you reach so near the Ohio river that they can afford to pay the transportation to its banks. Some of the furnaces now pay five dollars per ton for the delivery of the pig metal upon the Ohio; for nearly one half of which, it could be delivered by railroad in Lexington, and with but little additional cost could be placed in Louisville. At Ironton, on the Ohio river, common bar iron is now held at two cents per pound, while in the city of Lexington, similar qualities are sold at four to four and a half cents per pound, an increase of over one hundred per ct. in cost to the citizens of Lexington. With this road in operation Lexington could have her own Rolling Mills, Machine shops, foundries, etc., and the profit which now goes into the pockets of citizens of other States, would go to increase the wealth of her own citizens.

Timber is not found in any great abundance immediately upon the line of the road, but it crosses numerous streams down which it can be brought in quantities amply sufficient for all the demands of the country. Fine quarries of sand-stone, very accessible to the road, are found in the valley of Triplett creek, as also, fine quarries of Limestone of very fine quality, upon Tygret's Creek. As no possible route can be selected which will not pass from twenty to twenty-five miles through inexhaustible mines of coal and iron, that route alone should be selected in view of its important connections with other roads, which is the straightest and most direct between its terminal points.

While on this subject we extract from a letter of Judge Moore, of Virginia, published in the Kentucky Statesman, a portion in reference to the point of connection of the Central Virginia railroad with the Lexington and Big Sandy

Virginia regards the central, the most important of all the railroads in which she has any interest Her confidence in its benefits is greatly increased from the partial assurance entertained that this connecting link between Lexington and the mouth of Big Sandy will be made. She feels that it will be the great channel of communication and business operations between the east, south and west.—The confident opinion is held by many that when completed it will be the most profitable road in the United States. So strongly impressed with this belief was the late Governor Floyd and is the present Gov. Johnson that they both urged the State of Virginia, to take the whole stock and make the road all on the state account. That the Virginia central railroad will be speedily completed, I think is not seriously doubted by any man who is correctly informed upon this subject; and that its point of termination on the Ohio river will be the mouth of the Big Sandy river; admits still less doubt.

Extension of the Indiana Railroad.

We are exceedingly gratified at being able to state that this important road, now nearly completed as far as Tiffin, is to be vigorously pushed forward, from that place, westwardly towards the Indiana State Line. A delegation of our citizens interested in the road, left this city to-day for the interior, with a view to making arrangements for immediately putting under actual contract a portion of the road from Tiffin West. The preliminary surveys and estimates having already been made, it is believed that there will be no necessity for delay in contracting for the immediate construction of the more Eastern sections of the line. The precise location of the road, in several portions of the route, has been left open, for the purpose of allowing the competing points to make their respective offers of subscription to the stock of the company, although, in no instance, even for the sake of large subscriptions, will the line depart very far from the straight course already surveyed. One of the objects of the delegation is, to confer with the inhabitants along the proposed line, in reference to taking measures for its being all placed under contract as speedily as possible.

Our business men are at length thoroughly convinced of the importance to Sandusky, of the Indiana road, and this movement on their part is evidence of their determination to prosecute the work with vigor and energy. After having provided for the completion of the first thirty miles of the road, they are now desirous of seeing what their friends along the line can contribute towards the great work in which both are mutually interested.—When the latter have done all they can do, Sandusky will cheerfully make up the balance of the amount necessary. If the towns, the farmers and the business men of the interior, will meet our citizens in the same spirit, the road will be built within a short time. That they will do so, we have not a doubt. We saw a private letter the other day, addressed to one of our leading railroad men, from a responsible citizen of the thriving town of Rome, pledging a subscription of "at least ten thousand dollars, and probably more." We are also informed that assurances of liberal subscriptions have been received from other towns. In many places, the right of way has already been conditionally secured, upon the most liberal and satisfactory terms. These facts show that the right spirit is awakened, and fully justify the assertion that the entire work from this city west, to the line of Indiana, will be completed at no very distant day.

Of the character of the route and of the importance of the road, both to Sandusky and to the interior through which it passes, we have spoken at length, in previous articles. Perhaps no route of equal length, in the United States, presents a surface so uniformly level and a soil so favorable to the economical construction of a railroad. The route lays principally along a smooth, dry, sandy ridge, and there are but very few streams to cross,—none of which are sufficiently large, to render the expense of bridging them a material item in the cost of the road. Thus Nature has already done more than half the work—the grading.

The country bordering upon this ridge is unsurpassed in the richness and fertility of its soil, and is rapidly increasing in population, wealth and importance. But perhaps a more important consideration than any other, is the *direction* of the road.—It looks towards the vast agricultural regions of the South-west. It stretches towards the fertile prairies of Indiana, and grasps an iron connexion with St. Louis, the metropolis of the mighty Mississippi.—It opens an outlet, eastward, for the products of millions of acres of as rich land as the sun shines upon, and forms a channel through which merchandise from the east, to supply their myriads of inhabitants, will find its cheapest and most speedy transit. The travel, eastward and westward, of this vast extent of country, will also seek this route. Our business men fully appreciate the value of the prize for which they are aiming, and this being the case, they will not relax their energy or their efforts, until it is secured.—*Sandusky Register, 10th Sept.*

Pennsylvania.

Pittsburgh and Erie Railroad.—The Pittsburgh Gazette after enumerating the various roads and projects radiating from that city, strongly advocates this the seventh and last enterprise alluded to, and says:

The object of this work is to connect us with Lake Erie at the town of Erie, and to open up to us the region of country intervening, which is peculiarly Pittsburgh ground. The valley of the Shenango, through which it will pass, is rich in mineral and agricultural products, and a local trade of great importance will be by it secured to Pittsburgh beyond competition. It will commence at Enon, forty-four miles from Pittsburgh, on the Ohio and Pennsylvania railroad, which, up to that point is almost in a direct line to Erie, and will pass through the flourishing town of New Castle, with its 3,000 inhabitants, and we should hope also, through Mercer and Meadville, or as near to them as the nature of the ground will permit. Such a road will doubtless pay well, and will wonderfully develope the country through which it passes.

A company is organized to build this road, and a corps of engineers is in the field. What progress they are making, or how soon the work is to be put under contract, we cannot say. We hope there will be as little delay as possible. It ought to be put under contract from Enon to New Castle at once. This much New Castle could accomplish herself, if she would manfully place her shoulders to the wheel. The road once started, it is sure to go ahead. If money enough can be procured to grade and bridge the road, there will be no difficulty in procuring the iron. Crawford county we feel sure, with the assistance of the rich town of Meadville, will provide the means through her territory.

Let all the private subscriptions, possible, be obtained, the right of way secured, and then let the towns of New Castle, Mercer, and Meadville, and the counties of Lawrence, Mercer and Crawford, subscribe the remainder necessary to finish it to Meadville, ready for the iron, and issue their bonds, and the work will be done. The iron can be purchased with the bonds of the company. Having it finished to Meadville, the whole trade of that region would flow upon it, and it would become at once good paying stock. Erie, then, could no longer afford to do without it, and would take measures to finish it to that place.

Now cannot this be done. What is to hinder? The cost of grading and bridging from Enon to Meadville, would be, say $500,000, that is only $100,000 a-piece for the three counties, and $200,000 to be divided between the town corporations and private individuals. We hope soon to hear that this important project is under way, and we shall be pleased to hear from it as often as those at the head of it shall deem proper, and to give it all the aid we can through our columns.

Appointment of Steamboat Inspectors.

The National Intelligencer publishes officially the following list of appointments under the new steamboat law:

Robert L. Stevens, New York; Hiram Barton, Buffalo, N. Y.; Davis Embro, St. Louis, Missouri; Benjamin Crawford, Pittsburg, Pa.; John Shallcross, Louisville, Ky.; John Murry, Baltimore; George W. Dole, Chicago, Ill.

Maine.

Penobscot and Kennebec Railroad.—The people of Bangor are wide awake on the subject of railroads. They find that Portland with her present railroad improvements, is drawing off much of the trade of Franklin and Somerset counties which legitimately belongs to Bangor, and they are determined no longer to allow the capitalists of that city, to retard the construction of the Penobscot and Kennebec railroad. We learn that on Monday evening there was a highly and enthusiastic meeting of citizens to confer together upon this subject, and the determination was very generally and unanimously expressed that Bangor would take sufficient stock in the road to control its management and that the road should be built. The sum necessary to be subscribed to secure the management of the road is $300,000. The road can be built and put in running order for about the sum of $1,000,000. Of this sum it is proposed that $300,000 be taken in Bangor, $200,000 on the line of the Androscoggin road, and $100,000 among the friends of the enterprise elsewhere. This would give a cash capital of $600,000, which well expended, would furnish a sufficient and suitable basis on which to establish a credit in bonds for $400,000, the remaining sum supposed to be required.

Journal of Railroad Law.

ACTION FOR NEGLIGENCE.

The case of Clark *vs.* the Syracuse and Utica railroad company, decided last year by the Supreme court at Oswego, belongs to a class of controversies which are constantly increasing in importance,—relating to injuries occasioned by negligence on public roads.

In this case, cows were pastured in a lot adjoining a railroad, between which and the railroad there was no fence, and being at large upon the highway were killed by the cars. It did not appear that they escaped through any defect of the fences, which the defendants were bound to repair, or that the defendants were bound to repair fences at all at that point, and it was *held*, that no action could be maintained against the railroad company for running over and killing the cows by means of their engines and cars;—that an action for negligence could not be sustained, if the wrongful act of the plaintiff *cooperated* with the misconduct of defendants in producing the damages sustained, whether the plaintiff's act was negligent or wilful;—that it was an act of negligence to suffer cattle to be at large on highways at railroad crossings. In fine the court ruled that where cows are trespassers upon a railroad their owner cannot maintain an action against the railroad company for killing them by their passenger cars, even if the death of the cows was occasioned by the gross negligence of the defendants.

The rules adopted by different courts in relation to this subject do not exactly harmonize. A thorough examination of the authorities applicable to the question may be found in the Boston monthly Reporter for Sept., page 265.

The leading authority in respect to actions for damages for negligence is Butterfield *vs.* Forrester, (11 East. 60). In this case it was held that one who was injured by falling over an obstruction placed in the highway by defendant, cannot maintain an action if it appears that he was riding without ordinary care, and that a person riding with reasonable care could have avoided the accident. A large number of English cases sustain the same principle.

But in Walter *vs.* Pfeil, (M. & M. 362), Lord Tenterden swerving from the line of precedent, seriously modified the established rule, and held that an action might be maintained against one who demolished a house adjoining the plaintiff's in a negligent manner although the plaintiff had not taken proper precautions to prevent the injury. Several subsequent cases sustained this decision. Especially the case of Bridge *vs.* Grand, (Junction railway company, 13 M. & W. 244). This was an action for injury caused by the collision of two railroad trains. The defendants pleaded that the plaintiff's train was improperly managed, and that it was in part by their negligence that the accident happened. This plea was held bad, because it was not alleged *that if the plaintiff had used ordinary care the accident would have been avoided.* The true doctrine and the true spirit of the leading authorities in respect to this subject was declared to be, that although there may have been negligence on the part of the plaintiff, yet he was entitled to recover unless he was deficient in the ordinary care necessary to prevent the injury complained of, and the law in England at present seems to be consonant with the decision last cited.

In Massachusetts and New York the general doctrine is firmly adhered to, that in order to sustain an action for negligence the plaintiff must be free from *all* neglect of duty on his own part.

But in Maine the doctrine relating to this subject is substantially like that now enforced in England.

It is there held that if the plaintiff by want of ordinary care, contributes to produce an injury, he will not be entitled to maintain an action; but if his neglect of ordinary care did not contribute to produce the injury, he will notwithstanding, be entitled to recover.—Kennard *vs.* Benton, (12 Shep. 39). Perkins *vs.* Eastern, and Boston and Maine R. R. Co., (16 Shep. 307).

Georgia.

South-Western Railroad Dividend.—We observed in our columns yesterday morning the advertisment of an eight per cent dividend on the capital stock of the South-Western railroad on the operations of the first year. This fact deserves a passing notice.

It is only one year ago, counting from the 10th day of last July that the opening of this road was publicly celebrated, but matters were not properly in a working condition until the 1st August following. Hence it is strictly fair to state, that this dividend of 8 per cent is on the operations of the first year. It is proper to add, for the information of distant readers, that this road extends from Macon towards south-western Georgia, 51 miles, to the new town of Oglethorpe. In other words, the road in starting from Macon, went to "nowhere in particular," except to seek the prolific soil of that section of Georgia. It crossed the Flint and has stopped on its western bank for the present—the flourishing town of Oglethorpe soon usurping the place of the sylvan solitude which the work found there. Under all these disadvantages, the road has done a fine business from the beginning.—We venture to presume that the history of the United States can hardly present results similar to these, and they will appear yet more striking when it is considered that in order to reach the very best point for the concentration of the products of that garden of Georgia, the road should be extended in the same general direction towards Albany or Newton, at least fifty or fifty-five miles further.—Here is a pretty good index with which to estimate the agricultural resources of a region which may be said to be now only fairly beginning to be cultivated. In 1842, lots of land of 250 acres each, were granted by the state for only $5, in Baker, Lee, Sumpter, Early, Randolph, Decatur and Thomas counties. Now these very lands are commanding, according to location, from one to five dollars per acre, while some have sold for seven dollars without being in the least improved. In order further to show the value of railroads in improving real estate in that section of the country, we will state, that within the last four years, or rather since the project of the Southwestern railroad was matured, lands in cultivation have advanced from 100 to 125 per cent.—that is to say, lands which were then worth $5 are now worth from $10 to $15.

The Southwestern railroad is to be regarded as peculiarly a Savannah enterprise, for all the stock, excepting about $100,000 was subscribed and is owned in this city. The returns show conclusively how faithfully and ably its operations have been conducted by the officers in charge.—*Savannah Republican.*

Pennsylvania

York and Cumberland Railroad Company.—A general meeting of the stockholders of this company was held at the Masonic Hall, Baltimore, on the 13th inst., for the purpose of considering the 4th annual report of the situation of the road and the affairs of the company, and also to hear the report of the committee appointed to negotiate with the Susquehanna railroad company in relation to the manner and terms of rendering aid to that company in building their road from Bridgeport to Sunbury, in case said committee should be prepared to report.

On motion of John P. Kennedy, Lloyd N. Rogers, Esq., was called to the chair, and Wm. Fisher, Esq., was appointed Secretary.

Eli Lewis, Esq., the President of the company, read the fourth annual report of the directors to the stockholders, by which the road was represented to be in a flourishing condition, and which was adopted.

The receipts for passengers for the first year were $49,286.22. Paid Baltimore and Susquehanna railroad company for working the road, $18,090.07. Repairs, $8,085.23. Bridge tolls, $1,275,64. State passengers and freight taxes, $3,528.83. The balance on hand is $3,036,14. The report advocates the working of the road by the company itself, and is also favorable to aiding in the construction of the road from Bridgeport to Sunbury.

After the adoption of the report, Michael Herr, Esq., submitted a report of the committee appointed at a previous meeting, stating that a majority of the stockholders of the company had voted to accept the ordinances of the city, guaranteeing the bonds of this company which may be issued to aid in the construction of the Susquehanna railroad from Bridgeport to Sunbury. No action being required on this report it was laid on the table.

Mr. Kennedy submitted the following basis of a compromise of all difficulties between the Susquehanna railroad company and the Sunbury and Erie railroad company.

First. The first named company to make the road from Bridgeport (intersecting with the Pennsylvania railroad) to Sunbury.

Second. The second named company to make the road from Sunbury to Williamsport, each company to make its respective portion of the road as aforesaid, semi-annually.

Third. The two companies to enter into an agreement by which each shall have the use of the others road, upon equal and reciprocal terms, without discrimination of any kind.

Fourth. The object being that each company shall use the entire route from Bridgeport to Williamsport, for passage of freight and passengers, without let or obstruction, or preference of any kind by one road over the other—each Co. furnishing the motive power for its own road.

Fifth. The road from Sunbury to Williamsport to be made through Lewisburg; provided responsible subscriptions in Union county, (including a subscription by Union county for $200,000,) amounting to at least $225,000, be made to the stock of the Sunbury and Erie railroad Co.

Sixth. Perfect connections to be made between the two roads at Sunbury—also with the Williamsport and Elmira railroad, and the Sunbury and Erie railroad at Williamsport, and with the Susquehanna railroad and the Pennsylvania railroad at the point of intersection between the two roads.

Mr. Kennedy said that this compromise had been

prepared by the friends of the different companies, and that if consummated, passengers from Buffalo would reach Baltimore in twenty hours after leaving the former place.

B. H. Sullivan, Esq., from the committee appointed to negotiate with the Susquehanna railroad company in relation to the manner and terms of rendering aid to that company in building their road from Bridgeport to Sunbury, stated that the committee were not then prepared to report. The meeting then adjourned.

Indiana.

Madison and Indianapolis Railroad.—Mr. John Brough, president of the Madison and Indianapolis railroad, has published in a small pamphlet "a brief history of that road, which under his own guidance, has been brought out of a state of difficulty into one of great and permanent prosperity. The work was originally commenced by the state of Indiana, which appropriated $12 000,000 to a system of internal railroad improvements, of which this road was the principal, connecting the capital of the state with the Ohio river, a distance of 87 miles. The financial difficulties of the state stopped all progress after 26 miles of the road were completed north of the capital, and in 1842 the state conveyed this road to a company organized under a general act passed for that purpose. But it was not until 1845 that the company obtained adequate means to proceed energetically with the road. In 1845 and 1846, loans were obtained from J. F. D. Lanier, Esq., a director, and the construction of the work went bravely on, and it was finished in 1848. The state had reserved a right to compensation for the 26 miles of road it had built, but this was fixed last session at $300.000 in money, which the company agreed to pay. In 1850 and 1851 the road was thoroughly equipped, and all the necessary buildings, machine shops and depots were built, so that the road is now in perfect order. A new terminus at Madison is now in course of construction, so as to obviate the inclined plane now in use, which, from its great inclination of 314 feet per mile, necessitates a disproportionate expense for transportation. The road has never paid less than nine. and recently, ten per cent annual dividends. The surplus beyond this rate of dividend, in the present and following years, will be fully adequate to pay the state the sum agreed on. The increase of business upon this road is without a parallel in western roads. The surplus income over expenditure increased as follows:

	Receipts.	Expenses.	Increase.
1845....	$60,053 48	$47.415 64....	$12.637 84
1846....	101,014 79	52,202 52....	48,812 27
1847....	156,653 24	91,669 45....	64.983 79
1848....	212 125 85	123,405 69....	88,720 16
1849....	247,920 34	138.982 81....	109,237 53
1850....	296.700 73	157,689 75....	139,010 08
1851....	386,068 80	185,080 60....	200,988 20
1852, (4 mos.,).	145,086 36	102,836 32....	42,250 04

The increase has been obtained under repeated reductions in the tariff of rates. The great increase was in 1850 and 1851. We quote one or two of the leading articles;

OUTWARD TRAFFIC.

	1849.	1850.	1851.
Merchandize.	$18,802.806	$24,537,357	$34,832,599
Passengers ..	33,246	34,625	39,741
Coal	58,981	28,209	48,971

INWARD TRAFFIC.

Merchandize....	$1,329,251	$2,068,767	$3,557,138
Passengers.....	29.650	30,381	35,691
Flour	57,454	53,386	93,463
Wheat	161,981	334,171	587,975
Corn.....	111,519	153,851	519,978
Bacon.	201,652	854,333	1,334,151
Hogs.....	52,044	93,949	94,982

The room for further progress and increase is immense. Not one-fifth of the arable land along the line of road is yet under cultivation, and the new roads now constructing in the state will all be feeders to the Madison.

Railroad Subscriptions.

It is stated that books have been opened and $400,000 in stock subscribed for a road from Wheeling to Urichsville—connecting at that point with the Steubenville and Indiana railroad.

Barre and North Brookfield Railroad.—The estimated amount of stock required for building this road, we are happy to learn, will, in all probability, be promptly subscribed. Last Tuesday evening stock subscription books for this road were opened by the committee having the subject in charge, and about $20,000 of the stock was subscribed for within an hour. Citizens of North Brookfield with their characteristic promptness and enterprise, have already subscribed for about thirty thousand dollars of the stock, which, with the assurances given that the farmers and people of New Braintree are alive to the importance of this road to them, and the energy with which our own citizens have engaged in the enterprise, affords the most gratifying and satisfactory evidence that the demands of this section of our county for railroad facilities is finally and speedily to be met.—*Barre Gazette.*

The County Court of Lafayette county, Missouri, has subscribed the sum of three hundred thousand dollars to the Pacific railroad. Private subscriptions will increase the sum to three hundred and fifty thousand.

The citizens of Woodstock, C. W., at a meeting on Tuesday last, agreed to take stock in the Buffalo and Brantford road to the amount of £20,000, on condition that the road connect at Woodstock, and the company provide for the payment of interest during the construction of the road.

Wabash Railroad.—Mr. Griswold, the President of this road, has commenced the publication of a series of articles in the Terre Haute papers, in which he sets forth the advantage Terre Haute and Vigo county will derive from the continuation of this road. From his first communication we learn that the citizens of Sullivan county have subscribed $55,000, stock in the company, and the citizens of Knox, north of Vincennes, $5,000. He thinks the stock in Sullivan will be increased $25,000, and that in Knox $5,000 or $10,000; and it will rest upon the people of Vigo county to furnish such further means as will be required in the way, of stock subscriptions. Mr. Griswold talks very plainly and independently to the moneyed men of Terre Haute, telling them that they must not expect to build up a city by hog manias, working like an epidemic, or by private gambling speculations. He also maintains that the Wabash railroad will be a cheap road; that it will be a better freight road than the one to Indianapolis, and that, until the Alton road is made, it will be as good a passenger road.—*Vincennes Gazette.*

Cuyahoga Furnace Graduates.

Last season one of our citizens was returning on an ocean steamer from an excursion in Europe. After he had been out a few days, as he was walking the deck, a gentleman remarked, "This is Mr. C. of Cleveland." "Yes sir," was the reply.—"You do not know me, but I have often seen you in your bookstore in Cleveland. I was in the Cuyahoga Steam Furnace company, for a few years, and I am now second engineer of this steamer, with a salary of $1500 a year."

Another graduate of the same Cuyahoga Machine college, a Mr. Smith, (son of E. Smith Esq., of this city,) of New York, is one of the best engineers in the land, and has a salary of $4,000 a year. And Mr. Rodgers, now at the furnace, under whose superintendence so many fine locomotives have been made, is one of the most accomplished machinists in this country. Such men are useful—and their examples worthy of imitation.—*Cleveland Herald.*

Lake Pontchartrain.

It having been proposed to construct a railroad through lake Pontchartrain, Prof. Forshey has made investigations into the depth and character of the bottom. Two lines were examined, one from the harbor at the end of the Pontchartrain railroad to Mandeville, the other to Madisonville. The mean depth on the first of these lines was 15.6, and omitting three miles on the north and two on the south of the lake, the mean depth of which 5 miles is 11 feet, the mean depth of the remaining seventeen miles is 17.3 feet, with a maximum depth of 19.5 feet.

On the Madisonville line which is 24 miles from the railroad terminus to the bar in front of the Chefuncta river, the mean depth is 16.25 feet, with a maximum depth of nineteen feet, near the middle of the lake. Omitting four miles as under 15 feet mean, the twenty miles remaining have a mean depth of 17 feet.

Prof. Forshey, also considers that the whole delta, including the bed of the lake, is formed by deposits from the Mississippi, and that it is composed of the blue tenacious clay of that region entirely, or alternated with sand. The following are some of the conclusions arrived at by Prof. F.:

On the lowest portions of the drift beds, near the lake, we find in many places beds of gnathodon shells. These do not belong properly to that formation, but are an existing species, now inhabiting the lake in the same vicinity.

This indicates a change of relative level of the lake and that shore, by which a portion of the land formerly under the brackish water of the lake, is now elevated several feet above it. We are enabled by an inspection of these and other like beds of shells, to form some idea of the character of those beds beneath the lake. They are seldom more than two feet thick, unless in places where they have been heaped up by the waves or by human agency.

If this is reliable authority, the beds will be found to have a similar thickness on the bottom of the lake, forming a secure band at the surface for the support of piles driven through them into the less solid earth beneath.

From these considerations, I have great confidence that the bottom of lake Pontchartrain is sufficiently firm for the support of any work of engineering which the progressive spirit of the age and the exigencies of our people may indicate as necessary.

Railway over the Ohio Falls.

A correspondent of the Louisville Times says:—"The most magnificent enterprise ever undertaken in the west, is the contemplated Marine railway across the falls of the Ohio river, over which steamboats with their cargoes are to be transmitted. The railway will not exceed one mile in length, and will be laid near the water's edge on the Indiana side. Boats will be taken upon the rails by means of inclined planes ranging very slightly from a level, and conducted across by the power of a stationary engine placed at the midway. The strength and precision of the works will be proportioned to the ends to be attained. The plan is exceedingly simple, and pronounced practicable on the instant by every engineer who has investigated it, and sanctioned by almost every practical man the moment it is presented. The cost will probably not exceed $300,000, as the whole work consists in nothing more than heavy rails laid upon the naked rocks. Nature has so prepared the track that but little grading will be required. The best evidence of public sentiment on the subject is the fact that the whole capital stock in the Marine railway, was taken in less than four hour's time, and cannot be bought of those who hold it at any price.

Earnings of Railroads.

The joint receipts for Little Miami, Columbus and Xenia railroads for the month of August last, were $74,563 81. Being a large increase on July, and a still larger one on August, 1851.

The earnings of the Cheshire railroad for the month of August were.....$32,032 40
In corresponding month of 1851..... 26,355 92

Gain..... $5,676 48

The last annual report of the Mad river and lake Erie railroad company gives the annexed exhibit of receipts and expenditures for the years ending June, 1851 and 1852:

RECEIPTS.

	1852.	1851.
From passengers.....	$101,741 97	$124,016 05
From freight.....	341,554 73	294,518 97
From mail.....	8,661 94	8,614 76
From incidentals	1,014 36	5,699 50
Total.....	$442,927 10	$432,872 98

The way and through business presents the following results:

Way freight.....$199,815 78
Through freight..... 95,197 89

Excess of way freight.....$104,117 60
Way passengers, number.....117,151
Through passengers, number..... 11,332

Excess of way passengers.....105,819

Even the above does not exhibit a true state of the finances, for the deficit of the net earnings is more than made up by the diminished running expenses. Thus:

	1852.
Gross receipts for the year ending June.....	$432,872 98
Net decrease of running expenses.....	25,401 04
Total.....	$458,274 02
Gross receipts for 1850—'51.....	$452,927 10

Receipts of Madison and Indianapolis railroad.

January 1st to Aug. 28, 1852.....$265,558 85
January 1st to Aug. 28, 1851..... 197,617 70

Increase about 33½ per cent..... $68,041 15

The following are the earnings of the Western and Atlantic railroad;

	Aug. 1851.	Aug. 1852.	Increase.
Freight	$11,363 73	$8,470 69	$2,893 04
From passengers.....	13,533 14	12,774 02	779 12
From mail....	1,166 66	1,000 00	166 66
Total.....	$25,063 53	$22,244 71	$3,838 82

Railways about Boston.

Let us see what railways have done for Boston. The Old Colony road brings a good half of Cape Cod within two hours' travel of this old city, and its branches reach Narragansett Bay in about the same time. Two well conducted roads run through the eastern and northern sections of the State—the Eastern and the Maine roads—and thence into the most populous and thriving portions of New Hampshire and Maine. The Lowell and the Fitchburg, running north and northwest, connect with lines that reach the Canadas in fourteen hours, and the valleys of the Connecticut and the Hudson in three and seven hours, that formerly took one and two days and nights. The Worcester and the Western roads take their freights of passengers to Worcester in one hour, Springfield in three, Albany in seven, and New York in eight, via Hartford and New Haven, in Connecticut. Over the Boston and Providence road, the last named place is reached in one hour, and New York, by the boats, via Stonington, in ten hours. The White Mountains of New Hampshire, and the remotest of the Green Hills of Vermont, are only twelve hours from Boston; and Washington and Buffalo can be visited in twenty-four! All this has been achieved within the last quarter of a century.—*Boston Transcript.*

Norwich Copper Mine.

This is one of the most promising of the mines of the region in the neighborhood of Lake Superior. The vein shows itself beautifully along the side surface of the cliff, some 50 feet below the summit, on which two shafts have been sunk, 100 feet apart, on the course of the vein, which, like those of the Minnesota and other mines of the neighborhood, dips to the north at an angle of about 45, though as they go down, the vein becomes more perpendicular, and more favorable for future workings.

They had sunk on the west shaft, when we were there, over 80 feet, and on the east shaft 143 feet; the two shafts are connected by the first level at the depth of 63 feet, and the same level extended eastward 30 feet, and also the second level 60 feet lower, had been run from the east shaft 75 feet, and also extended a short distance to the east. A short adit, 63 feet below the surface, and 103 feet in length has been run in from the south, at the end of which, where it intersects the vein, there will be seen, in a few weeks, a curiosity. Men were at work excavating the rock for the purpose of making an underground, or rather underrock, whim house, which will be more than 100 feet from daylight at the surface. It will be a beautiful cool whim house in the summer, and a warm one in the winter for men and horses to work in.

At the depth of 157 feet below this short adit, a deep adit is immediately to be commenced, running in from the foot of the bluff, about 511 feet, striking the vein at least 200 feet below the surface. This will be a convenience for draining and ventilating affording at the same time an easy mode of removing from the mine the copper and refuse rock that few mines on the lake can have, and will save for some time, the application of expensive machinery for raising copper, rock and water.

The Norwich vein is everywhere of good size, and remarkable for the amount of mass copper that shows itself in many places through the present very limited workings. One of these masses at the bottom of the deepest shaft, weighs at least six or eight tons, and perhaps many more, and similar masses are projecting from the levels and shafts, of which no estimate could be made. A number of fine pieces, together with excellent barrel work have been taken out recently, some four and a-half tuns of which have been shipped this season, and the company are in a fair way to reap a rich harvest from their mining operations at this point. The energy and perseverance of their agent, Mr. Davis, promise the most favorable results for the future. They employ about thirty-five men in all, though their force is to be very much increased we believe, for the winter.—*Lake Superior Journal.*

New Hampshire.

Railroad Bridge Across the Souhegan River, at Mason, N. H.—This structure, not long since completed, is one of the finest truss bridges in the country. It was erected by the Peterboro' and Shirley railroad corporation at an expense of eighteen thousand dollars—Joseph Sawtell, of Lowell, architect. It is six hundred feet long and ninety seven feet high from the iron rail to the bed of the river. It makes five spans from bank to bank, the widest of which, in the middle, is 170 feet long; the next widest is 150 feet. It is supported by four solid granite piers, the two largest of which are, each, fourteen feet, eight inches thick, and twenty-nine and a half feet wide at the base. The timber of the bridge consists of 300,000 feet of the best spruce, all of which, in the frame, was conveyed to Lowell, Mass.; and burnatized at the Lock and Canal establishment, a process by which the sap is removed from the wood and an infusion of the chlorid of zinc substituted. This is said to preserve the wood against worms and fire, and make it stronger. This bridge is located in the beautiful farming town of Mason, immediately east of the village, extends from east to west across one of the wildest rivers in New England, and in the most romantic region of New Hampshire.

It will necessarily create dwellings, demand stores, school houses and churches, all of which, in due course of time, will produce literary institutions, reading rooms, debating societies, and attract other manufactures to the spot, until a thriving village will be observed in a very few years, where a dozen buildings are not now to be seen. This is one of the results of progress in railroads.—*Boston Courier.*

Illinois.

Belleville and Illinoistown Railroad.—We are happy to announce to our readers that at last, thro' the able management of the board of directors of this company, we are to have a first class railroad to St. Louis within less than a year from this time, fully equipped and in running order. Messrs. Page & Bacon, the eminent and wealthy bankers of St. Louis, second to no house in America for the business done and credit enjoyed by them, have stipulated in a contract with the company to furnish *all* the money necessary to construct the road. We have been kindly permitted to see the contract, and can assure our readers it is all we want—drawn with great care, and the interests of Belleville amply protected.

The contract provides in the first place that Page & Bacon will furnish all the capital required to build a first class road. The work to be commenced by 25th September, at which time at least one hundred men are to be put upon the road, and to be completed by 1st August, 1853.

The road is to be equal in all respects to the Ohio and Mississippi railroad, except the gauge, which is to be four feet eight and a half inches, which being the gauge of the Indiana roads, looks favorable to an extension at the proper time—the height of embankment over the bottom same as Vincennes—track to be laid with T, H, or compound rail as the directors may prescribe—contract for construction to be made by the directory, with the approval of Messrs. Page & Bacon. Belleville retains a majority of the directory under every contingency, until the road is completed to this city. Chief Engineer to be selected by mutual agreement of parties—arrivals and departures of trains to be always so regulated as best to subserve the interests of this city. The above are the principal features of the contract. Messrs. Page & Bacon, upon the opening of the books, subscribed the entire stock, $100,000, and paid in $10,000 thereon in gold.

Col. Morrison is President of the company, and if it does not succeed, it is the only thing he has ever entered upon that failed. He brings to the work not much experience, but an indomitable energy, and we believe the entire confidence of the capitalists who are engaged in it, and we understand will devote his individual attention to it. It is hoped that a corps of engineers will be upon the road by Friday next, and the estimates made and ready for contract within twenty-five days. If all things turn out as we anticipate, last week was the commencement of a new era in Belleville—construct plank roads to Mascoutah, Athens, High Prairie, and other points tributary to our city, and a new impulse will be given to our growth and prosperity, which reacting upon our country will in five years make the county of St. Clair the garden spot of Illinois. Some dissatisfaction existed here while the negotiations were pending, but like most similar ebullitions it was gotten up by two or three persons who were wholly ignorant of what was going on, but were ready for anything to carry out their ends. The people know them and their object, and will mark both with their reprehension.—*Belleville Republican.*

Timber by Railroad.

The railroads have commenced quite successfully the transportation of heavy timber. The Rochester Advertiser, notices the arrival in that city, from Canada, *en route* for Boston, several car loads of spars. Two of the spars were about one hundred feet in length, and two feet and a half in diameter at the large end.—They were placed side by side on saddles which rested on the flooring of the cars—one car at each extremity. To sustain the centre was another car similarly prepared, and which was connected to the front and rear ones by a long reach, the extremities of which played easily in a movable socket or ring—thus enabling the car to adapt itself to the curves of the road. The other two spars were shorter but of superior diameter, and required but two cars to sustain them. Some of these were too long to be passed by canal locks, and it is said they could be carried cheaper over the road than by the canal.—*Buffalo Com. Advertiser.*

Ohio.

Dayton and Michigan Railway.—The Toledo Blade, of 6th instant, says, Mr. Arnett and his party of surveyors had arrived in that city, having surveyed the entire route of the Cincinnati, Dayton, Sidney and Toledo railroad, from Sidney to Toledo. The road surveyed is that by Waukonnetta, Auglaize county; Lima, Allen county; Gilboa, Putnam county, to Perrysburgh; thence across the Maumee, and from thence to Toledo, striking the line of the Northern Indiana railroad at station 24. The surveyors were about to engage in running the line from Perrysburgh, via Findley, to Sidney.

Marietta and Cincinnati Railroad.—The Chillicothe, Ohio, Gazette of the 13th says:

Capt. A. Kennedy, chief engineer of the Marietta and Cincinnati railroad company, who has just returned from Point Harmer, brings the good news that the lines of our railroad east of the point in Vinton county, to which the work had been previously let, to the Ohio river, at both Marietta and Belpre, were put under contract last week, as was expected.

The entire work, including tunnelling, bridge building, construction, laying the iron, and everything else necessary to prepare the road for the cars was let to Messrs. Walter French & Co., of Lowell, Mass. These gentlemen possess the most ample means and resources for completing the work, within the time agreed upon, which is two years from the period of letting. They take some four hundred thousand dollars of their pay in the stock of the company—which is equal to about 20 per ct. on the whole job.

The road to Marietta and Belpre respectively, from the point of bifurcation twelve miles west of Parkersburg, will be constructed simultaneously, or within the two years, so that the connection with Baltimore will be made so soon as the Northwestern, Virginia, road can be completed from Three Fork to the Ohio river.

Ship Railroad across the Peninsula of Florida.

The Cotton Plant, published at Washington city, in alluding to the project of a Ship Canal across the Peninsula of Florida, suggests, as it thinks, a better and more economical mode of connecting the Atlantic and Gulf, viz—by a Ship railroad. In every dockyard in the world, remarks the editor, it is usual to elevate on stocks the largest sized ships and steamers for repairs; a vessel, indeed, of any tonnage, can be elevated to any required height.—On canals, it is known, locks have been successfully used to take vessels from one ascertained level and place them on another, higher or lower; and this being done, the vessels are towed or transported on their bottoms to any distance by horse or steam power. It may, therefore, be assumed, that any vessel can be raised to any desired elevation—that she can be lowered in the same ratio—that she can be safely transported. Then, why not transport vessels on railroads constructed for the purpose?

As stated above, the very largest sized vessels at shipyards are put on stocks and rollers and propelled from one point to another. So of houses, which have been removed with perfect safety from one part of a city, to another, without displacing a single article of furniture. If then, a ship or a house can thus be transported one yard or a hundred yards, the principle is established and they can be transported one mile or a hundred miles. The strain on a vessel in a storm, from bending masts and the weight of canvass, is a thousand times more trying than the slight jar incident to railroad transportation. Therefore, an ordinarily built ship would be insensible to the effects of a transportation of a thousand miles overland on the rudest railroad, and at the end of it she could be lowered, as from a dock, to the original surface, or in a position higher or lower.

The Cotton Plant is prepared to show conclusively, from statistics and the evidence of practical and scientific men, that a Ship railroad, having its depots or locks at Jacksonville or Brunswick on the Atlantic, and at Cedar Keys or some other point on the Gulf, can be built for much less than a Ship Canal, and can transport vessels as economically and safely, and with infinitely more despatch.

Belgian Project.

The following we take from the Scioto Gazette. We presume the project is the recently organized Savannah and Albany railroad, connecting Savannah with the waters of the Mobile bay, and thence aiming at the Mississippi:

A project has been started, in Belgium, that seems to be a very natural inception, for that part of the world which, in the course of one or two centuries of plodding industry, has become the treasury of the nations. This is no less than the formation of a company to construct a railroad through the states of Alabama, Georgia and Mississippi, thus uniting the Atlantic ocean with the Father of Waters. The route has been surveyed, land purchased, etc. A Belgian journal, in giving the programme of the scheme says:

"The company also intending to favor emigration, propose, besides, to transport at its own cost, and to settle on small farms, a part of the colonists who would wish to occupy these lands, giving them the privilege of reimbursing the company for the expenses of the voyage and the price of the farms by devoting some days of every week towards the work of the railroad That advantage being incalculable, and the climate of Georgia agreeing in all respect with Europeans, a great many families, who now barely subsist in Europe, and who have but misery in perspective, will go, it is hoped, under the auspices of the company, to seek in that part of America a better and happier state."

The head quarters of this mammoth establishment is to be in Antwerp. Belgian directors, capitalists, machinists, engineers, etc., etc., only are to be employed. The Dutch inventors of this magnificent project are determined themselves to be the principals, if profits are to enure. And that they will reap rich returns, there can be no question. Climate, position, connexions, every thing, conspire to stamp the scheme as one of the most feasible and certain of this day of great expedients.

Baltimore and Ohio Railroad.

The work on the western section of this road has been pushed forward this summer with great promptness and vigor. The Wheeling Intelligencer says a large portion of the line is ready for the laying of the rail within a short distance of that city. The excavations for the bridge at the mouth of the creek, where the train is to enter the depot, are about completed, and the stone work commenced. The site for the depot, on Water street, in Wheeling, is nearly cleared of the buildings, which have been torn down for the erection of car houses, etc.

Memphis and Charleston Railroad.

The Memphis and Charleston railroad will soon be in operation to LaGrange, a distance of about forty miles (we believe) from Memphis. The treasurer of the company furnishes the *Eagle* with the following information in reference to the road:

"All of the grading from this city to LaGrange is finished, except 4½ miles, and most of that is on the old grade and will be easily completed. The whole of the timbers, cross-ties, etc., are on the road, except for a distance of about 12 miles, and a sufficient force is putting on the balance to keep ahead of the track-layers. The contractor for laying the superstructure, has a fine force on the road and is now progressing rapidly—at the rate of from 400 to 600 yards per day."

The Mobile and Ohio Railroad.

The Mobile and Ohio railroad company are going ahead with their road. The Mobile Register of the 3rd inst., says:

"There are now completed and under contract 138 miles of the road, to wit: 33 miles finished to Citronelle; 55 miles from Citronelle to near Winchester, which have been worked on two months, and 50 miles just let out. Besides this, 129 miles, from the south line of Lauderdale to the south line of Pontotoc, will be under contract by the 30th of September—thus making a distance from Mobile of 267 miles."

Alabama and Tennessee River Railroad.

Proposals for contracts are now offered for grading thirty-five sections of road on the Alabama and Tennessee river railroad, from near Montevallo to near Gadsden a distance of thirty miles; also for all the masonry and bridging required on that part of the road between Montevallo and Jacksonville; embracing the Coosa river bridge. We trust arrangements will soon be made to continue active operations beyond Gadsden to the full extent of the charter. Our next legislature will certainly look upon this road in a more favorable light than the last, since its present progress renders its completion to Gadsden a matter of certainty. And we think if no further aid is given, the balance of the three per cent fund should be given to that portion of the road between Gadsden and the Tennessee river.—*Sunny South.*

Canal Railroad.

Messrs. Strong and Bois have for the past week been circulating the stock book and have met with very good success. The business men of Northampton have, almost to a man, signified their desire for the road, and testified to their confidence in it, by liberal subscriptions to the stock. That the stock of this road will be good we have no doubt, for it will cost by the mile less than any road in New England, (not one-third as much as did the Connecticut River,) and the prospect is that it will do a good and paying business.—*Hampshire Gazette.*

Ohio.

The Lake Shore Lines are fast being closed up. The laying of the track in Pennsylvania east of Conneaut, will be commenced early next week, and the iron horse will run through to Erie by the 20th of October, or 1st of November.

The Elyria Democrat says, the Junction railroad company are now receiving iron for the track from Olmstead to Elyria, and the masonry is rapidly advancing, all along the line.

The Toledo, Norwalk and Cleveland railroad company have laid nearly all the track from Toledo to Fremont, and have commenced laying track west from Rawsonville, the point of junction with the C. C. and C. road. The bridge across Black river at Carlisle, is completed, and the road will be in operation to Oberlin in a few weeks.—*Cleveland Herald.*

Great Railroad Trial.

This trial before Hon. F. W. Bingham, Probate Judge, commenced on Friday last, and closed today, occupying 5 days.

It was the first case, in this vicinity, which has occurred under the new Constitution, for an assessment of damages by a jury of twelve men, selected in the same manner as the regular county jury, instead of a summary committee of three, as heretofore.

This jury was summoned to assess the value of 132 feet front, on Wall street, next east of Stockley's Old Pier, and extending into the lake, and belonging to Mr. Stockley, and appropriated for a depot by the C. P. and Ashtabula R. R. Co.

Forty-five witnesses were examined as to the value of the property, involving inquiries and discussions as to the value of the lake front for commercial purposes, the mode of making land, and piering out, etc., etc.

The witnesses disagreed widely, ranging from $20, and $30, to $250 per foot.

The case was argued by Messrs. Willey & Carey, and T. Bolton, for Stockley; and F. T. Backus, and C. Stetson, Esqrs., for the railroad. It was

argued to the jury by Mr. Willey. Verdict for Stockley—$19,000 00.—*Cleveland Herald.*

American Railroad Journal.

Saturday, September 25, 1852.

New York.

Sodus Point and Southern Railroad.—The merits of this enterprise are ably set forth in an article on the subject which appears in the Phelp's Western Argus; from it we make the following abstract.—The road terminates on the best natural harbor on the Northern shore of the State, and its line passes through a region inexhaustibly rich in lime, plaster and hydraulic cement—materials of the utmost importance—besides it offers the shortest communication, and by very easy grades, between the coal basins of Pennsylvania and the Lake Ontario and Canadian markets. The want of a really good harbor on the south shore of Lake Ontario, accessible to the great thoroughfares of the country, has long been felt, and it has driven the commerce of the Lakes to seek at considerable risk, restricted and crowded harbors, or else driven it to longer routes.

The Canadian and Western commerce seeking an outlet through Lake Ontario has been greater than could be accommodated at Oswego, and yet the business has increased at that port from $7,951,409 in 1845, to $24,013,131 in 1850. The following table exhibits the rate of increase in a few leading articles for the years 1850 and 1851.

Shipments to Sept. 1,	1850.	1861.
Flour, bbls	369,617	500,661
Wheat, bush	255 296	646,834
Corn, bush	333,621	875,594
Lumber, feet	50,874,487	59,571,366

This wonderful increase appears to direct us to new accommodations, and the advantages of Sodus Bay as a depot of trade, dictate its connection with the channels of internal trade, in order to secure to the State works their proper share in the great carrying trade of the West. Sodus Bay has sufficient room to accommodate the whole commerce of the Lakes, if not of the United States; being more than 15 miles in circuit. It has a uniform depth of water sufficient for the largest ships, say from 30 to 50 feet, with good holding ground for anchorage, and no rock-bottom, admirably sheltered from all winds, and above all, offering the only safe and accessible *winter harbor* on the South shore of Lake Ontario. It is 36 miles nearer to the carboniferous region of Pennsylvania than any other harbor on Lake Ontario. A straight line drawn from Goderich, the Huron terminus of the Toronto and Lake Huron road, to Boston, passes through Sodus Bay, Utica and Troy. And the distance from Boston to Sodus Bay is about the same as to Ogdensburgh, saving more than 150 miles to the traveller from Canada West. This fact presents a claim on the stockholders of the Rochester and Syracuse direct railroad for aid in the construction of the Sodus Bay and Southern, opening to that company in conjunction with the latter, to compete favorably for the Boston conveyance of freight and passengers between Boston and any port on Lake Ontario, or even on Lake Erie, early and late in the season.—Shipments, it will be remembered, can be made several weeks earlier in the spring and later in the fall, through the Welland canal, to Lake Ontario, than by Buffalo or Tonawanda, in consequence of obstructions by ice in the latter ports. The port of Ogdensburgh has the further inconvenience of a river navigation of seventy miles, and a winter embargo of five months, while Toronto and Sodus Bay are nearly as well adapted for steam navigation during the winter as New York harbor. The author of Phelps' and Gorham's Purchase, speaking of the Bay says: "It enters a cove of the Lake which is protected on either hand by headlands. It is about half a mile across its neck, gradually widening out to the extent of four miles. In length, from north to south, it is nearly seven miles. A small island in the lake, lying opposite the entrance of the Bay, a pier connects it with the mainland, and another is extended into the Lake. These public improvements, added to natural advantages, render it the finest harbor upon all our Lake coasts. It is said of the magnificent bay of San Francisco that all the navies of the world might ride at anchor in it at one time with safety. It may be said of Sodus Bay that all the crafts that will ever navigate our Lakes would find ample room there. Its mostly deep, still waters, might, at times, be passed over safely in a canoe when a tempest was tossing the waters of the Lake."

This is proposed as the Northern terminus of the road, because not only of its beauty of situation, but because it can be reached with an easier grade than any other Lake port, and *it alone* is accessible for four months out of the twelve from the open waters of Lake Ontario. A similar harbor is found on the other side, in that of Toronto, and between the two, daily passages can be made by steamboat even during the winter, uninterrupted except during heavy and protracted snow storms.

The road now under contract from Toronto to Pentangueshere north, and the one to Goderich on Lake Huron, together with the Sodus Bay and Southern, will enable the inhabitants of Northern Michigan and Canada West, in a few hours, to reach the Eastern cities.

The route passes through a portion of the counties of Wayne and Ontario, rich in plaster and water lime, and brings these articles to the door of consumers in Canada, or in Southern New York and Pennsylvania, from the two termini north and south. The plaster now used in Canada comes from the quarries of Cayuga Lake, via the Cayuga, Erie and Oswego canals, a distance of 110 miles—Gypsum in the rock can be transported from Phelps, on the proposed railroad to Sodus Bay, and thence be carried as ballast in the holds of the lumber vessels to any part of the Canadian shores.—The water and common line of the towns of Phelps and Sodus, are superior as cements, and in whiteness, and lie directly on the track of the proposed road. Southern New York and Northern Pennsylvania are deficient in these necessary articles, and the cheapest approach from these portions of country to the quarries, is by the Sodus Bay and Southern railroad.

Lake Ontario and the markets around it have at present no direct communication with any of the sources of either hard or soft coal. Sodus Bay is admirably adapted for a depot of this important combustible. The most northern outcrop of bituminous coal in Pennsylvania, is directly south of Sodus Bay, the most southerly portion of Lake Ontario, and within 113 miles, and only 35 miles of rail are now wanting to connect them, the last link is the present road, and the Canandaigua and Jefferson, the Chemung, the Erie, and the Blossburgh and Corning, already completed, make out the remaining distance. The quantity that will be consumed by the steam navigation of Lake Ontario, and the population bordering the Lake must be enormous.

A preliminary survey, with maps, profiles, etc., shows that the road can be built for less than $400,000, that no grade exceeds 42 feet per mile, and that not more than two or three miles of that will be necessary. The steepest grades *ascend* toward the south, so that the coal traffic will run with the grade. By this road, and the series above mentioned, coal can be loaded at the mines and without any further hauling be delivered in the hold of a steamboat or vessel at Sodus Bay.

On the completion of the road from Dover to Scranton, through New Jersey and Pennsylvania, the distance from Sodus Bay to New York by railroad, will be 10 miles less than it now is from Geneva. Passengers will then reach Sodus Bay in from 10 to 15 hours. It will be likewise far the shortest line from the Lake to Baltimore, Washington and Philadelphia, Sodus Bay being on the Meridian of Washington. These advantages, and the low cost per mile of the construction, are urged to induce the public to take hold of this enterprise, and the companies most interested, the Rochester and Syracuse direct, the Canandaigua and Corning, the Chemung, and the New York and Erie, are also advised to come forward and aid in its speedy completion.

Cherokee Railroad Company.

The Rome (Ga.) Courier has been favored by the Secretary with the following information concerning the organization of the Cherokee railroad company.

At a meeting of the stockholders on Thursday the 4th ult., held at the Rome railroad depot, Messrs. Alfred Shorter, W. S. Cothran, Nathan Yarbrough, Wm. West, Thomas H. Sparks, Wm. F. Janes and J. R. Alexander, were elected directors.

The board of directors have elected Mr. Shorter President of the company, and Mr. Alexander Secretary and Treasurer.

The following are the Alabama directors:

Geo. C. Whatley, President, M. W. Abernathy, Wm. Scott, W. R. Graham, Walter Billingley, Neil Ferguson, and J. F. Grant, directors.

Railroad in Turkey.

It is stated in a letter from Belgrade, that it is in contemplation to construct a railway between that city and Constantinople. An English company is about undertaking its execution. This same company has an idea of continuing the same railway into Asia. If this line were completed, the journey from London to Bombay might be made in fifteen days.

Massachusetts.

Boston and Maine Railroad.—The stockholders of this company held their annual meeting on the 15th inst.. at Exeter, N. H. The directors were directed to consider the subject of hiring the Cocheco railroad, the final decision to be left to the stockholders. The following gentlemen were elected directors: John Flint, G. W. Ketteridge. Samuel Batchelder, Southworth Shaw, George H. Kuhn, and James Hayward.

Ohio and Mississippi Railroad.

At the election held on the 6th inst. for directors of the Ohio and Mississippi railroad company, the following gentlemen were chosen.

Jno. O'Fallon, H. D. Bacon, W. H. Belcher, J. H. Alexander, J. B. Brant, Samuel Gaty, J. H. Sturgeon, A. T. Ellis, S. Breese, J. L. D. Morrirson, C. T. Chouteau, S. H. Clubb, Alfred Kitchell.

Two more directors have been placed in the board from Missouri than were in the old board.

Tennessee.

Nashville and Chattanooga Railroad.—The Chattanooga Vindicator announces that the cars have commenced running from that city to a point six miles distant, where they meet the daily stages, now plying thence to Nashville. The work is rapidly progressing on the balance of the line, and it is hoped that the entire road will be completed to Nashville the coming winter. Let the tracks unite at Chattanooga, and our friends at Nashville will soon see Savannah cars discharging goods at their doors in four days from the seaboard.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.

Portland, Sept. 21, 1852. tf

Stock and Money Market.

The most notable event of the present week has been the sale of the Pennsylvania railroad bonds, which were taken on European account at 103,20. The bonds are 6 per cents, have 28 years to run, and are convertible into stock. The loan is based upon a capital stock *paid up*, of $9,750,000, and is limited to $5,000,000. The security for the loan is ample, and the road must be one of the most profitable in the United States. There were a large number of bidders, chiefly from New York.

There continues to be a good demand for first class railroad securities of all kinds; in fact the market may be said to be bare of such. With regard to the new offerings, there is a great deal of caution used, and there is no disposition to buy freely, but upon careful examination. Purchasers who do not fully appreciate the immense field for railroad enterprize in this country, are apprehensive that the more recent projects are in advance of the wants of our people. The excessive dividends, too, which some of the Western roads, which have recently gone into operation, have paid, create suspicion, instead of inspiring confidence; and we admit that they are well calculated to do so. The inference is, that the reports are *cooked*, and that the dividends are declared upon money that should go to the interest, or construction account, for the purpose of carrying the stock to a higher figure, for the benefit of certain parties holding it. The idea of a new road paying 15 and 20 per cent for the first year of its going into operation, is perfectly preposterous. In so brief a period, no adequate estimate can be formed of the earnings of a road, nor of its ultimate cost. The business mode of doing things, is to hold a portion of the first net earnings of a road for contingencies, which are sure to arise and which no foresight can anticipate. When this is not done, or where, for the first year extravagant dividends are paid, it renders the managers liable to the charge either of incapacity, or of acting from improper motives, and creates a feeling of distrust, which extends to the whole class of railroad projects. We ask our friends standing at the head of new works, not to throw discredit upon really excellent projects, by any such unwise course as that to which we have alluded. We know that there is a great deal of rivalry among some of our new roads, and those conducting them are very anxious to make the best show of earnings; but the obviously proper course will certainly be the most popular one in the end.

Of the new securities coming into the market, one of the best are the bonds of the Dayton and Michigan railroad, a portion of which are offered for sale to day, by Messrs. Winslow, Lanier & Co. The line of this road extends from Dayton to Toledo, a distance of 130 miles. It follows the general course of the Miami canal, but not near enough to it to be competitor for the local business of the latter. It traverses one of the most fertile portions of the State, now destitute of railroad accommodations. It will connect Cincinnati with its appropriate lake port, through which she now carries on her commerce with the east. Nowhere in the west is a railroad more needed to meet the wants of a large commerce than between two such points as Cincinnati and Toledo, and we know of no route that promises a larger through, and eventually local, business. Toledo will soon be connected with the great line now in progress from Buffalo to Detroit, through Canada, by the Toledo, Norwalk and Cleveland railroad with Cleveland, so that it will be on one of the shortest, and most convenient *through* routes to the east. We are confident that the bonds of no western project will stand relatively better, as soon as the real merits of the project becomes known, than the above. They are based upon sufficient security, and the road is in competent hands.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, SEPTEMBER 25, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101¼
U. S. 6's, 1856	109
U. S. 6's, 1862	115
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¼
U. S. 6's, 1868	119
U. S. 6's, 1868—coupon	119
Indiana 5's	94¼
Indiana 2½	52½
" Canal loan 6's	95½
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	81
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	108
New York 6's, 1854-5	108¼
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	118
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	108½
New York 5½'s, 1865	109
New York 5's, 1854-'55	105½
New York 5's, 1858-'60-'62	105½
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	109½
Ohio 6's, 1870	115
Ohio 6's, 1875	116½
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1880	107
Virginia 6's, 1886	111½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	103
St. Louis	96½
Louisville 6's 1880	95
Pittsburg 6's, 1869-1871	100
New York 7's, 1857	110
New York 5's, 1858-'60	108
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	104½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115
Erie 2d mortgage, 7's, 1859	108½
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	98
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	98
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	101½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 16.	Sept. 23.
Albany and Schenectady	107	107
Boston and Maine	107½	108
Boston and Lowell	—	109½
Boston and Worcester	104	105
Boston and Providence	89½	99½
Baltimore and Ohio	82½	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	131½
Eastern	98	98
Erie	86½	87
Fall River	—	—
Fitchburgh	105½	105
Georgia	—	—
Georgia Central	—	—
Harlem	72½	72½
" preferred	111½	111½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	72½	75
Little Miami	—	—
Long Island	26	25
Mad River	—	99
Madison and Indianapolis	105½	116½
Michigan Central	113	111
Michigan Southern	123½	123
New York and New Haven	114	113
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	55	53½
Ogdensburgh	26½	27
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	32½	34½
Petersburg	—	—
Richmond and Fredericksburg	100	97½
Richmond and Petersburg	35	35
Reading	94½	99½
Rochester and Syracuse	122	122
Stonington	60	61
South Carolina	—	122½
Syracuse and Utica	135	138
Taunton Branch	115	115
Utica and Schenectady	139	140
Vermont Central	18	18½
Vermont and Massachusetts	20	22½
Virginia Central	—	40
Western	105	105
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Ship Canal from the St. Lawrence to Lake Champlain.

The report for 1851 of the commissioners of Public Works in Canada, has just been published and the most important measure urged, is, without doubt, the construction of a ship canal between the waters of the St. Lawrence and lake Champlain. The arguments and the statistics presented in the report of the commissioners are of general interest on both sides of the political line dividing the U. States from Canada, and if it is urged on the Canadians that this enterprise will give increased employment to their canals and railroads, it will be seen on the other, that the productions thus carried are directed towards Albany, New York and Boston, and the markets and exporting depots of the United States. The possession of mere conduits of trade, are not so important as the ability to consume and fashion the material products of commerce. We shall endeavor to present an abstract of the views of the commissioners on this subject.

The proposed canal is to form a link in a competing line of transportation for the great trade which passes between tide water on the Hudson and the railroads of New York and New England on the one hand, and the western states and Canada on the other. By affording this link, the St. Lawrence, and other Canadian canals, will be made successful rivals of the Oswego and Erie canals, and the Erie, New York Central, Ogdensburgh and Cape Vincent railways.

By this canal the lumber region of the Ottawa and St. Lawrence is thrown into direct and cheap communication with the greatest lumber mart in the world—that of Albany and Troy—enhancing greatly the value of this staple, the supply of which will soon be almost exclusively Canadian. It opens from the sea to the districts around lake Champlain, via Quebec, the cheapest supply for coal, iron, salt, fish, oil, etc.

The trade for which the proposed work is to be a competitor, is that of the *through traffic* of the N. Y. state canals,—this shipped from the western states and Canada for the year 1850, as shown by the returns for that year, was as follows:

	Tons.	Value.
Coming in by Buffalo	626,655	$19,264,185
" " Oswego	340,338	7,664,130
" " Whitehall	80,691	1,457,662
Total	1,047,684	$28,385,977

During this year 47,107 tons arrived at tide water by railroad, a small portion of which is probably *through* traffic. In the 80,691 tons coming by Whitehall, are included the exports from lake Champlain, which would not come over the proposed canal; at the same time there is to be set off produce received from the St. Lawrence for lake Champlain consumption or for Boston and the interior of New England. The through business of the Erie railroad is also not included. The down trade between the lakes and the St. Lawrence, on one side, and the Hudson and the eastern states on the other, may be set down at one million of tons, of 2000 pounds, open to the competition of this canal.

The merchandize which left the Hudson river for the west and Canada, during 1851, was:

	Tons.	Value.
By way of Buffalo	99,918	$62,963,640
" " Oswego	74,981	
" " Whitehall	17,124	
	192,023	

In addition 29,112 tons left by railroad, a portion of which may have been "through traffic." After deducting from the tons which went by Whitehall, the portion left on lake Champlain, the up trade open to the completion of the canal may be assumed at 200,000 tons. The ratio of future increase is indicated by the total through tonnage along the above lines for the following years:

	Tons.		Tons.
Down in 1845	304,551	Up	58,455
"1851	966,993	"	192,023

The construction of railroads in the north-western states at the rate of 1000 miles in a year, must tend to increase this through trade, by turning it in this direction in preference to New Orleans, the export trade of which city, by this competition, is already stationary.

The magnitude and future increase of the trade being shown, the report goes on to point out the advantages of the new route. The Welland canal is stated to have increased in tonnage carried, more rapidly than the Erie, and the Oswego route has progressed more rapidly than the Buffalo, simply because it shortens the canal navigation 154 miles and increases the length of the voyage for the lake craft without increasing the whole time of transport. This progressive increase is shown by the following table.

		Down.		Tons.
1840, Buffalo	tons	138,101	Oswego	20,047
1845	" "	233,133	"	110,318
1850	" "	498,611	"	275,247
1851	" "	626,655	"	340,338
		Up.		
1840	" "	18,863	"	3,192
1845	" "	37,713	"	11,905
1850	" "	79,405	"	35,091
1851	" "	99,918	"	74,981
		Salt trade up.		
1840	" "	11,156	"	22,481
1845	" "	10,877	"	32,596
1851	" "	15,042	"	56,871

There is every reason to believe that if a communication be perfected which would reduce the canal boat navigation *not* 154 *miles only, but* 297 miles, with but one transhipment, its success must be decided.

The Ogdensburg road carried between the opening of navigation and the 24th July, 1852, from the St. Lawrence.

Flour	310,412 barrels.
Wheat	210,120 bushels.
Corn	155,279 "

The cost of transporting a barrel of flour via this road to New York, is 2s. per barrel, the portion of which coming to the road is a fraction under 10d. per barrel, the price from Rouse's Point to New York being 1s. 3d., and from Whitehall 9d. per barrel. The margin then of transportation is 1s. 3d. to transport a barrel from Ogdensburg to Whitehall; now, 9d. would be ample additional freight for a vessel to continue on from lake Ontario thro' a ship canal to Whitehall; the railroad must then come down from the present price of 1s. 3d. to 9d. —3d. of which must be given to the carrier on the lake leaving only 6d. to the road to cover transport, storage, loading and unloading. The competition by railroad is thus disposed of. On the Erie canal in 1851, the average tonnage of boats was 78 tons, and the cost of transport including toll 49 cents, of which 23½ is toll, leaving 25½ cents for freight. Starting from Cleveland, the cost of transport via the Erie canal including freight to Buffalo, transhipment at Buffalo, 49 cents; carriage to Albany, and freight from Albany to New York is estimated at 3s.—9d. is seen to be the cost from Whitehall to New York leaving 2s. 3d. as the margin to cover freight and tolls from Cleveland to Whitehall.

If the tolls were abolished on the New York canals, the average freight from Cleveland to New York would be 36½ cents, and from Whitehall to New York 11½ cents, being 25 cents as the margin between Whitehall and Cleveland, which would be a remunerative freight on a barrel between those last named points. In point of time it is calculated that the transport would be made to New York in 6 days time by the lake route and canal, against 9 days by Buffalo and the Erie canal.

It is believed that the appearance of brigantines and 500 ton steamers at the foot of Lake Champlain, coming from Lakes Michigan, Huron and Superior, would at once cause the enlargement of the canal from Whitehall to Troy, to accommodate the increased trade, and that the influence of New York city alone would be sufficient to ensure its accomplishment.

The cost of the proposed canal to connect the waters of the St. Lawrence and Lake Champlain, is estimated at £450,000.

The amount of sawed lumber which reached the Hudson river in 1851, was 427,000,000 feet, or 711,731 tons, valued at $7,200,000. Of this 200,000 tons were exported from Canada, and it estimated that the total amount required for this market will soon be not less than 1,000,000 tons, of which 500,000 will be furnished by Canada.

Mobile and Ohio Railroad.

The Sumter county Democrat says that the bidding at the Lauderdale Springs the other day on the contract lettings for the Mobile and Ohio railroad was very spirited. "The improvement in the price of land, the general spirit of activity and energy and hope, amongst the people, and the universal impression of confidence in the stock of the road, as an investment, (it continues) induced much the largest number of bids to be made by the landholders of the country living adjacent to the line of the road. Many of the citizens of Sumter, partaking the general confidence, were successful bidders for contracts."

It concludes as follows:

The advantage of all this has been very great to the people of Lauderdale, already, in enhancing, over an hundred per cent., in many instances, their lands. When, however, the "Giant Iron Horse" clangs and snorts through the forests and fields of that region, it will be a sight to see him slake his eager thirst at the splendid fountains of the Lauderdale springs, and, adding to his load, speed on in his mission to the bosom of the great Egypt of the North-west, or to the great Gulf mart.

Wisconsin.

Lake Shore Railroad.—We learn from the Sentinel that the votes cast in the several wards of Milwaukee, at a recent election, on the question of loaning the city credit in aid of the Fond du Lac and Lake Shore railroad, was sufficiently significant. Eleven hundred and forty-eight votes were cast, of which only twenty nine were in the negative—leaving a majority of eleven hundred and twenty one.

Michigan.

Canal around St. Mary's Falls.—The bill grants the right to the State of Michigan to make the canal on the line of survey heretofore made for that purpose, or such route as, under the approval of the Secretary of War, may be selected; and provides that the work shall be 100 feet wide, with a water depth of 12 feet, and the locks 250 feet long and 60 feet wide. It appropriates 750,000 acres of land to be selected in the State of Michigan, and binds the State to make it within ten years under penalty.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL RAILROAD, NEW YORK, SEPTEMBER, 1852.—Sealed Proposals will be received at the office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging, and Superstructure, or either of them, with, or without materials on the following Divisions of the Illinois Central Railroad, to wit:—

3rd Division from Township No. 1, North of the Base Line of the 3rd principal meridian, including sections 113 to 151..39 miles.
4th Division, terminating at Decatur, including sections 152 to 204.....53 miles.
5th Division terminating at Bloomington, including sections 205 to 247.....43 miles.
7th Division from Lasalle to Freeport, including sections 309 to 386.....78 miles.
11th Division from Urbana to S. line T. 12, including sections 583 to 630.....48 miles.
12th Division terminating at the junction of Chicago Branch with the Main Line, including sections 631 to 704.....74 miles.

Total .....335 miles.

Proposals may be for the entire length of each division, or for the following sections:

3rd Div.,	for sec.	113	to	135	inclusive	23	miles.
"	"	136		151	"	16	"
4th	"	152		180	"	29	"
"	"	181		204	"	24	"
5th	"	205		226	"	22	"
"	"	227		247	"	21	"
7th	"	309		312	"	 4	"
"	"	313		324	"	12	"
"	"	325		352	"	28	"
"	"	353		370	"	18	"
"	"	371		386	"	16	"
11th	"	583		608	"	26	"
"	"	609		630	"	22	"
12th	"	631		650	"	20	"
"	"	651		669	"	19	"
"	"	670		681	"	12	"
"	"	682		690	"	 9	"
"	"	691		704 (more or less)		14	"

Proposals will be received at the office in Chicago, until the 11th day of October, 1852.

Profiles, Plans, and Approximate Estimates of quantities will be ready for inspection, and blank forms for proposals will be furnished at No. 50 Wall street, New York City, or at the office of the Chief Engineer in Chicago, Illinois, and after ———1852, the same as relates to the 3rd and 4th divisions at Vandalia, to the 5th division at Bloomington, to the 7th division at Lasalle and Freeport, to the 11th division at Urbana, and to the 12th division at Vandalia.

Payments will be 80 per cent cash, and the balance on the completion and acceptance of the work in cash, or 7 per cent construction Bonds, at the option of the Company.

Satisfactory references will in all cases be required. R. B. MASON, Chief Engineer.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. ly*

PROSSER'S

PATENT LAP-WELDED

Wrought Iron Boiler Tubes,

ALSO,

Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

Iron Tubes for Artesian Wells, screwed together flush on either side.

THOMAS PROSSER & SON. Patentees, 28 Platt street, New York.

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—

DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To Chief Engineers.

A YOUNG MAN is desirous of a situation, either in Field Work, or as Practical Draughtsman. Has just completed an engagement in this country; before which, was engaged for six years with an Engineer in Scotland—part of the time as Draughtsman. Is in possession of all instruments necessary for Surveying, Leveling, etc. Please address J. H. STEWART, Box 70, Post Office, New York.

Dayton and Michigan Railroad Company.

PROPOSALS FOR LOAN.

$100,000

DAYTON AND MICHIGAN SEVEN PER CENT. FIRST MORTGAGE CONVERTIBLE BONDS.

The Dayton and Michigan Railroad Company offer for sale $100,000 of their Mortgage Bonds, with Coupons.

They are in sums of $1,000 each, payable the 1st July, 1867, with interest at 7 per cent. semi-annually, in the city of New York, on the 1st January and 1st July in each year, where the principal sum is also payable. They are secured by a first and only Mortgage, or Deed of Trust, to Joseph B. Varnum, of the city of New York, in trust for the Bondholders. They are issued under acts of the Legislature of Ohio, authorising them and the mortgage to secure their payment. The amount of bonds thus to be issued under the mortgage is one million of dollars. They are convertible into the capital stock of the company at the option of the holder.

The amount of Bonds at present to be issued under the mortgage is $300,000, of which only $100,000 will now be offered for sale.

The mortgage covers the entire line of the company, their property real and personal, commencing at the termination of the Cincinnati and Dayton Railroad, at the city of Dayton, Ohio; thence by Troy, Piqua, Sidney, Lima, Perrysburgh, Maumee City and Toledo, to the Michigan State line, in the direction of Detroit, 140 miles long.

The mortgage provides that the company shall only issue and the Trustees certify under it, $800,000 of bonds, until after the road is finished and in operation to Sidney, 38 miles; $200,000 more after the same is finished and in operation to Lima, 65 miles, and so on as the road is completed from point to point, and the money needed to purchase iron, rails, etc.

It is the first and only lien thereon, and the only debt of the company.

The part of the line lying between Dayton and Sidney is nearly graded and bridged, the rails having been purchased and now in the course of arrival—will be completed and in operation by the first of June next.

An arrangement has been made with the Cincinnati and Dayton road to run it for the present.

The entire line from Dayton to the Michigan State line, equipped for one year, is estimated to cost $2,500,000. That part lying between Dayton and Sidney $650,000.

It is the purpose of the company to complete the line to Sidney first, the residue point to point continuously as the means of the company will permit.

To complete the road to Sidney, the company has an available stock subscription of about $400,000, which has been mostly collected and expended on the line. To raise the remaining means this loan has been resorted to.

Active measures are in progress by the company to raise the necessary stock subscription to complete the entire line. A considerable sum has already been subscribed. The entire line, it is expected, will be placed under contract for graduation and masonry early next year, and completed within the year following.

The mortgage gives full power to the Trustees to take possession of the road, its personal effects, franchises, depot grounds, etc., and to sell the same to the highest bidder, to raise money to pay either interest or principal in case of default.

The country through which the road passes, with its connecting link to Cincinnati, is not only unsurpassed but unrivalled by any other of equal extent in the Union, in fertility of soils, capability of sustaining a dense population, and in all the elements of wealth and prosperity.

The report of the Auditor of the State of Ohio for 1851, shows that about one-fourth of the entire taxable property of that State was found in the twelve counties through which this line passes from Toledo to Cincinnati.

The southern portion of the line passes through the most populous and fertile portion of the United States; half a century ago it was an unbroken forest.

At Sidney this line crosses the Bellefontaine and Indiana railway; at Lima, the Ohio and Indiana, which will prove a valuable tributary, opening to it the immense trade of the region around Fort Wayne, and that west and north of it.

At Toledo it connects with the Michigan Southern and Lake Shore roads. The line will soon be extended to Detroit. At Dayton it connects with the road to Cincinnati south, and to Indianapolis west, and Columbia east.

This road will probably pay its shareholders quite as well as the Cincinnati and Dayton road, whose stock is now at or above par.

An examination of a map of this line will show that it occupies a most important position, nearly, if not quite, equal to any other in that state.

Sealed proposals will be received for any amount not less than $1,000, until Saturday, the 25th day of this month, at 3 o'clock P. M.

Proposals will be addressed to the Agents of the Company, Messrs. WINSLOW, LANIER & Co., No. 52 Wall st., endorsed "PROPOSALS FOR DAYTON AND MICHIGAN RAILROAD BONDS."

Twenty-five per cent of the purchase money will be required to be paid on accepting the bids, the remainder in equal monthly instalments of 25 per cent. Any purchaser will be at liberty to pay in full at once. Interest on the Bonds will run from the day of payment.

The above $100,000 will be sold absolutely and without reserve to the highest bidder.

A printed exhibit, with a map and all necessary information in relation to these securities, can be had by calling at the office of the Company's Agents, No 52 Wall st., New York.

JNO. G. TALFORD, President.

New York, Sept. 6th, 1852.

To Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Freehold and Janesburg Agricultural Railroad, at Jamesburg, Middlesex County, New Jersey until Wednesday the 6th of October; for the grading of 11¼ miles of said road, from Jamesburg to Freehold.

The line will be ready for examination by Sept. 20th; when an Engineer will be at the office to give such information as may be required.

The road will be divided into sections of a mile, to a mile and one half.

WM. COOK, Engineer.

ENGINEER'S OFFICE, }
Jamesburg, Sept. 13, 1853. }

To Contractors.

PROPOSALS will be received at the office of the Alabama and Mississippi Rivers Railroad Company, in Uniontown, Ala., until the first of October next, for the Graduation, Masonry, Bridging and Cross-ties of said road, from the west bank of Valley Creek to Uniontown, 28 sections about one mile each. Bids proposing the entire payment, or a percentage thereof, in the stock of the road, will receive the most favorable consideration. Specifications can be seen at the office of the company in Uniontown, and also at the office of the Chief Engineer in Selma, Ala. J. J. DRAKE, Secr'y.

Uniontown, Ala., August 16, 1852. 4t*

To Contractors.

Office of the Dauphin and Susquehanna Coal Co.
No. 54 Wall-st., New York, Sept. 22, 1852.

PROPOSALS will be received until the 15th day of October next, for the graduation, masonry and bridging of that part of the Dauphin and Susquehanna Coal Company's Railroad extending from near Ransch Gap on the line now open for travel, to Auburn on the Philadelphia and Reading Railroad, a distance of about 31 miles.

The character of the work is such as to render it well worthy the attention of contractors, and payments will be made in cash.

The Directors reserve the right of rejecting any proposals that may be deemed unsatisfactory.

Plans, profiles, etc., can be seen, and further information be obtained, by application to the Chief Engineer, Richard B. Osborn, at the Company's Office, No. 73 South 4th st., Philadelphia, after the 9th of October next, or on application to the undersigned.

Proposals to be addressed to A. G. Jandon, Secretary, (marked Proposals for grading, etc.,) at the office of the Company, 54 Wall-st. New York.

THOMAS CHAMBERS, President.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 39tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

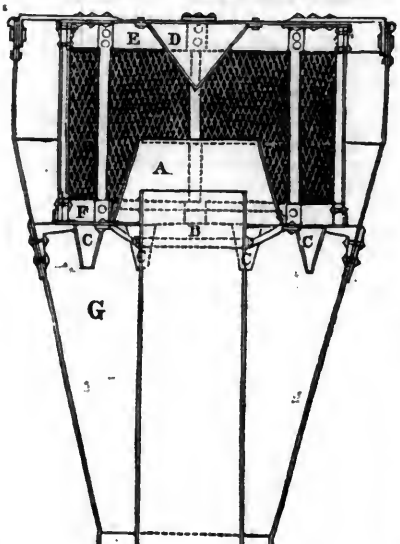
MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.

To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

MR. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MI. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.

Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.

Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN.
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent - WM. BAILEY LANG, 9 Liberty Square, Boston.

500 Tons of Wire Wanted.

PROPOSALS ARE INVITED by the undersigned, on the part of the NIAGARA FALLS INTERNATIONAL BRIDGE COMPANIES, for the construction of the Wire Cables of the Railroad Suspension Bridge, of 800 feet span, to be erected over the Niagara river, below the Falls, for the delivery of ONE MILLION of POUNDS of IRON WIRE, or any portion of it, not less than 100,000 lbs, at the site of the bridge, on the following conditions:

1. The wire is to be of No. 10 size, so that 20 feet will weigh exactly one pound.

2. The skeins to weigh no less than 18 lbs. An offer for 30 to 40 lbs. will be greatly preferred.

3. The wire must be finished with a lime coat, smooth and even, both ends of the same thickness.

4. It must be finished in three holes, or nearly as hard as spring-wire.

5. The iron must have been manufactured of the best quality of charcoal blooms, which will make hard wire of great elasticity, strength, fibre and toughness.

6. The blooms must have been manufactured of cold-blast charcoal pig, and not of anthracite pig, nor of hot-blast pig.

7. Satisfactory evidence will be required before hand of the quality of the iron, of which the wire is to be drawn.

8. The wire must be drawn on blocks of no less than 2 feet diameter.

9. It must be put up in bundles of 200 lbs., as near as can be done, without small skeins.

10. The wire is to be delivered in five equal portions during the months of May, June, July, August and September of next year.

11. On delivery, the wire will be examined and tested in the following manner:—Of every 5 bundles or 1,000 lbs. one skein will be selected, and suspended between two posts 400 feet apart, the one end attached to a capstan, by which it will be gradually hauled on until it breaks. The condition now is, that this wire must not break with a greater deflection than 9 inches, which is equivalent to 1,300 lbs., or 90,000 per superficial inch of solid wire section. If it stands this test, then further examination of that one thousand pounds, in respect to other qualities, will be continued; but if not, it will be rejected and placed at the disposal of the contractor.

12. As regards toughness and fibre, each end of a skein will be tested by bending it square over the jaws of a large pair of new and sharp pliers, and bending it back again. The wire must stand this test without the least sign of failure. Its hardness and elasticity will at the same time be examined by bending and swinging, also by hammering, filing and notching the ends, which forms part of the operation of splicing.

13. Such lots as have stood the various tests satisfactorily, will then be accepted conditionally, and 80 per cent of its full value will then be paid to the contractor in bankable funds.

14 The 20 per cent will be reserved for four months longer. Should in that time, during the construction of the cables, any more defective skeins be discovered, such skeins will be rejected and placed at the contractor's disposal, either broken or whole, oiled or not oiled, in such condition as they happen to be during the progress of the work. The value of such wire, together with the labor expended upon it, will then be deducted out of the 20 per cent reserved.

15. The undersigned, as the Engineer of the Bridge, will be the sole judge of the above tests; he will stand as an impartial umpire between the contractor and the Bridge Companies, and from his decision there shall be no appeal.

16. Proposals for imported wire will also be accepted. One-half or 500,000 lbs. will be used on the Canada side, and may be bonded, if imported by way of New York.

17. Proposals will be received until the 1st October next; they are to be directed to the undersigned at Niagara Falls, N. Y., and should be marked on the envelope, "*Proposals for Bridge Wire.*"

18. Those contractors, whose proposals are accepted, will be informed of the fact by mail before or on the 10th October next.

JOHN A. ROEBLING,
Eng. Niagara Falls R. R. Suspension Bridge.
NIAGARA FALLS, N. Y., August 5th, 1852.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Velium or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,
Importer of Stationary 191 Pearl st., N. Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.

July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Railroad Contracts.

THE Mobile and Ohio Railroad Company hereby offer for contract the *Graduation, Masonry* and *Bridging* of 179 miles more of their road, extending from Section 64 of the last *letting* in Wayne Co. to the south line of Pontotoc Co., Miss.—the latter point being 267 miles from Mobile.

The line will be ready for inspection on and after the first of August next. Also, plans, profiles and specifications will be exhibited, proposals received under seal, and contracts made at the following times and places, to wit:

August 15th—At Quitman, for line in Clarke County.
" 25th—At Lauderdale Springs, for line in Lauderdale and Kemper Counties.
September 5th—At Macon, for line in Noxubee County.
" 15th—At Major Gilmore's, 16th section on "Robinson" Road, for line in Lowndes County.
" 25th—At Doct. Gillespie's, on Aberdeen and Houston Road, for line in Monroe County.
" 30th—At Okolona, for line in Chickasaw County.

From July 25th to August 10th, the profiles can be examined, and other information obtained, of C. B. Child, Esq., Resident Engineer, at Macon, Noxubee Co., Miss.

The grading upon 8 miles of this line is heavy and good car work. About 35 miles middling heavy, and the remaining 136 miles light.

The high and healthy country in which this line of work is situated, and the proposed *letting* of 250 miles more within twelve months, to complete the road to the Ohio and Tennessee rivers, for which subscriptions are now partly taken up, render this work worthy the attention of contractors both north and south. JOHN CHILDE,
Chief Engineer and General Agent.

New York, June 14th, 1852.

Notice to Contractors.

Sodus Point and Southern Railroad.

PROPOSALS will be received at the office of the Engineer, at Sodus Point, until Tuesday, the 5th day of October next, for the construction of the Sodus Point and Southern Railroad, including Grubbing, Graduation, Masonry, Bridging, and the laying of the superstructure, complete for operation.

Plans, Profiles and Specifications will be exhibited, and all requisite information given, at the office of the Engineers, on and after the 25th of September inst.

Contractors should be prepared to state what proportion of the stock of the company they will take at par in part payment.

The company reserve to themselves the right to let the work in items and sections, and in such manner as may appear most advantageous to their interests.

Dated Sept. 4th, 1852.

WM. D. COOK, President.
S. CULVER, Secretary.

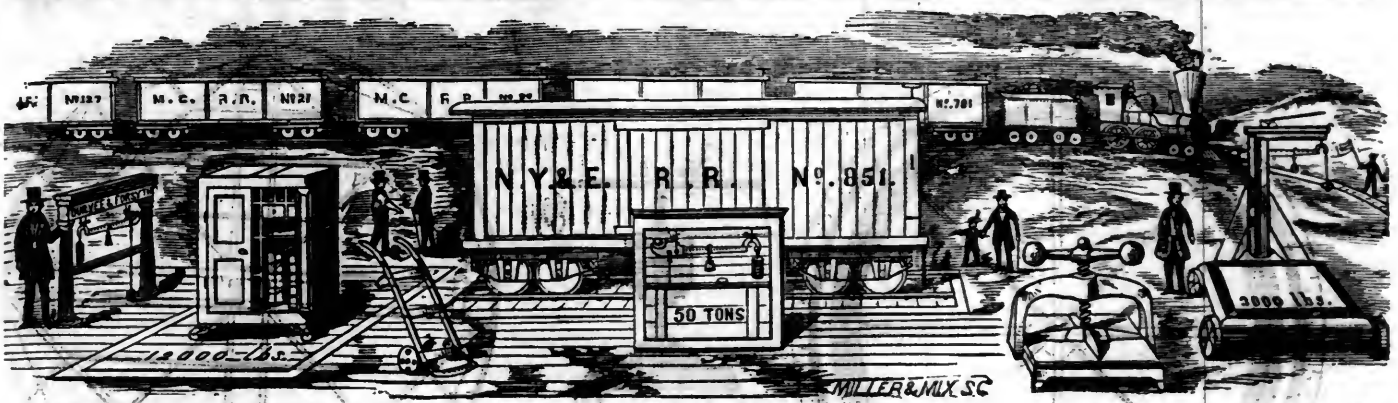
LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments; also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly six hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

TO MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Obio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Loganspport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

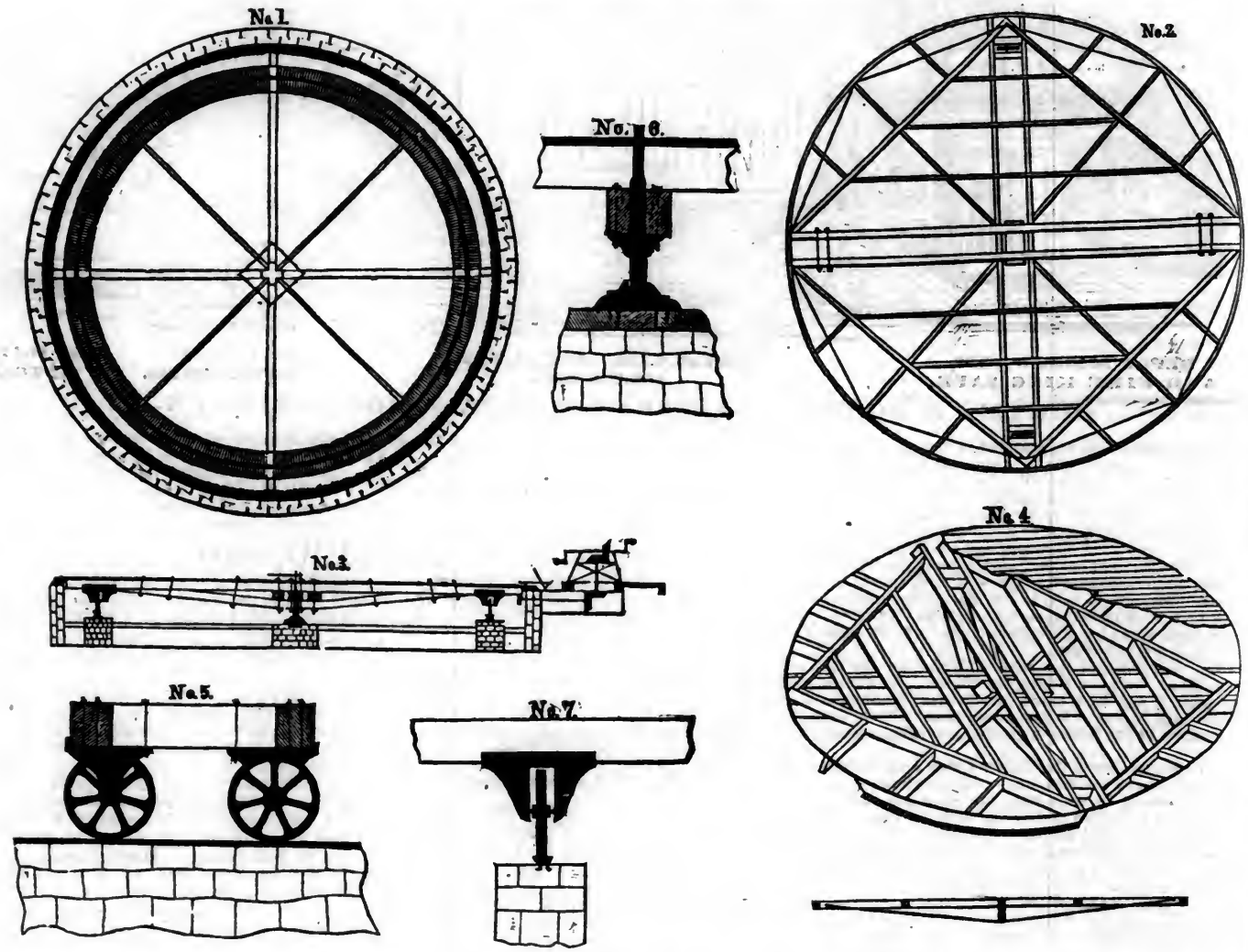
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.




The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer,*

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 40] SATURDAY, OCTOBER 2, 1852 [WHOLE No. 859. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Reciprocity and Retaliation.....625
Canadian Canals and Commerce.....627
New Orleans and Jackson Railroad.....627
Journal of Railroad Law.....627
Mount Savage Railroad.....628
Railroad Convention at Warsaw.....628
Lake Shore Railroad.....628
Railroad Commerce of Sandusky.....629
Lexington and Covington Railroad.....629
Railroads in Missouri.....630
Penn and Oquawka Railroad.....630
Railroad Subscriptions.....630
Railroads in Ohio.....631
Manassas Gap Railroad.....631
Plattsburgh and Montreal Railroad.....631
Foreign Investments in this Country.....632
Nova-Scotia Railroads.....632
Tunnel under the Hudson River at Albany....632
Stock and Money Market.....633
Green Bay, Milwaukee and Chicago R. R....634
Seleck's Collision Director.....634
Utica and Syracuse (Straight Line) R. R.....635

American Railroad Journal.

Saturday, October 2, 1852.

Canada.

RECIPROCITY AND RETALIATION.

The Canadian government have come to the determination to increase the tolls upon American produce passing through the Welland canal, and also to raise the duties imposed upon merchandise imported from the United States into Canada, (except through the Gulf of St. Lawrence,) as retaliatory measures for our refusal to enter into an arrangement for reciprocal free trade between the two countries. The increased toll on the Welland canal will amount to about 3 cents upon a barrel of flour, and the increased duties are to be 12½ per ct. upon sugar, molasses and salt, 7 per ct. upon tea, and 5 per ct. upon cotton goods, leather, glass, paper, etc.

We regret the step, as we believe its effect will be to postpone, instead of hastening, reciprocity. What we refused to concede under a friendly state of feeling, will hardly be yielded under retaliating measures, the object of which is to punish us for our obstinacy.

We have good reason for believing that but for the steps now taken by the Canadian government, reciprocity would have been carried at the next session of Congress. We happened to be in Washington a few days before the close of the late session; and we took some pains to inform ourselves as to the state of feeling in that body in reference to the question of reciprocity. We could not learn that there was any concerted opposition to the proposed measure; and we were informed that a favorable report had been prepared by the Committee on Commerce of the House, accompanied by a bill, which was not presented only for the reason that there would not have been time enough to discuss the matter before the day of adjournment which had been agreed upon. There was a good state of feeling upon the part of all who had thoroughly examined the subject, and who were not committed against it from local considerations. We were then satisfied, that nothing was wanting to carry the measure, but to have it fully understood in all its bearings. We know that such was the opinion of its best informed friends, and the fullest confidence was expressed of its success, so soon as the vexed question of the presidential election should be fairly out of the way.

There has been no doubt some opposition to the measure, but this has arisen either from prejudice, or from incorrect views as to its influence, or from a want of a proper understanding of its real merits. At first sight, it would appear that we were called upon to give up much more than we were to receive. Hence the *inertia* of the public mind of this country upon the subject. There was not a sufficient motive to move us to action. All these obstacles which were of a *negative* character, were fast disappearing before a more general and thorough examination of the question; and, as we before stated, there was, up to the recent decisive measures adopted by Canada, the best prospect of speedy and favorable action on our own part.

If we have not thoroughly appreciated the importance of the subject, still less have the Canadian government the obstacles to prompt action on our part. The reciprocity asked for by the Province, is not a *practical* reciprocity, one in which the benefit is *mutual*. What is it? Simply this: The Canadas are an agricultural country, and have a large surplus of the agricultural product for export to foreign countries, and which in fact constitutes their *available* means. So have we. In this respect both countries are in the same category. We are rivals in the same kind of industry, and competitors for the same market. But we have what the Canadas have not, extensive domestic markets. Still these markets do not take so much but that a large surplus is left for exportation. The Canadas being *entirely* devoted to agriculture, say to the people of the United States, "If you will allow us to send *our* wheat to you *free of duty*, you may send *yours* to us, on the same terms!" To this proposition we reply, that "we also raise more wheat than we can either consume or sell. You do the same, and consequently can take nothing from us, even with entire freedom of trade. The reciprocity you ask for would let you into our markets, without *practically* opening your own. But (say we) if you will extend the proposed measure to *all* articles of commerce, we will accept it at once." The reply on the part of Canada to this is, "We cannot do this. We must have a revenue to support our government. This revenue is, and must continue to be raise by *imposts* upon importations. A reciprocal arrangement embracing everything, would leave us without the means of sustaining our government, and all institutions connected with it."—All this is very true, and it is a sufficient answer to our demand for *entire* reciprocity. The question then comes up: shall we allow the introduction of certain Canadian products without any apparent equivalent secured to us?

We have no hesitation about this matter. We believe, even should the arrangement be confined to agricultural productions, the *aggregate* of our interests would be the gainers. Our wheat and stock growers, and our lumbering interests might suffer some from competition with the Canadian products, but our commercial and manufacturing classes would be very large gainers, by the increased capacity of the Provinces to buy. The wheat of Ohio would command a higher price in the market than it does now, were that of Indiana excluded; but though the former might be benefitted by such an arrangement, the community in the aggregate would suffer. So with reciprocity with Canada. However partial it might be, we believe that under all circumstances we should be benefitted by it, just as our commercial and manufacturing classes are benefitted by large crops in Ohio and Indiana, and by an entire freedom of communication between them and the above States. The capacity of a people to *buy* is measured by their ability to *sell*; and the true way to increase our trade with the Canadas is to take from them their surplus products, whatever they may consist of.

By the arrangement now proposed by Canada, we should be gainers only in the indirect manner already stated. No person believes that with perfect freedom of trade between the two countries, we should send to the Canadas wheat, stock or lumber—articles which make up the great mass of their exports to us. At the same time we should be benefitted by receiving an additional supply of these articles, although we produce them all (with the exception, perhaps, of lumber) in excess of our domestic demand. In no point of view, therefore, could the United States fail to be benefitted, by an arrangement which should secure to us an increased volume of Canadian productions.

To our minds, by far the strongest argument in favor of completing the one-sided and partial arrangement proposed, is the influence it will exert in eventually breaking down all barriers to the entire freedom of trade between the United States and Canada. This is an event which cannot be long distant, and which must prove of vast consequence to both countries. The prosperity of the United States is in a great measure the result of entire freedom of trade between them all. This prosperity would instantly disappear by any restraint to this freedom. As an illustration, let us suppose that New York had the power to levy a duty upon all property passing between Massachusetts and Ohio, for consumption in each. Who does not see that the manufacturing and commercial interests of the former, and the agricultural interests of the latter, would sustain a most disastrous reverse. The tax imposed by New York would be just so much a burden imposed upon the industry of the two States. Now, what would be true in the case cited is true of the commercial intercourse between the Canadas and the United States. We do not see the blighting influence of the burdens now imposed, because we have no adequate idea of what it would become under a system of complete reciprocity. The Canadas need the markets of the United States, just as much as does the State of Ohio. They *must*, and will in the end, have access to it on equally favorable terms. They can never develop their resources without, and so apparent and urgent will the necessity become, that in time all other considerations will be made to yield to this paramount one.

The Canadas themselves feel most keenly their anomalous and inconvenient position. For their great staples, lumber and agricultural products, Great Britain offers no suitable market. Only a small quantity of the choicest kind of lumber will bear the expense of sending to that country. The same may be said of hay, potatoes and oats, all very valuable, and the two former probably the most valuable products of the Provinces. The same remarks are exactly true of beef cattle, and live stock of all kinds, of which the Provinces raise a vast quantity. For these articles, which must be consumed *near* the point of *production*, the Canadas have not, and cannot for many years have, an adequate *domestic* market. They must have access to the markets of the States, to render labor and capital in any degree remunerative. While such is the fact, it is idle to suppose that they can or will remain quiet and contented, till an arrangement necessary to their highest pecuniary interests shall be effected.

Reciprocity, then, must come. How shall it be accomplished? In the United States great indifference has and still prevails upon the subject. This indifference is not hostility. It arises from a want of a thorough understanding of the subject, and from the slight advantage apparently offered to us. The course to be pursued by its friends on both sides of the line is a perfectly simple one, which is to educate the public mind of this country up to the subject. The moment this is done, the measure will take care of itself. We shall then be as ready to enter into the arrangements, as are the Canadas. But to a superficial observer, no sufficient inducement is yet held out to us. The Canadas should have looked at *our* side of the subject with *our* eyes; they would then have found an apology for our inaction, and would have taken measures to remove the obstacles thay lie in the way, by showing to us, as can be done, that the advantage to us will be as great as that secured to them, though not so apparent nor direct.

Instead, however, of pursuing the obvious and sensible course already pointed out, and which alone can secure success, the Provinces, impatient at our delay, have come to the determination to *force* us into reciprocity by an attack upon our purses instead of our reason. We do not believe in the policy of this new move. If argument has failed to convince us, we do not believe that retaliatory measures will. It is not characteristic of our common race to be driven—even to do *right*. Our people will be likely to feel their dignity insulted, and may refuse to treat altogether. The loss we might sustain would have but little present weight upon the public sentiment of the whole country, because this would fall upon a very small number of persons. But we doubt whether the retaliatory measures threatened will injure any but their own people. Take the articles of sugar and teas for instance. Will the increased duty diminish consumption? We presume not. The duty, then, will have no effect upon our markets. These will be sustained as well with, as without, the duty. What price does the Canadian now pay for his tea? Of course the New York price—duty and cost of transportation added. What will he pay under the new arrangement? New York price—duty and cost of transportation added. The increased duty will not affect the price in New York. Of course our merchants will not undersell our own markets for the benefit of the Canadian purchasers. We see no way in which the purchaser will not be compelled to pay the increased charge, and we do not believe that it will perceptibly decrease consumption. What is true of tea and sugar, will be true of the whole list. The blow thus far aimed at us, will only recoil upon the authors of it.

How is it with the increased tolls to be imposed upon freight going through the Welland canal? Suppose it should be sufficiently high as to drive American produce from this route; would it increase the price of flour in New York? By no means. The capacity of the Erie canal is yet much greater than the whole amount of produce passing east from Lake Erie. The effect of throwing 500,000 tons more upon the canal at Buffalo would be to diminish, instead of increasing, the rates of freight, upon the principle that the larger the amount of business to be done, the less the charges upon a specific article. Does any person suppose that should the traffic on the canal be reduced to one million, the cost of transportation would be reduced? Not at all. Another thousand, in addition to the six thousand boats already employed, might be added without the least inconvenience to those already running. The tonnage reaching tide water the past year through the Erie canal was something over 2,000,000 tons Without any further enlargement of this great work, the tonnage may be increased to 3,500,000. Till the full capacity of the canal is reached, no increase has a tendency to increase rates of charges, but on the other hand a contrary one. The forwarders by the Welland canal route we admit may be losers by the additional amount of toll; but this will not affect the price of flour, neither in the west nor the New York market. So long as this shall continue to be the case, we do not think that entire seclusion from the Welland canal would have the least tendency to drive us into reciprocity. The interests of a few would have to yield to the sentiment of the great mass.

In this connection, it may be well to state that the enlarged Erie canal, when completed, will undoubtedly so far reduce the cost of carriage of a barrel of flour from Lake Erie to New York, as to draw the transportation of it altogether from other routes. Under the enlargement, 25 cents per barrel will be an ample charge for such service.

From the best opinion, therefore, which we can form upon this matter, retaliation cannot reach any of our great interests; and at best, only a few forwarders. It can only operate to the disadvantage of Canadians. They must pay the increased duty they see fit to impose. We shall not complain of this. Should the increased toll upon the Welland canal have no effect to drive business from it, then it will increase its revenues somewhat. Should it, on the other hand, drive the American business to the Erie route, as it will be likely to do, then it would result in turning off one of the best customers for their public works.

One word as to the freedom of the St. Lawrence, a boon which the Canadians offer as a consideration for free trade. This we freely admit may be of great value to us. But where we should make one dollar by it they would make ten. The Canadas, according to the speech made by Mr. Young, upon resigning office, have spent $16,000,000 in rendering this river navigable. The works constructed for this purpose yield a revenue of only £60,000, leaving a difference of some £180,000. Now, we ask, who is to receive the greatest advantage from the use, by the Americans, of the St. Lawrence. The Canadas want custom to make their works profitable. At present they are very poor investments. As well might a person who had constructed a mill, call it a boon to the surrounding farmers, to allow them the favor of having their wheat ground at it, as for the Canadians to apply the same term to *our* use of their canals. Our public works are enjoying a most lucrative business; theirs are languishing for want of it. Instead of its being a boon to offer us the use of their canals. the advantage resulting from this would be altogether on the other side.

We had hoped that in discussing reciprocity, all questions, as to the probable injury that the two countries can do each other, would be kept out of sight. To drag on such questions, tends neither to peace nor harmony between individuals or nations. Men cannot be driven toward their true interests. A threat never brings people together. We regret exceedingly the course of the Canadian ministry. It will certainly postpone the end sought to be accomplished. It comes in most inopportunely. A person who understands anything of this country, knows that pending the presidential election, no important act of legislation can be expected to take place. Both parties may be afraid to drag a matter into the contest, the bearings of which they cannot readily foresee. Every fourth year, presi-

dent-making supersedes all other business. This is the correct explanation why the question of reciprocity did not receive attention at the last session of Congress. The next would have been a favorable period, during which, we have no doubt, but for the recent precipitous measures adopted by Canada, reciprocity would have been triumphantly carried.

We are equally confident that the Canadians were not well posted up as to the true state of the question in this country. Had they been, the result would have been very different. We are equally satisfied that they have neither taken the suitable nor proper pacific measures to effect their object.

Notwithstanding all this, reciprocity must come, and that, too, without very great delay. The present relations between the two countries are most unnatural. There is no more reason in the nature of things why the Canadas should not have our markets for their wheat, hay, oats, potatoes and beef, upon the same terms as the western States; nor why the former should not in turn take the products of our manufactures and commerce in exchange. Political considerations cannot long override so plain and obvious an expediency. But the Canadas need this reciprocity vastly more than we do. We are a nation in which all interests are well balanced. We have domestic markets for every variety of our products. In this respect we have all the elements necessary to make a great and prosperous people. The Canadians, on the other hand, are great producers, but have no markets. *Their* appropriate markets are our manufacturing and commercial districts. To be excluded from them is a direct blow to their highest prosperity. We should not feel it, because our markets are abundantly supplied with all that the Canadas could furnish. Without them we shall continue to move forward with a stride commensurate with our resources. But without the use of our markets, the Canadas must remain comparatively stationary.

Canadian Canals and Commerce.

We extract the following figures from the trade and navigation returns recently laid before Parliament.

Vessels which passed the several canals during the year 1851.

BRITISH.

	No.	Tonnage.	Tolls.
Welland canal	3,357	363,221	1,628
St Lawrence canal	6,656	505,197	1,447
Chambly "	1,517	81,594	193
Burlington B. "	1,998	380,649	230
St. Anne's Lock	1,926	99,561	309
	15,454	1,430,172	£3,809

FOREIGN.

	No.	Tonnage.	Tolls.
Welland canal	2,336	409,402	2,436
St. Law. "	278	21,013	64
Chambly "	210	9,147	27
Burlington B. canal	535	101,261	61
St. Anne's Lock	61	2,846	8
	3,420	553,669	£2,598

Total British and foreign 18,874 vessels, 1,973,841 tons, toll £6,407.

The total movement on the canals for 1851 and 3 years previous, is as follows:

WELLAND CANAL.

	1848.	1849.	1850.	1851.
Tons	307,611	351,596	399,600	691,627
Passengers	2,487	1,640	1,930	4,758
Tonnage of vessels	372,854	468,410	588,100	772,623

ST. LAWRENCE CANAL.

	1848.	1848.	1850.	1851.
Tons	164,627	213.153	288,103	450,406
Passengers	2,071	26,997	35,932	33,407
Tonnage of vessels	5,648	5,448	6,169	6,934

CHAMBLY CANAL.

Tons	17,835	77,216	109,040	110,726
Passengers	470	8,430	278	1,860
Ton. vessels	659	1,264	2,878	1,727

The receipts of 1851 were £76,216, expenses £12,286, of the gross tolls the Welland produced £48,241, and the St. Lawrence £21,276.

The total value of the imports for 1851 was £5,358,667, of this there was imported from Great Britain £3,012,033, and from the United States £2,091,441, the balance from other countries.

The following statement shows the imports for 1849, 1850, and 1851:

VALUE.

	1849.	1850.	1851.
Great Britain	£1,669,002	£2,407,980	£3,012,033
N. A. Colonies	48,913	96,404	109,243
West Indies	3	1,112	3,406
United States	2,242,855	1,648,715	2,091,441
Other for. countries	41,824	91,393	142,574

The exports of 1851 were in value, products of the mine, £21,688, of the sea £62,324, of the forest £1,815,878, animal products £221,879, vegetable food £841,597, other agricultural products £9,507 manufactures £13,781, and other articles £37,971 total £2,824,630, to which must be added 41,971 tons of shipping built for sale at Quebec, at £416,550, making a total of £3,241,180. The export trade was thus divided, Montreal £529,807, Quebec £1,593,661, Gaspe £35,434, New Carlisle £20,025, Amherst £4,895, inland ports £1,057,354.

Mississippi.

New Orleans, Jackson and Great Northern Railroad.—A railroad meeting was held at Aberdeen, Monroe county, Miss., for the purpose of aiding in the passage of this road, and obtaining the subscription of $500,000 for which the county is pledged. We learn from the report of the meeting in the Monroe Democrat, that a preamble and resolutions offered by Chancellor Cocke were unanimously passed by the meeting, by which a committee was appointed to procure an order from the board of county police to submit to the electors the question whether they will consent and authorise the legislature to pass an act to effectuate the following objects:

1st. To lay an *ad valorem* tax of one per cent per annum, for five consecutive years, on the taxable property in Monroe county, for the purposes of said railroad, to be assessed, collected and accounted for and to be expended on the local work in the county

2d. That the tax payer obtain from the tax collector a certificate of the amount of railroad tax he she or they may pay, each and every year, and when paid, such certificate to entitle him, her or them, or his, her or their assigns, to so much stock in the New Orleans, Jackson and Great Northern railroad company, as he, she or they may pay.

3d. That at the time of such payment, such tax payer to have such certificate of stock in the New Orleans, Jackson and Great Northern railroad company, at his, her or their option, and which may be transferred by endorsement.

4th. That voluntary subscribers of stock on such taxation and payment, may obtain such certificate, and have the same credited as so much payment of his, her or their stock subscribed for.

5th. That the money so assessed and paid into the treasury of the state, may be drawn therefrom (the governor of the state approbating the same,) by the president of the New Orleans, Jackson and Great Northern railroad company, or by the president of the Mobile and Ohio railroad company, as they may respectively be entitled.

Journal of Railroad Law.

WHAT IS LUGGAGE?

The fifth volume of Cushing's Massachusetts Reports, which has just issued from the press, contains the important decision of the case of Jordan, *vs.* the Fall River railroad Co.

The defendants availed themselves of the station of the Old Colony railroad in Boston, and also used that road for transportation of passengers and freight as far as Braintree, where the Fall river road commences. The defendants kept no servants in Boston for the especial purpose of receiving and taking charge of luggage for their road, but it was customary for passengers to deliver their luggage to the agents of the Old Colony road. The plaintiff purchased a ticket in Boston, for the purpose of going to Bridgewater by the Fall river road, and delivered her trunk, containing $325 in gold pieces, to an agent of the Old Colony road. Most of the contents of the trunk were lost, and sought to be recovered by the plaintiff in this suit, and under the directions of the judge the jury rendered a verdict for the amount of the plaintiff's claim.

On a motion for a new trial, the court *held*,

1st, That the proprietors of a railroad who receive passengers, and commence their carriage at the station of *another* road, are bound to have servants there to take charge of luggage until it is placed in the cars, and if it is the custom of the luggage master of the station, in the absence of any servant, to receive and take charge of the luggage in his stead, the proprietors will be responsible for the luggage so delivered to him.

2ndly, That common carriers of passengers are responsible for money bona fide included in the luggage of a passenger for travelling expenses and personal use, to an amount not exceeding what a prudent person would deem proper and necessary for the purposes; but not for money beyond that amount, or intended for other purposes; unless the loss is occasioned by gross negligence of the carriers or their servants.

Chief Justice Fletcher, in delivering his opinion in this case, briefly, but instructively, examined the question as to the true signification of *luggage* or *baggage* in a legal point of view, and defined luggage to mean such articles of necessity or convenience for personal use, as it is customary for persons travelling to take with them; even including articles designed for amusement, like fishing tackle, or for instruction, like a book. The following authorities were cited by the court.

In the case of Brooke, *vs.* Pickwick, 4 Bingham 218, a lady's trunk containing apparel and jewels was deemed luggage. In Jones, *vs.* Voorhees, 10 Ohio Reports 145, the carrier was held responsible for a watch lost in a trunk, as being an appendage of the person.

In the case of Pardree *vs.* Drew, 25 Wendell 459, the carrier was held not to be responsible for a trunk of silk goods claimed as baggage. So in Hawkins, *vs.* Hoffman, 6 Hill 586, a carrier was held not to be liable for the loss of samples used in effecting the sales of goods. So carriers are not liable for large sums of money taken for transportation, and not for the exigencies of a journey.

Orange county bank, *vs.* Brown, 9 Wendell 85. Nor is the owner of a steamboat used for carrying passengers liable under the circumstance last described. In the case of Weed *vs.* the Saratoga and Schenectady railroad company, 19 Wend. 524, the court held that railroad companies are liable for money contained in a passengers trunk, an amount which shall under the circumstances of the

case be deemed reasonable by a jury. But the supreme court of Connecticut, subsequently in the above cited case from 6 Hill, expressed a doubt whether money could be considered baggage.

In conclusion, as the judge had in the case at bar directed a verdict to be rendered for the plaintiff to the amount of her claim, with inquiry as to the purpose for which she was carrying the money. The court ordered the verdict to be set aside, unless some amicable arrangement of the case should be made by the parties.

Maryland.

Mount Savage Railroad.—The amount of coal transported over the Mt. Savage Iron Co's railroad for the week ending Sept. 18th, was 5,289 tons.

The road has been extended about five miles—from Mt. Savage to within a few hundred yards of Frostburg. This improvement is one of importance to the coal business. The Cumberland Miner's Journal in an article on the subject of the opening of the extension of the Mt. Savege railroad, gives an interesting description of that work and the mining region in which it is situated. This road is now the principal feeder of the Baltimore and Ohio railroad and the Chesapeake and Ohio canal, with the renowned semi-bituminous coal of that region. It leaves Cumberland, where it unites with the Canal and Baltimore railroad by separate branches, passing with an easy grade through the sublime scenery of the Narrows of Wills' Mountain, which is crested with a granular white stone of pure silex, destined at no distant day to add to the wealth and population of Cumberland in the manufacture of every kind of glass, for which it is admirably calculated.

At the western entrance to the gorge two miles from Cumberland, the railroad is intersected by one leading up the valley of Braddock's Run, to the Eckhart, Washington, Pompey Smash, and other valuable mines. This road, built by the Maryland Mining company, as well as the greater part of the coal property just mentioned, is now owned by the Cumberland coal and iron company.

From this point the road proceeds two miles up Wills' creek, crossing the stream by a timber bridge of two arches. On reaching Jennon's Run the heavy grade of 100 feet commences and in 3 miles the road enters the coal field. The first mines are those of the Parker vein coal company, connected with the main road by a branch of three-fourths of a mile in length.

Two miles further brings us to Mount Savage—the largest iron works in the United States. Three immense furnaces which, when in blast, can produce fifteen thousand tons of pig iron a year—a large and most complete foundry and machine shop—a noble rolling mill, capable of turning out ten thousand tons of rails or bar iron a year, or even more—a manufactory of the best fire brick in the United States—dwellings for twelve hundred operatives, and their families, estimated at a population of fully 5000—all this bursts on the view as we arrive at the beautifully situated village of Mt. Savage.

Here commences the continuation of five miles in length, built in a substantial manner and laid with Winslow's patent compound rail of 65 pounds to the yard. The road reflects great credit on C. F. Fogg, Esq., the engineer.

The companies on the line of this improvement, have heretofore had their coal conveyed to Mt. Savage over the tram-track of the Frostburg company, but now their facilities for sending coal to market are only bounded by the demand and the number of of cars it is possible to put on the road.

The present weekly transportation of coal, down the Mount Savage railroad is nearly six thousand tons; and the greatly increased facilities afforded by the opening of this new line, will in the course of the next few weeks, increase into nearly ten thousand.

Indiana.

RAILROAD CONVENTION AT WARSAW.

A railroad convention was held at Warsaw, the capital of Kosciusko county, Indiana, on the 14th September last; the main object of which is the connection of Chicago with Philadelphia and the railroads branching from the latter city. The correspondence of the Pittsburg Gazette states that the managers of the Southern Michigan road had made two propositions to the persons interested in the new project.—1st. To extend the line from Fort Wayne to Goshen, 53 miles, and there connect with the southern line by means of the Elkhart and Goshen branch; or, 2nd, to extend the Ft. Wayne line to Laporte, there to connect with the Southern Michigan.

The convention was organized by the appointment of Chas. H. Reeve, Esq., of Marshall Co. as chairman, and T. Tiger, of Allen Co. and D. M. White of Pittsburg, as secretaries.

A business committee consisting of two from each county in Indiana, and two from each state represented, were then appointed. The report of this committee was presented, and eloquently advocated by Judge Hanna, of Fort Wayne, and the accompanying resolutions unanimously adopted.

Resolved, That the near approach to completion of the great central through line of railroad, from Philadelphia, by Pittsburg to Fort Wayne, considered in connection with the vast net-work of railroads, over one thousand miles in extent, now in progress beyond Chicago, and soon to concentrate at that city a very large travel and business, points invitingly to a connection of these two extensive systems of railway communication by the construction of a road from Fort Wayne to Chicago and in the opinion of this convention the time has arrived for a commencement of this work.

Resolved, That in the opinion of this convention, this only remaining link in the extensive chain of railroad communication between Philadelphia and Chicago, and the vast region north and north-west of Chicago, cannot fail to prove a paying stock, and that for this opinion there is sufficient warrant; first, in the immense through travel and traffic of a lighter kind, between this north-west region and the Atlantic cities; and secondly, from the way travel and freight furnished by the fertile country along the line, which will equal that of other western roads.

Resolved, That from the manifest advantage resulting to the cities of Philadelphia and Pitsburg, in all their business interests, and also to the stock of the eastern portions of this through route, this convention relies confidently upon subscriptions of stock in that quarter, after the people along the intermediate route shall have subscribed to the extent of their ability.

Resolved, That to the rising city of Chicago this project commends itself for support especially on account of its direct connections with the manufacturing cities of Pittsburg and Cincinnati, and with all lesser cities of central and southern Ohio.

Resolved, That while as a through line between Chicago and New York, the Fort Wayne route can compete, in time and expense, with the roads north of it, being in fact shorter than either, it is quite certain that for all travel and traffic between Chicago and any of the Atlantic cities south of N. York, or to any interior point in the middle states, it is emphatically *the route*.

Resolved, That to the counties through which this road will pass, its advantages will at once be realized in the increased value of all real estate, in the building up of thriving villages, and more especially to the agricultural interests by reducing the cost of transportation on all heavy articles to or from either Pittsburg, Cincinnati or Toledo. By the connection at Fort Wayne with the enlarged portion of the Wabash and Erie canal, the wheat and corn of Whitley, Kosciusko and Marshall counties, can be carried to lake Erie much cheaper than by railroad the whole distance.

Resolved, That this route will have a further advantage in its easy grades and freedom from all curvature, there being no grade for near 300 miles east from Chicago, exceeding 26 feet per mile, and for the same distance the line may be, for all practical purposes considered straight.

Resolved, That it is expedient to organize a Co. for the construction of this work, and that the articles of association be so framed as to authorize an intersection with any railroad now in operation leading to Chicago, at any point not farther east than Laporte, under a fair and equitable contract as to the use of such road, or the construction of an independent road to the State line in the direction of Chicago, at the discretion of the board of directors.

Resolved, That the importance of this route as a general passenger thoroughfare demands a first class road in every respect, adapted to the highest rate of speed, and that with this view, and to include a full equipment, the capital stock for the portion within this state be fixed at two and a-half millions of dollars.

Resolved, That in organizing a company for the purpose of connecting Fort Wayne and Chicago, this meeting does not consider a connection with the roads of Illinois in the direction of La Salle, Peoria, or some intermediate point on the Illinois river, unimportant or impracticable, but on the contrary avow their intention of urging the construction of a road from some point on the Ft. Wayne and Chicago road, westwardly to the Mississippi, as soon as practicable.

Before proceeding to further action, the convention called upon gentlemen from other states for information, and Messrs. Hart and Fernon of Philadelphia; White, of Pittsburg; Dr. Merriman, of Bucyrus; Gen. Bliss, of Delphos, Ohio; J. R. Straughan, chief engineer of the Ohio and Indiana railroad; B. T. Morgan, chief engineer of the Peoria and Burlington road; Mr. Frazier, of Kosciusko; and Mr. Reeve, of Marshall, addressed the meeting.

A company was then organized under the title of the "Fort Wayne and Chicago R. R. Co.," by a subscription of stock to the amount of $50,000 and the election of the following board of directors:—S. Hanna, Fort Wayne; W. J. Walker, Laporte county; S. L. Anthony, Porter county; Wm. Williams, Kosciusko county; A. S. Wheeler, Marshall county; G. H. Hart, of Philadelphia. The convention then adjourned.

The British Iron Trade.

By a recently published table of statistics, we observe that the amount of iron now worked up every year in Great Britain is 2,500,000 tons; the same being estimated at a value of £10,424,000, or $50,500,000. From this trade no less than 50,000 men derive employment. In a lecture delivered by Mr. Blacknell before the Society of Arts in London, on the "Iron making resources of the United Kingdom," it is stated that the mineral fields discovered not long ago in the county of Northampton, (England), were known and worked by the Romans; and that the manufacture has gone on increasing in rapid ratio, especially since the year 1740. In the last twenty-five years it is said to have increased from 600,000 to 2,500,000 tons; which increase has only kept pace with the growing wants of the community. The progress of this manufacture, however, has been stimulated at various periods in its history by extraordinary events—such as, for example, the invention of the steam engine, the discovery of smelting by means of coal, and the introduction of railways and steamships.

Lake Shore Railroad.

The Supreme Court of this State, it will be remembered, recently granted an injunction to restrain the Sunbury and Erie railroad company from proceeding with certain work they had undertaken, in violation of the rights of another corporation.—At the same term an application was made by a private individual for an injunction to restrain certain parties from constructing a railroad from the State line of Ohio at the town of Erie, which is designed to connect with the New York and Ohio railroads, and thus carry off from the Pennsylvania improvements the trade of the Northwestern States. The right to construct such a railroad has uniformly been refused by our Legislature, and it has only been obtained by one of those tricks of legislation technically known as "snakes" by which the authority is quietly tacked on to another bill, and passed without the knowledge of nine tenths of the members. The right thus obtained is of incalculable value to parties in New York, and, rather than forego it, they would doubtless pay the State a handsome bonus—probably as much as a million of dollars—and the State has a right to demand such a sum for a privilege of such value, which is calculated to diminish so much the value of her own improvements.

But, as the matter now stands, the State gets not a cent for giving away this most invaluable grant—not even a tax upon the work, thus clandestinely authorized by the Legislature. It was to prevent this great wrong that the injunction we have referred to was asked for; but the court could not grant it, from the fact that the individual praying for it was only a private citizen, with no equity in the case, and no individual rights likely to be damaged by the work complained of. The Commonwealth is the true party interested in the case, and the only party whose rights are likely to be considered as entitled to the interference of the court for protection against the foreign corporations. The only remedy, therefore, in the matter, is an application on the part of the Commonwealth for the injunction which the court could not grant to a private individual. Unhappily, the Commonwealth is in an extremely awkward position, which incapacitates her from moving in the premises. Her Attorney General, by whom all her legal actions are to be brought, is retained by the opposite parties, and is thus pledged, not only to refrain from all proceedings against them, but obliged to defend them against all actions brought by the State of which he is the sworn legal adviser and counsel. Thus the work so injurious to the State goes on, without opposition from her, and the people are compelled to look on, powerless to prevent the injury, while the proper officer of the State is engaged in the service of her opponents.

Unless some remedy is devised speedily, this outrage upon the rights of Pennsylvania, will be irretrievably consummated, and the treasury will receive not a cent for a privilege that is worth millions to others, and the surrender of which is a surrender of millions by her and her citizens. We take it for granted that the sterling good sense and sound Pennsylvania feeling of Governor Bigler, will at once see the impropriety of retaining in office an Attorney General who has thus preferred the service of New York capitalists to that of his own State, and whose present position forbids any proper interference on the part of Pennsylvania, in a matter of such vast moment to her and her citizens. Such clients as the New York railroad capitalists are ready to pay counsel any sum, for services either done to them or neglected towards the State, and it is of the utmost importance that Pennsylvania should have a man as her legal representative who is not only totally free from all kinds of association with foreign interests, but sincerely devoted to her own prosperity and wealth.—*Phila. Ledger.*

The above article from the Philadelphia Ledger, has, we see, been copied with approbation by numerous papers in Pennsylvania. It expresses, we regret to say, the sentiment of the State as far as works in which the people of other States are interested, are concerned. Even the Pittsburgh Gazette endorses it to the fullest extent. This is a little ungrateful, considering that the Lake Shore road is a New York work. But for the capital furnished by this city, Pittsburgh would not have accomplished the first step toward the construction of her great Pennsylvania and Ohio line, with which she has just secured a connection with the great railroad system of Ohio and the West.—Without the aid received from this city, the Ohio and Pennsylvania could not for years have been built, neither could any of the Western roads which both Philadelphia and Pittsburgh expect to make tributary to themselves. With the exception of the Pennsylvania railroad, the city of Philadelphia will owe to this city all the advantages she expects to derive from the railroads not only of the West, but of Western Pennsylvania. As a poor compensation for all this, it would seem that we might have the privilege of passing through the State, untaxed; but this even is to be denied us.

The Philadelphians are determined if possible to break up the Lake Shore road. Their Courts of justice have been applied to aid in defeating it, but they decline to interfere, because in the language of the Ledger, "*no person is injured* by its construction." Millions will be benefitted by it, which fact among men recognizing the ordinary principles of justice, would be sufficient to disarm their hostility, if not to secure their approbation. Instead of this, however, the leading journals of the State are incessantly urging the Legislature to use the position that Pennsylvania occupies, extending as she does from Lake Erie to tide water, as a bar to all communication between New York and the West, except through the city of Philadelphia. They say "we hold the key to the trade of the West and we will allow none to use it but ourselves." This is their language, as we said before, we are sorry to find that it appears to express the sentiment of the State.

Our hope is, that the inveterate hostility of Philadelphia toward the above road, will not be successful in stopping its progress until after it shall be opened. The contest will then assume a new shape. It will then be between, not a handful of men on one side, and a powerful community seeking monopoly on the other, but between the public and the state. Only allow sufficient time for *this* fund to be raised, and we have nothing to fear. Allow the public the use of this road for six months and the closing it after such a period, would be an outrage too glaring to be thought of.

Philadelphia aspires to become the commercial emporium of the Union, a very laudable ambition and New York by her capital, is generously placing her in connection by railroad with every portion of it. Her ambition is a laudable one. To accomplish her object if attainable, she must no longer pursue a narrow and bigoted policy, but a broad and catholic one. It nature has designed her to become what she seeks to be, she will soonest realize her destiny by breaking down all obstacles to the freedom of trade, instead of erecting new ones. Great cities only can afford to be liberal. Illiberality is always an evidence of weakness. We shall give Philadelphia credit for her strength, when she herself ceases to distrust her own weakness.

Indiana.

Lawrenceburg and Indianapolis Railroad.—This company is progressing. At the late election, Messrs. G. H. Dunn, David Nevill, L. B. Lewis, James H. Foley, James Marshall, J. G. Montfort, James M. Ray, Harvey Bates, and William Robsen, were elected directors. This is an efficient board.

Railroad Commerce of Sandusky.

The Register contains an interesting article relative to the railroad commerce of Sandusky, from which we glean the following facts:

The receipts of leading articles by the Sandusky, Mansfield and Newark road were—

Wheat—From Feb. 12 to August 1, 1852	768,592	bush.
Wheat—From Feb. 12 to August 1, 1851	416,000	"
Increase in '52 (about 86 per cent	353,992	"
Flour—From Jan. 1 to Aug. 1, 1852.	80,067	bbls.
" " " " 1851.	29,999	"
Increase in '52 (166 per cent.)	50,068	"
Wool—For June and July, 1852	1,051,469	lbs.
Butter—June and July, '52	180,147	lbs.
Staves—July and August, '52	631,667	

This great increase upon the receipts of 1851, is owing to the extension of the road southwardly, and to the development of the agricultural resources of the country along its line.

Nine thousand four hundred and fifty-three tons of merchandize have been shipped from the Lake, over the road since April 1st; an amount exceeding the shipments of the whole year 1851, by 1,027 tons.

It is expected that the amount of grain transported over the Mad River road, during the coming fall and spring, will equal that carried over the Mansfield road. The completion of the new Lake steamers, at the opening of navigation the ensuing season will throw upon this route, a largely increased through passenger business. The steamers will be the largest upon the Lake, and will be unsurpassed by any others in elegance, comfort and speed. Their extreme length will be three hundred and twenty-five feet, with thirty-nine feet breadth of beam, and a tonnage capacity of eighteen hundred tons.

Kentucky.

Covington and Lexington Railroad.—We learn, says the Cincinnati Gazette, that this important work is now going forward to completion with great energy; the grade of the northern division is nearly finished; the iron for the whole line is purchased and paid for, and the work of laying down the rails is just being commenced.

This road will be of great importance to Covington and Cincinnati—the extension from Lexington to Danville has just been put under contract; and South of Danville towards McMinnville, Tenn., the country along the line is alive to the importance of this great work. A large amount of means has been raised towards the extension from Danville to McMinnville, there to connect with the road now in operation to Charleston, South Carolina, and through Winchester, Tennessee, to Huntsville, Selma and Mobile, Alabama, and thence to New Orleans.

This will be decidedly the shortest and most direct railway from Buffalo, through Cleveland or Sandusky, and Cincinnati, to the Gulf of Mexico and the South Atlantic coasts. It will also be the great line over which the products of the North and South are to be exchanged, and will afford the shortest and most pleasant route for the vast thro. travel between the North and South.

The whole line, except about eighty miles from Danville, Kentucky, to McMinnville, Tennessee, is now under contract and a large portion in Alabama in use.

The city of Covington fully apprised of the importance of this work, has just endorsed the bonds of the Covington and Lexington railway company

for $200,000, which makes them first class securities, and this too without risk to the city, as the road, when opened, will, beyond doubt, pay a large interes. on its cost.

Railroads in Missouri.

The majority of the committee of the senate of the state of Missouri, have reported two bills transfering all the title the state has in the land ceded by the general government to the Pacific railroad company and the St. Joseph railroad company. The minority dissented principally on the ground that, the act of congress required that the western terminus of the Pacific road should be fixed before the grant.

The committee also are in favor of the passage of a bill to aid in the construction of that branch of the Pacific railroad which leads to the Iron mountain. The report on this subject, by the chairman of the committee, Hon. Thomas Allen, is of general interest. It states that:

The mineral wealth to which this road points is probably without a parallel. The Iron Mountain and Pilot Knob are striking characteristics of Missouri, while the vicinity of Mine La Motte is considered a principality of mines, abounding in lead, copper, iron, cobalt and nickel. It is estimated that these mines would furnish, annually, a thousand tons for transportation, and that the Iron Mountain and Pilot Knob, together, under the influence of the stimulating effect of a railway, would probably furnish thirty-five thousand tons of freight annually. The lead mines and the pineries would also supply no inconsiderable amount of tonnage. The track of the road would run into the vicinity of large quantities of material, suitable for the manufacture of porcelain, near large quantities of granite, and of white and variegated marble, and immense leads of manganese. To say nothing of the convenience to be afforded by such a road to a considerable travel, and to the transportation of merchandize and the various products of the soil and the forest, the thorough developement of the mineral region is a matter of great importance to the whole state. The consumption of iron and other metals is increasing and hundreds of thousands of dollars are annually sent from our state, to import from abroad those articles which are lying in a natural state in the greatest abundance, in our own soil. Public policy, therefore, dictates that those measures should be encouraged and upheld, which, like the one proposed, will curtail the expenses of our people, and increase the wealth of the state.

Although a survey was made by the state in 1839, and by the U. States government two years ago, yet the Pacific railroad company have recently caused a new survey to be made from the line they are now constructing to the Iron Mountain; and while the route has been found a practicable one for a railway, the distance is found to be seventy to seventy-five miles, thus exceeding by twenty to twenty-five miles the distance to which that company are authorized by their charter to construct a branch.

Viewing this improvement as one of great interest and value, and one which, when completed, would be self-sustaining, and as connected with the matters referred to them, the committee have no hesitation in recommending a loan of the public credit to aid in its completion, not to exceed $750,000, upon terms of perfect safety to the state.

The people of the country through which the branch road would run have shown a disposition to subscribe liberally to its stock and the passage of this bill now, would give the enterprise assurance of complete success; and the corps of engineers now engaged upon its surveys might proceed to locate the route at once, and the work be immediately placed under construction.

In any event, it cannot be doubted that this communication with the Iron Mountain will be opened at no distant day, and be the means of furnishing the iron for the tracks of many future railroads in Missouri, and the valley of the Mississippi, and ultimately, perhaps, form a link in a chain of railways connecting the upper Mississippi with New Orleans.

Michigan Lake Shore Railroad.

A railroad convention was recently held at Racine, for the purpose of constructing a railroad from Milwaukee through the cities of Racine, Kenosha and Waukegan, to Chicago, along the Lake Shore. Hon. W. T. Richmond, of Racine, presided, and Messrs. Rufus King of Milwaukee, and C. S. Chase of Racine, acted as secretaries. A series of resolutions were passed expressing the sense of the convention strongly in favor of the road. Among these it was stated that this was to be the great trunk road leading through the State to Lake Superior in continuation of the National road from Mobile to Chicago. And that as the distance from Fond du Lac to Chicago by the way of the Milwaukee and Fond du Lac and the Lake Shore railroad, is 45 miles less than by the way of Janesville, and the road more feasible for construction; that the trade, travel and business of Fond du Lac and the country surrounding Lake Winnebago and her tributaries up to Lake Superior, would seek this channel of communication with the South and East in preference to any other road, that now or hereafter can be projected.

The following recommendation was also passed that the different cities, towns and counties upon the line of this road, issue their corporate bonds (running 20 years and drawing interest at the rate of seven per cent. per annum) for an amount in the aggregate of not less than $600,000, to aid in the construction of the road.

Suitable committees were appointed to carry out the ends of the convention.

Panama Railroad.

The Panama *Star* states that the roads between Cruces and that city are in very bad order, and large quantities of goods have been damaged in the transit. It consoles itself with the reflection that the railroad is hastening toward completion. In relation to that work it says:

We are informed that one half of the bridge for the Chagres river, over which the railroad is intended to pass, has reached its destination, and that the remainder is expected out, immediately. By the time this bridge is erected, it is supposed the road to Gorgona will be completed; the distance is now five miles, and it will probably be opened in less than two months.

The only travel, then, except in the cars, will be from Gorgona to Panama, a distance of about 20 miles, which is accomplished with mules; and in the dry season is rather a pleasant ride, occupying about five or six hours.

In twelve months from this time the whole road, according to the contract, will be completed to Panama, and then we shall be able to cross the Isthmus in a couple of hours.

Illinois.

Peru and Oquawka Railroad.—We are informed that the work on this railroad is going ahead with great rapidity all along the line. The new pile driver, after giving some trouble for a few days, is working now in fine style and doing great execution.—There remains to be finished about one mile of piling—the most difficult and expensive work on the whole line—but the energy which is now applied warrants the belief that it will be completed in the course of a few weeks. By this process the track will be elevated from six to eight feet above the ordinary level of the bottom, thus carrying it far above all ordinary high water. So soon as the piling shall be extended to the high land, dirt cars will be put in operation for the purpose of building an embankment along the line of piles. There is no current in the bottom, even at the highest stage of water; and any fears as to the washing of the embankment, heretofore entertained by some, are entirely groundless. The overflow of the bottom is always caused by back-water, and not by a descending flood.—*Bur. Telegraph.*

Railroad Subscriptions.

Louisville and Nashville Railroad.—All the surveys of the railroad made from Louisville, Ky., to Nashville, Tenn., have been completed and the cost is estimated at $5,000,000.

Mr. Shreve, the president of the road, gives assurance that so far as the road in the limits of Kentucky is concerned, he is ready to begin the work. The 1,000,000 subscribed by the city of Louisville, and the amounts subscribed by the counties along the line, and individual subscriptions in Kentucky, enable him to speak with confidence.

The proportion of the means necessary to the accomplishment of this great work by Tennessee is estimated at $1,000,000. Sumner county has subscribed $300,000, and Gallatin is made a point in the line. For the remainder, Nashville and the adjoinfng counties are looked to, and efforts are now making to make up the amount.

The Grand Jury of Jefferson county, Pa., have authorised an unconditional subscription of $95,000 to the stock of the Alleghany Valley railroad, being very nearly the full amount authorized by law.

The Grand Jury of Clarion county, have recommended a subscription on the part of the county, of the full amount authorised by law, ($168,000,) to the stock of the same company unencumbered by any conditions as to location or route.

The vote of the people of Lexington on the 18th September, on the proposition to subscribe $150,000 to the Lexington and Big Sandy railroad was affirmative—for the subscription 318; against, 174; majority 134.

Indiana.

Depot at Union.—The railroad companies of Indiana and Ohio, connecting at Union, have recently arranged their connections so as to afford as through lines from Indianapolis and the West to Pittsburg, Cleveland, Sandusky, Wheeling, Columbus, Dayton, and Cincinnati, every modern facility for the rapid, cheap and safe transportation of freight and passengers. Among other arrangements, such as for through tickets, checks, and freight bills, a general brick station, 400 feet long by 100 feet wide, is to be erected at Union, early next season, for the reception of the passenger trains of the several roads, besides their freight—depots and other buildings. Each company appears to be pressing their work to completion, and preparing the rolling stock for active operations at the earliest possible day.—When these lines are opened, the line from Indianapolis to Pittsburg will be about 16 hours, to Wheeling about 14, to Cleveland about 12, to Sandusky about 10, to Columbus about 7, to Dayton about 5, and to Cincinnati about 7 hours, and fares and freights between Lake Erie and our city, about the same as between the same points and Cincinnati, the distance being a trifle greater, but the grade much lower. The opening of these lines to the public, at an early day, will be a great matter for Central Indiana and the West—*Indianapolis Sentinel.*

Virginia.

Orange and Alexandria Railroad.—This road is now completed to the Rappahannock river, a distance of 50 miles from Alexandria, and the Gazette states that it has opened a new trade to that city. Already flour is arriving from miles on the Rappahannock river. Some of the members of the Board of Public Works, accompanied by the corporate authorities of Alexandria, viewed the road, as far as completed, on Friday last.

Ohio.

Scioto and Hocking Valley Railroad.—The meeting held in the city of Portsmouth, on the 15th of September, was a very important one; we learn that a subscription of $25,000 was made to the Maysville and Big Sandy road. The location of the route between Logan and Newark was also determined. Considerable rivalry existed between the towns of Lancaster and Somerset. The route through the latter place was adopted as being the best. The distance is about equal by both; but by proceeding through Somerset, a larger portion of the mineral region is spanned. Perry county has raised nearly $150,000, the amount agreed upon, and reliable citizens of the county have given ample security for the full amount.

Dayton and Western Railroad.—The following gentlemen have been elected directors for the ensuing year:

Henry L. Brown, J. D. Philips, V. Winters, Jonathan Harshman, John Rench, F. Gebhart, R. W. Steele, T. A. Philips, P. P. Lowe, H. Vantuyl, Seth Cook, E. M. Walker, D. Higgins.

Henry L. Brown was unanimously re-elected President, Rob't W. Steele, Secretary, and V. Winters, Treasurer.

The agreement entered into by the Board with the Indiana Central railway company, consolidating the two companies, the consolidation to take effect on the completion of the roads, was presented to the stockholders, and unanimously ratified and confirmed.

Cincinnati and Marietta Railroad Lettings.—We learn from the Scioto Gazette that the construction of the Marietta and Cincinnati railway, from the point in Vinton county heretofore let, to the Ohio river, at both Marietta and Belpre, have been let to Walter French and Co., of Lowell, Mass. These gentlemen agree to take in part payment $400,000 in the stock of the company—an amount equal to about twenty per cent. on the job. The Gazette says:

The road to Marietta and Belpre respectively, from the point of bifurcation 12 miles west of Parkersburg, will be constructed simultaneously or within the two years, so that the connection with Baltimore will be made so soon as the N, W. Virginia road can be completed from Three Forks to the Ohio river.

The energy with which the directors of our great Through Line are pushing forward the work, certainly entitle those gentlemen to high credit and the thanks of every friend of the mammoth enterprise. By this time next year, the iron horse will be busily transporting the black diamonds from the Jackson and Vinton mines to Cincinnati, and by the expiration of the twelve months following, we shall have an unbroken line of the best constructed railroad in the state, crossing through Chillicothe, the peninsula of Southern Ohio.

A Railway Train Struck by Lightning.

It has been somewhat of a problem whether anything in very rapid motion was liable to be struck by lightning. Steamboats, and railroad cars, under full headway, have been considered as pretty much exempt from the visits of the electric fluid. But one instance has come under our observation. This took place in France. The Moniteur de Loiret states that during a late thunder storm the electric fluid struck the baggage wagon of a train that was proceeding from Orleans to Paris, and after having made an irregular hole in it, passed thro' the trunks, boxes, bags, etc., without doing them any injury, and then ran along the iron chains which connect the cars together. The conductor, who was seated on the baggage wagon experienced a sharp electric shock, and all the passengers in the train one of a lighter description. Thus, it seems, that if a train is struck but little damage follows.—*Lynchburg Express.*

Pennsylvania.

Philadelphia and Sunbury Railroad.—Messrs. McGrann, Barry, and Dougherty, the contractors for the grading of the road from Shamokin to Ashland, the terminus of the Mine Hill extension, arrived here a few days since, for the purpose of commencing operations. They have also, we understand, the contract for re-laying the track from this place to Shamokin, with a heavy T rail, in the shortest practicable time. When these improvements, which connect us with the Reading railroad are completed, we shall have a continuous railway to Philadelphia, by the valley of the Schuylkill.—*Sunbury American.*

Susquehannah Railroad.—The Union county subscription to the Susquehannah railroad required that the work should be put under contract from Sunbury to Williamsport by the 1st Sept. The directors desired an extension of the time, as the surveys were not yet completed for a public letting; but one of the commissioners only being willing to extend the time, the directors were forced to close a contract upon two or three days notice, which they did on Tuesday, the 31st August. The Hon. George Schnabel, now of Williamsport, and Jonathan Nesbit of Lewisburg, have the 42 miles, which they are required to commence within thirty days. Both these gentlemen are well known to the public, as reliable, prudent, experienced, and responsible men. They are to be paid monthly certain prices for specified descriptions of work, and for specified materials. We have heard the opinion expressed that the terms are reasonable, and that $15,000 per mile will prepare the road for the cars. As no mode of letting the work was required, the directors (who are themselves stockholders) have done the best thing possible, and deserve credit for their arduous and uncompensated labors.

The line between Sunbury and Harrisburg, it is expected will be let within a few weeks, of which more public notice can and will be given.—*Lewisburg Chronicle.*

Virginia.

Manasses Gap Railroad.—The track will be ready for the cars at Piedmont by the 25th Sept. at Farrowsville by the 1st of November, and to a point within one mile of the top of the Ridge by the first of December. The cost of construction to the summit of the mountain will be $485,000. The cost of the road east of the Ridge, including construction, equipment and all other expenses, will be $607,000 or $14,366 per mile. The business of the road is very encouraging. The board has ordered five hundred tons more iron for the road from Farrowsville to the top of the ridge. From the top of the ridge on the western slope the road has been put under contract as far as the Shenandoah river. Favorable views of the extension to Paddytown, if it can be accomplished, are expressed. The continuation of the road to Harrisonburg is strongly urged. There is a reasonable prospect that the road can be put in readiness by May next as far as Wapping, in Warren county. The receipts from passengers and freight for August were two thousand dollars.—*Balt. American.*

New York.

Erie Railroad.—The Erie company have 22,000 tons of iron arrived and at sea for their second track which is being pushed with vigor. The entire iron needed for the Canandaigua and Niagara Falls R. R. has been shipped, and a large portion of it received and on its way to Canandaigua—the road will be completed to Batavia this winter. The force on the line is very large.

Baltimore and Ohio Railroad.

Travel to the West.—The enterprising Baltimore and Ohio railroad company have published their rates of travel to the West. Passengers going to the Ohio river get *through tickets* from Baltimore to St. Mary's, on the Ohio, for $11; to Marietta for $11¼; Zanesville, $12; Columbus, $14, and Cincinnati $16. Passengers arrive on the Ohio in twenty-nine hours from Baltimore, by way of railroad to Fetterman, 280 miles from Baltimore, then taking stages to St. Mary's, a distance of 84 miles. St. Mary's is 175 miles below Pittsburgh.—*St. Louis Intelligencer.*

Telegraph Between England and America.

The London correspondent of the National Intelligencer gives the following description of the new project for a submarine telegraph between Great Britain and America. The writer considers this new plan by far the most feasible yet proposed:

We stated, a few weeks ago, that a project had been formed for constructing a submarine telegraph between Great Britain and the United States by a route not before thought of, which would very materially shorten the line of water transit, render the transmission of intelligence much less liable to interruption, and most materially diminish the cost of construction and repairs. We have now the map of the proposed submarine lines before us.—They commence at the most northwardly point of Scotland, run thence to the Orkney Islands, and thence, by short water lines, to the Shetland and the Ferroe Islands. From the latter a water line of 200 to 300 miles conducts the telegraph to Iceland; from the western coast of Iceland another submarine line conveys it to Kioge Bay, on the eastern coast of Greenland; it then crosses Greenland to Juliana's Hope, on the western coast of that continent, in latitude 60 deg. 42 min.; and is conducted thence, by a water line of about 500 miles, across Davis's Straits to Byron's Bay, on the coast of Labrador. From this point the line is to be extended to Quebec.

The entire length of the line is approximately estimated at 2,500 miles, and the submarine portions of it at from 1,400 to 1,600 miles. The peculiar advantage of the line being divided into several submariue portions is, that if a fracture should at any time occur, the defective part could be very readily discovered and repaired promptly and at a comparatively trifling expense. From the Shetland Islands it is proposed to carry a branch to Bergen, in Norway, connecting it there with a line to Christiana, Stockholm, Gottenburg, and Copenhagen; from Stockholm a line may easily cross the Gulf of Bothnia to St. Petersburgh. The whole expense of this great international work is estimated considerably below £500,000; but to cover contingencies, it is proposed to raise that sum by 25,000 shares of £20 each. We confess that we consider this plan as by far the most feasible one which has been yet produced for connecting Europe and America by the electric telegraph.

Vermont and New Hampshire Railroads.

It is stated while every railroad in Vermont has involved the stockholders in heavy losses, the stock not being worth more than twenty or twenty-five cents on a dollar, yet the real estate in the State has risen in value more than the whole cost of the railroads, because of the ready access to the city markets, and the stimulus to the enterprise of producers. So with the bankrupt lines in this State. Besides their daily convenience and utility, to be reckoned largely in dollars and cents, they have already added more than their whole cost to the value of the timber lands about them.—*Claremont Eagle.*

Plattsburg and Montreal Railroad Completed.

We learn from the Plattsburg and Montreal papers, that the track of the Montreal and New York railroad was connected with the track of the Plattsburg and Montreal railroad at the Province line on Thursday evening last, thus completing the iron connection between lake Champlain at Plattsburg and the river St. Lawrence at Caughnawaga—It is understood that the ensuing week will be devoted to putting the track of the Montreal and New York railroad in complete running order, and finishing the turn-table at Caugnawaga, and the regular passenger trains between Plattsburg and Montreal will commence running on Monday the twentieth instant.

The business of the Plattsburg and Montreal R. R. is steadily and rapidly on the increase. Arrangements have been completed with connecting lines of road, so that this route will be (what has always been claimed for it) *the shortest, most expeditious and reliable route* between Montreal and Ogdensburg, Boston and New York.

The final opening of the entire road from Plattsburg to Montreal will take place in a few days; of

which due notice will of course be given, as well as of the regular running of the trains.

American Railroad Journal.

Saturday, October 2, 1852.

Foreign Investments in this Country.

The present low price of money in England, the high rates which it commands here, and the great attractions which this country holds out for the profitable investment of capital, is turning the attention of foreigners not only to our securities, but to our public works, with a view to their engaging directly in their construction. As an evidence of this fact, we would state that a number of contracts have already been closed for Provincial roads, by Wm. Jackson, Esq., a gentleman of the highest respectability in England, and who represents a very extensive and powerful party engaged in railways and similar works. Mr. Jackson, we understand, proposes to examine some of our projects, with a view to their construction. We have also the satisfaction of stating, that the eminent firm of Fox & Henderson, well known as the builders of the *Crystal Palace*, are also looking to this country as a new field for their enterprize, and propose to connect themselves more or less intimately with the railroad movement in this country, and for the purpose of opening the way, they have despatched their agent, A. Fitzgibbon, Esq., an experienced Engineer, who may be found by parties interested to call upon him at the College Hotel, in New York. Mr. Fitzgibbon, we understand, is already prepared to take orders for every description of railroad iron, machinery and fittings, such as rails, chairs, fastenings, switches, crossings, turntables, iron tanks, columns, cranes, crab winches, wheels and axles, springs, axle boxes, iron hoops and bridges, Rumpers locomotive and stationary engines, etc., etc.—Mr. Fitzgibbon pledges the well known reputation of the firm he represents, for the quality of all articles furnished by him. As they are determined to offer nothing that is not of the best quality, preferring to take the wise course of securing business from the excellence rather than the cheapness of the articles furnished by them.

Messrs. Fox and Henderson have one of the largest machinery establishments in England, and their great facilities enable them not only to turn out work at the lowest rate but of the best quality.

Nova Scotia Railroads.

A scheme of internal improvement has been set on foot by the Provincial Government, the object of which is the construction of a system of rail roads. It includes the appointment of a board of five commissioners to aid by their counsel in carrying out the projected works. Surveys of a common trunk extending to the Western frontier, to the eastern and western counties, and of branches to Victoria—Beach and the Pictou coal mines are provided for. The executive is recommended to make preliminary arrangements subject to the sanction of the Legislature, for the construction of 30 miles of railway in each of the next ensuing ten years, making 300 miles in all, connecting New Brunswick, the coal mines at Pictou and the western counties with Halifax. "Circulars" have already been sent to eminent bankers and other capitalists to ascertain the lowest terms upon which money will be advanced upon Provincial Securities, and also to experienced contractors, on both sides of the Atlantic, enquiring at what rates and upon what terms they will construct the several lines of railway. Replies to all these queries will, ere long, be forthcoming, and the Government, armed with the necessary information, will be fully prepared for action when the Legislature is convened for the "despatch of business."

Tunnel under the Hudson River at Albany.

There seems to be good reason to believe, that this proposed work will soon be commenced under the auspices of the various railroad companies terminating at Albany. The proposition is, to excavate a trench in the bed of the river of sufficient depth to admit of the construction of an arch, of a capacity to allow the passage of railroad trains.—The water is to be kept out of the trench while the work is in progress, by the use of coffer dams. It is believed that there are no serious obstacles to the execution of the proposed work, and that it can be completed at moderate expense.

A work like the one proposed, or a railroad bridge at Albany, is indispensable to the roads terminating at that point. All the produce and merchandize brought to that city, and designed to be forwarded either east or south, by railroad, has now to break bulk, and to be taken across the river at very considerable expense; a process involving serious loss and inconvenience to forwarders, and to railroad companies. There are now four very important lines of railroad terminating upon the left bank of the Hudson, opposite Albany, which are the outlets to market, of the produce collected at that city, viz: the Hudson River, Harlem, Housatonic, and the Western. Upon the right, the great line is the road to Buffalo, most of which has a double track, and is now capable of transacting an immense business. In addition to this, is the Susquehanna road, which is soon to be built, and through which the city of Troy, as well as Albany, is to be supplied with coal. All connection between these roads is now carried on by boats in the summer, and upon the ice, during the winter season.

From New York to Lake Erie, the shortest equated distance, must in our opinion, always be by way of Albany. There is but little difference in correct distance, between this, and the more direct route by way of the Erie road, but the excess is much more than counterbalanced by the superiority of grades and curves in the former. This fact must always secure to this route an enormous traffic, requiring uninterrupted communication with New York, which the proposed work will effect. When its necessity to our great business and travelling interests is considered, and the abundant means of the companies interested possess, we have no hesitation in believing, that it will be immediately commenced and successfully carried out.

Pennsylvania.

Pennsylvania Railroad.—The board of directors have adopted a resolution authorising the Chief Engineer to cause the whole of the main line of the road between Pittsburg and the Juniata division of the Pennsylvania canal, to be completed for a double track as soon as it can be economically executed, with a view of finishing the whole road in like manner as early as practicable.

Pennsylvania.

York and Cumberland Railroad.—At an election held Sept. 23d in York for president and directors of this road, the following gentlemen were elected for the ensuing year:—John Herr, president. Directors—John P. Kennedy, P. H. Sullivan, Alex. Fisher, of Baltimore; Judge Fred'k Watts, Martin Crull, John Hough, of Pennsylvania.

Massachusetts.

Fairhaven Branch Railroad.—The New Bedford Standard states that the prospects of the immediate commencement of the road are most flattering.—The subscriptions to stock now amount to $155,000, leaving but $10,000 to make up the sum desired. The subscriptions are as follows: Fairhaven, $115,000; New Bedford, $25,000; Fall River, $15,000.

We learn that a public meeting of the stockholders will soon be convened, and that the necessary steps will be taken to commence the construction of the road at once. The amount now required, $10,000, is comparatively a small one, and can be very easily secured. Our Fairhaven friends are entitled to great credit for their untiring efforts for the success of this enterprise.

Massachusetts.

Newburyport Railroad.—The following gentlemen have been elected directors for the ensuing year. C. J. Breckway, Geo. Coggswell, Jas. B. Morse, Geo. J. Tenney, Richard Fowler, Edward Kimball, and Tappan Pearson. The annual report states that the road had been worked at a disadvantage during the first six months. During the last six months the business has increased very handsomely, and an arrangement on equitable terms has been effected with the Boston and Maine road, by which a fair remuneration is obtained for the Boston business which this road creates and facilitates.

New York.

Albany and Susquehanna Railroad.—At the annual election recently held in the city of Albany, the following gentlemen were elected directors of this company:—

Edward C. Delavan, William V. Many, Robert H. Pruyn, Franklin Townsend, John N. Wilder, Erastus Corning, jr., James Redd, Albany; E. R. Ford, Oneonta; Geo. W. Chase, Maryland; Arnold B. Watson, Unadilla; Charles Courter, Cobleskill; Edward Tompkins, Burlington; Timothy Ruggles, Harpersville.

The following are the officers of the Board:—

Edward C. Delavan, President; E. R. Ford, Vice President; Robert H. Pruyn, Secretary and Treasurer.

Railroad between Albany and Goshen.—A meeting was held in Montgomery, Orange county, on the 18th Sept. last, to take measures for urging the construction of a railway from Goshen to Albany.—Resolutions were passed and committees appointed to forward the enterprise.

Attica and Olean Railroad Company.—The Attica Atlas says a convention of the stockholders of this company met on Thursday in that village, when it was ascertained that the requisite amount of stock was subscribed, and the ten per cent paid in. Articles of association have been drawn up and signed, and the company is therefore organized.

Missouri.

The Pacific Railroad.—We learn from the St. Louis Intelligencer that the surveys for the extension of the road are progressing rapidly. The completion of one to the Iron Mountain demonstrates that no serious difficulty is to be met on that route, whilst the engineers engaged on the South Western route report very favorably. On the Western or Independence route, the parties are engaged in correcting or modifying the routes originally made. Other parties of surveys have been delayed in their progress by sickness; but are now being pushed forward with vigor.

European and North American Railroad.

The St. John papers state that a contract for the European and North American railroad, from Schediac and the Nova Scotia line via St. John to the Maine boundary, is closed by the executive and the company with William Jackson Esq, M. P., in behalf of himself and associates. The price per mile is £6,500 sterling. The province takes in stock £1200, and leaves the company £1800 per mile, the loan bearing interest at 6 per ct., secured by a first mortgage on the whole road, stock, stations, etc. The road and all equipments to be of the very best description, such as the best English roads, and capable of being travelled over at the greatest speed.

The Great India Rubber Case.

The celebrated *India Rubber* case, of *Goodycar*, vs. Day, has at last been settled by a decision in favor of Mr. Goodyear, upon "all points," as lawyers say. Those of our readers chiefly interested in this matter are our railroad companies, as it settles the question as to the ownership of the *Rubber Spring*. The New England Car Spring company, being the representatives of Mr. Goodyear, as far as the right to use his patent for Springs is concerned, are the only party entitled to manufactnre and sell, "*Ray's Patent India Rubber Car Spring.*"

To Contractors.

Contractors will do well to notice the Advertisement of the Dayton and Cincinnati railroad company, to be found in another column. The tunnel advertised is a heavy piece of work, and will prove a good job to contractors who have enterprise and capital.

Nashville and New Orleans Railroad.

We learn that Jas. H. Grant, Esq., now Chief Engineer on the Nashville and Chattanooga railroad, has received the appointment of Chief Engineer on the Northern division of the Nashville and New Orleans road, extending from Jackson, Miss., to Nashville, a distance of 300 miles. Mr. Grant will proceed at once to organize surveying parties for the purpose of locating his portion of the road. He still retains his connection with the Nashville and Chattanooga road.

South Carolina.

King's Mountain Railroad.—We learn from the Yorkville *Miscellany* that the second annual meeting of this railroad company was held at Yorkville on Thursday last. The representation of stock was large, and the meeting a harmonious one. The reports of the officers were highly satisfactory. A president and eight directors were elected as follows:

President.—Wm. Wright.

Directors.—John S. Moore, D. S. Wright, Dr. James M. Lowry, Dr. John F. Lindsay, John H. Adams, George Steele, F. H. Simril, Dr. W. T. Miller.

Georgia.

South Western Railroad.—The subscription required to insure the extension of this road to Americus has all been taken up. The route has been lately gone over by an engineer, who reports it quite favorable. The road will be well constructed with a T rail. The survey and location will doubtless be commenced during the present autumn, or as soon as the proper preliminary steps can be taken and engineering parties organized.

New Iron and Car Works in Ohio.

We invite the attention of our Western friends, to the advertisement of W. W. Wetherell's Iron and Car Works at Sandusky, Ohio.

Stock and Money Market.

The money market continues very easy, with pretty large transactions in railroad securities.—Such companies as are able to make a fair show of stock subscriptions, can readily obtain any necessary balance to complete their roads upon reasonable terms. On the whole, our railroad projects never stood higher in public estimation than at the present moment, and there never has been a period in which capital has been supplied more liberally toward their construction.

The bonds of the Dayton and Michigan railroad company, sold by Winslow, Lanier & Co., on Saturday last, brought from 90 to 94, a very fair price but not so high a figure as the excellence of the project warranted. The Springfield, Mount Vernon and Pittsburgh bonds, offered by Messrs. Delano, Dunlevy & Co. were not sold, the offerings not coming to the limits fixed for them. A portion of this loan has since been disposed of in Philadelphia at satisfactory rates. This too is an excellent project, both as regards through and local business. It is looked upon with especial favor in Philadelphia, being there regarded as an extension toward Cincinnati of the great Pennsylvania, and Ohio and Pennsylvania lines. There has been recently subscribed in that city $100,000 to the capital stock of the above road.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 2, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	109¼
U. S. 6's, 1862	116
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¼
U. S. 6's, 1868	119¼
U. S. 6's, 1868—coupon	119¼
Indiana 5's	91¼
Indiana 2½	52½
" Canal loan 6's	95¼
" Canal preferred 5's	48½
Alabama 5's	95
Illinois 6's, 1847	81
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	108
New York 6's, 1854-5	108¼
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110
New York 5's, 1854-'55	107
New York 5's, 1858-'60-'62	105½
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	118
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	100
Tennessee 6's, 1880	107½
Virginia 6's, 1886	111½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	103
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1863-1871	101½
New York 7's, 1857	110
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	98
Hudson River 1st mort., 7's, 1869	107½
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	101½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 30.	Sept. 23.
Albany and Schenectady	106	107
Boston and Maine	107	108
Boston and Lowell	—	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	80	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	131½
Eastern	98	98
Erie	86½	87
Fall River	—	—
Fitchburgh	105½	105
Georgia	—	—
Georgia Central	—	—
Harlem	72	72½
" preferred	111½	111½
Hartford and New Haven	—	127
Housatonic (preferred)	35	35
Hudson River	73	75
Little Miami	—	—
Long Island	28½	25
Mad River	—	99
Madison and Indianapolis	107	116½
Michigan Central	110	111
Michigan Southern	123	123
New York and New Haven	113	113
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53	53½
Ogdensburgh	26½	27
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	34½	34½
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	99½
Rochester and Syracuse	122	122
Stonington	59½	61
South Carolina	—	122½
Syracuse and Utica	130	138
Taunton Branch	115	115
Utica and Schenectady	139	140
Vermont Central	18½	18½
Vermont and Massachusetts	20	22½
Virginia Central	—	40
Western	104½	105
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Wisconsin.

Green Bay, Milwaukee and Chicago Railroad.—In another column is a notice of a railroad convention held at Racine, at which strong resolutions were passed to begin at once the construction of a railroad to connect Milwaukee and Chicago, and running through the other towns on the Lake Shore. It is now stated that responsible capitalists stand ready to build the road for $1,135,000, and take three-fourths of it in stock, provided the balance, about $290,000, can be made up from the cities and towns on the line of the road. This estimate includes not only the construction of the road but its equipment, including 9 locomotives, 18 first class modern passenger cars, 36 freight and forty gravel cars, excepting only the depot buildings.

The report of the chief engineer of the Green Bay, Milwaukee and Chicago railroad, C. R. Alton, Esq., presented to the board of directors 2nd August last, embraces the results of his examination of the line and its financial prospects. From it we learn that the general features are favorable and that the road may be constructed in a nearly direct line with very easy grades. The length of the road from Milwaukee river near Walkers' Point bridge to the State line is 38·791 miles, and the entire distance between Milwaukee and Chicago will not greatly exceed 85 miles.

Of the distance between Milwaukee and the State line, the grades are:

Level ..... miles	12 244
Under ten feet per mile.....	5.720
Between 10 and 20 ft. "	5.302
" 20 and 30 "	8.420
" 30 and 35 "	7.105
	38 791

It is thus seen that nearly half the entire line is level, or under ten feet grade to the mile.

The total length of curved line is 3,809 miles, and the radii of curvature vary from 2,786 feet to 18,343 in length.

The estimates are made for a first class passenger road, to be laid with T rail, not weighing less than 60 lbs to the yard.—Including right of way, grading, ballasting, bridging, superstructure, depots and grounds, equipments, engineering, and office expenses, these estimates on the line from Milwaukee to the state line amount to $551,519, or an average of $14,271 per mile. Assuming this basis the total cost of the road between Milwaukee and Chicago, 85 miles, fully equipped with locomotives, etc., would be $1,208,505 35.

The line of road offers many facilities for the rapid and cheap construction of a road.

Passing through the heavy belt of woodland that borders the western shore of lake Michigan, the finest oak timber can be obtained at a comparatively trifling cost, for the formation of ties; and with the ports of Milwaukee and Chicago at either terminus, and Racine, Kenosha and Waukegan intermediate, opportunities are afforded of landing and delivering iron at five different points, thereby saving the delay and expense attendant upon the transportation of this material over a great length of line; facilitating a commencement, if thought desirable, at all these points simultaneously, and ensuring the completion of the road in a much shorter space of time. These various facilities will perhaps diminish the cost of construction, and may bring it considerably below the foregoing estimates.

The fertility of the soil, the salubrity of the climate, and the energy of the population on the western shore of lake Michigan, are not surpassed in the west. The commerce of the lake is already immense, and the most visionary speculations as to the increase of that business and the amount of travel between Wisconsin and the eastern markets may fall far short of the reality that the next ten or fifteen years will exhibit. The extension and completion of the Milwaukee and Mississippi, of the La Crosse and Milwaukee and of the M. and Fond du Lac railroads, together with the numerous plank roads in progress, will pour on this line the varied productions of as fertile a region as the sun ever shone upon.

The population directly dependent and tributary to the road is thus enumerated in the report:

Milwaukee city and Co., Wisconsin.	35,000
Racine " "	17,000
Kenosha " "	13,000
Washington " "	21,500
Waukesha " "	21,500
Portions of Lake Co. and Cook Co., Ill, ...	12,000
	120,000
Incidentally interested.	
Dodge county, Wisconsin.	21,000
Fond du Lac Co. "	16,000
Sheboygan " "	9.000
Jefferson " "	16,800
City of Chicago..	35,000
Total	217,800

It is further stated, as a fact worthy of attention, that by the present line and the contemplated road, from Milwaukee to Fond du Lac, that the distance from Chicago to Fond du Lac will be only 145 miles, whereas by the Rock River and U. V. road, via Zanesville the distance is 190 miles.

The following are the estimated revenue, expenses, etc., on the whole line between Chicago and Milwaukee:

Passengers.		$234,750
Freight		93 900
Mails		3,000
Total revenue		$331,650
Deduct operating expenses	$110,550	
Repairs and renewal	25,000	135,550
Nett revenue		$196,100

Equal to 16½ per cent on cost of road.

Or, assuming the calculations of revenue on a corresponding distance as made by the engineer of the Milwaukee and Mississippi railroad.

Receipts, 85 miles.		$340,000
Deduct operating expenses	$113,333	
Repairs and renewal	25,000	138.333
Nett revenue		$201,667

Or 16½ per cent on cost of road.

The report concludes with an approximate estimate and general view of the prospects of the road, when extended north from Milwaukee to its terminus on Green Bay.

The distance from Milwaukee to Green Bay, following the line prescribed by the charter, through the villages of Grafton, Port Washington, Sheboygan, Manitowoc, and Depere will not probably exceed 115 miles. Assuming an average cost upon this portion of the line, of $15,000 per mile, and we arrive at the following result:

Green Bay to Milwaukee, distance 115 miles, cost	$1,725,000 00
Milwaukee to Chicago 85 miles cost.	1,208,505 35
Total distance, 200 miles, cost	$2,933,605 35

The proposed line would touch lake Michegan at most of the important points north of Milwaukee, and would attract the large amount of business and travel that must eventually flow from the counties of Washington, Sheboygan, and Manitowoc; with the incidental advantages that the plank road now nearly completed from Sheboygan to Fond du Lac, and the road now being constructed from Manitowoc to Menasha and Grand Chute on Fox river, together with the contemplated Manitowoc and Mississippi railroad, must afford, in securing to this line the productions of at least a portion of the fine region of country bordering upon lake Winnebago. In addition to this, the connection with Fox river at Green Bay, with an eventual continuation to lake Superior, will open a winter as well as a summer outlet for that extensive region of country lying north and north-west; rich in minerals, the productions of the forests and fisheries, and highly favorable for agricultural pursuits.

The report is accompanied by the acts of incorporation and amendment to the charter of the company by which very comprehensive powers are given.

Section 1st, enumerates the original corporators and confers the title of the company and usual rights and powers of a corporation.

Section 2nd, authorises the making of surveys and the construction of a road with one or more tracks from the city of Milwaukee through the cities of Racine and Kenosha to the Southern state line, and also from the same point, via the village of Grafton or Cedarburgh, or Port Washington, Sheboygan, Manitowoc, and Depere, to some point on Green Bay in the county of Brown.

Section 3d, fixes the capital at $500,000 in $100 shares.

Section 4, prescribes the opening of subscription books within two years after the passage of the act, and after 30 days notice in a newspaper printed in the city of Milwaukee.

Section 5, provides for the choice of directors and organization, after the subscription of $100,000.

Sec. 6. The directors are empowered to call in the payments of subscriptions after 30 days notice in a Milwaukee paper, each instalment not to exceed 25 per cent per share and not to be made payable at any place out of the counties through which the road passes.

Sec. 7, The directors are further empowered to make the rules and by-laws for the transaction of the business of the company, and determine the width and number of tracks, and the amount of toll, etc.

Sec. 8, gives a right of entry on land, to survey and construct the road, and prescribes the form of settling the compensation for the same when taken or entered on.

Section 9, requires the company to restore to their original usefulness public and private roads and also streams and water courses on the line of the road.

Section 10, prescribes the division of net profits over 6 per cent and that no accumulation fund exceeding 1 per cent on the profits shall remain undivided for more than 6 months.

Sec. 11, fixes the damages in case of obstructions or injuries on the road.

Section 12, makes it obligatory on the company to provide wagon ways in passsing through the lands of each individual.

The act amending the charter. 1st section gives authority to borrow money at any rate of interest.

Sec. 2, authorises the purchase of lands for the purpose of procuring gravel and material and also the re-sale of the land after the construction of the road.

Sec. 3, allows an extension to some point on lake Superior, or to Minnesota territory, and an increase

of the capital stock to meet any exigencies of the road.

Section 4th, permits connections with roads in the state of Illinois by purchase or lease.

Sec. 5. The company are required to commence the extension in two years from the date of the amended act, and complete the same within ten years.

For the American Railroad Journal.

Thaddeus Seleck's Collision Director.

We take pleasure in calling the attention of rail way companies and the public to the inventions of Mr. Seleck, of Greenwich, Connecticut, which he is now engaged perfecting; the object of which is to prevent the loss of life and property, which so frequently and unfortunately occurs by the collision of trains.

Mr. Seleck's inventions consist of a new method of arranging the platforms, of a plan affording additional security to the break man, and several other matters connected with what is essential in the safe running of a train.

He proposes to make the platforms diagonal to the line of the centres of the cars, in such a manner, that if the precautions fail to prevent a collision, the cars will be swung upon their centres, one end in one direction and the other in that opposite to it. The arrangement is to include the locomotives and tenders as well as cars of all kinds. The locomotives of one train cannot when the cars are fitted, as Mr. S. suggests, run through another, as they would throw one another off the track, or rather swing each other on the track in opposite directions.

He also proposes to fit the trains with a look out station for a pilot, and to have it so connected that there shall be a connection to the throttle valve and whistle of the engine and brakes of the tender, and suggests that the pilot shall have nothing to do but keep a look out ahead. Engine drivers and pilots are separate officers on steamers, and there is the same necessity for as much precaution on a railway. It is impossible for an engine driver, behind the chimney, having other duties of importance to perform, to keep an uninterrupted and careful look out at all times.

The plan also proposes to have the brakesmen of the cars inside, in the angle of the car formed by the diagonal platform. Trains are frequently broken up and much loss is caused by the brakemen knowing their danger and leaving their posts, several moments before they might if more thoroughly protected. As the platforms are most frequently broken the first thing in case of accident, the brakesmen who stand upon them are more exposed than any other person on the cars, while they should be as much protected as possible in order that they may guard the life of others.

The inventor also claims, among other things, that the cars being made with diagonal platforms and ends, the dust of the road will draw through between them, and pass the train without inconveniencing the passengers.

Several contrivances are also suggested for the arrangement of the seats and the window blinds, to prevent inconvenience from dust, and accident in case the trains run off the track.

Mr. Seleck has, we understand, taken the means to secure himself in the legal rights vested in his inventions, and is making vigorous efforts to introduce what, if successful, will be substantial improvements.

Care must be taken that the angle of the platform is such that the cars will not be too easily reversed on the track, but this can readily be done.

Mr. Seleck's contrivance, it will be seen, guards against the effects of a collision, where one train runs into the rear of another, as was the case in the late accident on the Erie railroad.

From Mr. Seleck's connection with the mechanism of some of our largest and most important public works, he certainly has had sufficient experience to enable him to form correct views upon such matters, and his opinions are backed up by those of some of our most learned and skillful Engineers.

CAUTION.

Remarks.—The importance of having a man upon every locomotive, who shall have no duty but to keep watch of the track ahead, is too obvious to require argument. It is impossible for either the engineer or fireman, properly to attend to their own duties, and maintain a sufficiently strict watch over the track. The watchman should of course, as Mr. Seleck suggests, be placed upon the front of the engine, a position which will give him the most extended view of the road.

Mr. Seleck's arrangement for preventing the destructive consequences of collisions, will, we have no doubt, answer the ends proposed to a very considerable extent. As at present arranged, both the locomotive and cars come into direct contact and the *momentum* of the trains exhausts itself *instantly* in the most destructive manner possible. By the arrangement proposed, more time is allowed for the purpose, and the bodies brought into contact are thrown from, instead of mutually demolishing, each other.

The plan proposed is simple, and will be readily understood by every one. Mr. Seleck is an ingenious and practical man, and familiar with the operations of railroads. His plans have secured the approbation of some of our most experienced railroad men, and we commend them to the consideration of the railroad interest.

ED. AMERICAN R. R JOURNAL.

New-York.

Utica and Syracuse (Straight Line) Railroad.—The Oneida Herald contains the following statement as to this projected air line connection between Utica and Syracuse.

This company is unlike those that have been projected in this vicinity within the past few years, and have died almost before they had an existence. This is a real organization, having at its head our most substantial and most energetic citizens. On Saturday last, the articles of association were drawn; yesterday nearly $350,000 of the stock subscribed, and the 10 per cent. required by law paid in. And already the articles are filed in the office of the Secretary of State.

The capital stock of the company will consist of $1,000,000. The Board of directors is composed of the following gentlemen: John T Clark, Oswego; Wm. B. Welles, George Curtis, Hiram Denio, E. M. Gilbert, Utica; Delos DeWolf, Oswego; Samuel Beardsley, Geo. C. Tallman, B. D Hurlburt, O. B. Matteson, Utica; John Mott, Sangerfield; Salmon Case, Vernon; Eneas P. Clark, Clark's Mills.

Among the subscribers to the capital stock, we may name Wm. Walcott, James S. Lynch, James Sayre, J. V. P. Gardener, Charles S. Wilson, Willard Crafts, Josiah Case, and A. G. Dauby.

After about $350,000 had been taken, the books were closed, so that opportunity might be given for other places to become interested in the company.

Engineers will be put upon the route next week. It is expected that John T. Clark, a well known engineer in whom the entire community have the utmost confidence, will have charge of the survey. The route will probably run through New York Upper Mills, Clark's Mills, Vernon, Chittenango, etc. The distance will be about forty-six miles, or eight miles less than by the present line.

Notice to Contractors.

OFFICE OF THE DAYTON AND CINCINNATI (SHORT LINE) RAILROAD COMPANY.—CINCINNATI, Sept. 20th, 1852.—RAILROAD LETTINGS.—Sealed proposals will be received at the office of the Company; situated on the south side of Sixth street, between Main and Walnut, until Wednesday, October 20th, 1852, at 5 o'clock P. M., for the preparation and construction of section No. 1 of the road of said Company ready for the superstructure.

This section is the heaviest on the line, and embraces the excavation of a tunnel measuring some six thousand feet in length, with two thousand feet of arched approaches in addition, and from two to four miles of the road bed. The job of masonry on this section will be heavy, and the whole offers to responsible and energetic contractors, one of the most extensive and compact sections of work ever offered in the West.

The tunnel passes through stratified blue fossil limestone and indurated marl, and will be of a width to accommodate double tracks, walled with stone, and arched with brick. The Company desires that the work shall be commenced as soon as possible after the letting, and completed at the earliest practicable period.

Other portions of the work are in course of preparation for letting, and if adjusted may be offered at the same time.

The plans and specifications will be ready for inspection at this office at least two weeks prior to the letting.

By order of the Board of Directors.

SAMUEL H. GOODIN, President.

JOHN C. THORP, Secretary.

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*

ELIJAH PACKARD, *Superintendent.*

SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO., of Dayton, Ohio The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.

Oct. 2, 1852. 1y*

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.
Portland, Sept. 21, 1852. tf

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.
September 9, 1852. 2m

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To Chief Engineers.

A YOUNG MAN is desirous of a situation, either in Field Work, or as Practical Draughtsman. Has just completed an engagement in this country; before which, was engaged for six years with an Engineer in Scotland—part of the time as Draughtsman. Is in possession of all instruments necessary for Surveying, Leveling, etc. Please address J. H. STEWART, Box 70, Post Office, New York.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

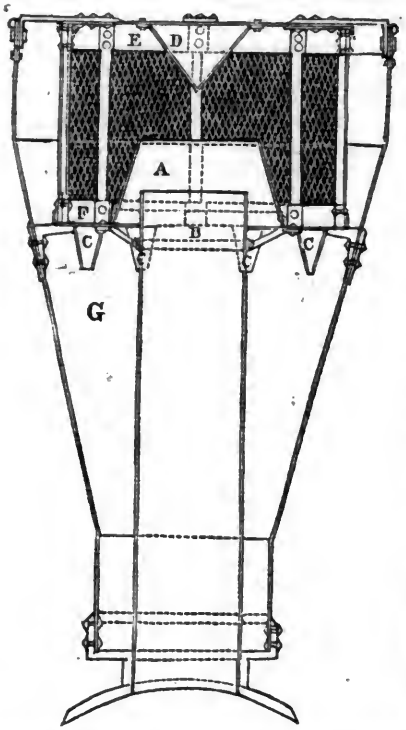
Also—

MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc. WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

Mr. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD. Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs. Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,

BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,

Importer of Stationary 191 Pearl st., N. Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,

Poughkeepsie, Dutchess county, N. Y.

July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL RAILROAD, NEW YORK, SEPTEMBER, 1852.—Sealed Proposals will be received at the office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging, and Superstructure, or either of them, with, or without materials on the following Divisions of the Illinois Central Railroad, to wit:—

3rd Division from Township No. 1, North of the Base Line of the 3rd principal meridian, including sections 113 to 151	39 miles.
4th Division, terminating at Decatur, including sections 152 to 204	53 miles.
5th Division terminating at Bloomington, including sections 205 to 247	43 miles.
7th Division from Lasalle to Freeport, including sections 309 to 386	78 miles.
11th Division from Urbana to S. line T. 12, including sections 583 to 630	48 miles.
12th Division terminating at the junction of Chicago Branch with the Main Line, including sections 631 to 704	74 miles.
Total	335 miles.

Proposals may be for the entire length of each division, or for the following sections:

3rd Div., for sec.	113	to	135	inclusive	23	miles.
" "	136		151	"	16	"
4th " "	152		180	"	29	"
" "	181		204	"	24	"
5th " "	205		226	"	22	"
" "	227		247	"	21	"
7th " "	309		312	"	4	"
" "	313		324	"	12	"
" "	325		352	"	28	"
" "	353		370	"	18	"
" "	371		386	"	16	"
11th " "	583		608	"	26	"
" "	609		630	"	22	"
12th " "	631		650	"	20	"
" "	651		669	"	19	"
" "	670		681	"	12	"
" "	682		690	"	9	"
" "	691		704	(more or less)	14	"

Proposals will be received at the office in Chicago, until the 11th day of October, 1852.

Profiles, Plans, and Approximate Estimates of quantities will be ready for inspection, and blank forms for proposals will be furnished at No. 50 Wall street, New York City, or at the office of the Chief Engineer in Chicago, Illinois, and after ———1852, the same as relates to the 3rd and 4th divisions at Vandalia, to the 5th division at Bloomington, to the 7th division at Lasalle and Freeport, to the 11th division at Urbana, and to the 12th division at Vandalia.

Payments will be 80 per cent cash, and the balance on the completion and acceptance of the work in cash, or 7 per cent construction Bonds, at the option of the Company.

Satisfactory references will in all cases be required. R. B. MASON, Chief Engineer.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

PROSSER'S

PATENT LAP-WELDED

Wrought Iron Boiler Tubes,

ALSO,

Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

Iron Tubes for Artesian Wells, screwed together flush on either side.

THOMAS PROSSER & SON, Patentees,

28 Platt street, New York.

To Contractors.

SEALED PROPOSALS will be received at the Engineer's Office of the Freehold and Jamesburg Agricultural Railroad, at Jamesburg, Middlesex County, New Jersey until Wednesday the 6th of October; for the grading of 11¼ miles of said road, from Jamesburg to Freehold.

The line will be ready for examination by Sept. 20th; when an Engineer will be at the office to give such information as may be required.

The road will be divided into sections of a mile, to a mile and one half.

WM. COOK, Engineer.

ENGINEER'S OFFICE, Jamesburg, Sept. 13, 1853.

Notice to Contractors.

Sodus Point and Southern Railroad.

PROPOSALS will be received at the office of the Engineer, at Sodus Point, until Tuesday, the 5th day of October next, for the construction of the Sodus Point and Southern Railroad, including Grubbing, Graduation, Masonry, Bridging, and the laying of the superstructure, complete for operation.

Plans, Profiles and Specifications will be exhibited, and all requisite information given, at the office of the Engineers, on and after the 25th of September inst.

Contractors should be prepared to state what proportion of the stock of the company they will take at par in part payment.

The company reserve to themselves the right to let the work in items and sections, and in such manner as may appear most advantageous to their interests.

Dated Sept. 4th, 1852.

WM. D. COOK, President.

S. CULVER, Secretary.

To Contractors.

Office of the Dauphin and Susquehanna Coal Co. No. 54 Wall-st., New York, Sept. 22, 1852.

PROPOSALS will be received until the 15th day of October next, for the graduation, masonry and bridging of that part of the Dauphin and Susquehanna Coal Company's Railroad extending from near Ransch Gap on the line now open for travel, to Auburn on the Philadelphia and Reading Railroad, a distance of about 31 miles.

The character of the work is such as to render it well worthy the attention of contractors, and payments will be made in cash.

The Directors reserve the right of rejecting any proposals that may be deemed unsatisfactory.

Plans, profiles, etc., can be seen, and further information be obtained, by application to the Chief Engineer, Richard B. Osborn, at the Company's Office, No. 73 South 4th st., Philadelphia, after the 9th of October next, or on application to the undersigned.

Proposals to be addressed to A. G. Jaudon, Secretary, (marked Proposals for grading, etc.,) at the office of the Company, 54 Wall-st. New York.

THOMAS CHAMBERS, President.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,

OFFERS HIS SERVICES FOR THE

PURCHASE AND SALE OF

AMERICAN SECURITIES,

COLLECTION OF DIVIDENDS, DEBTS, LEGACIES, ETC.,

And for the Purchase and Inspection of

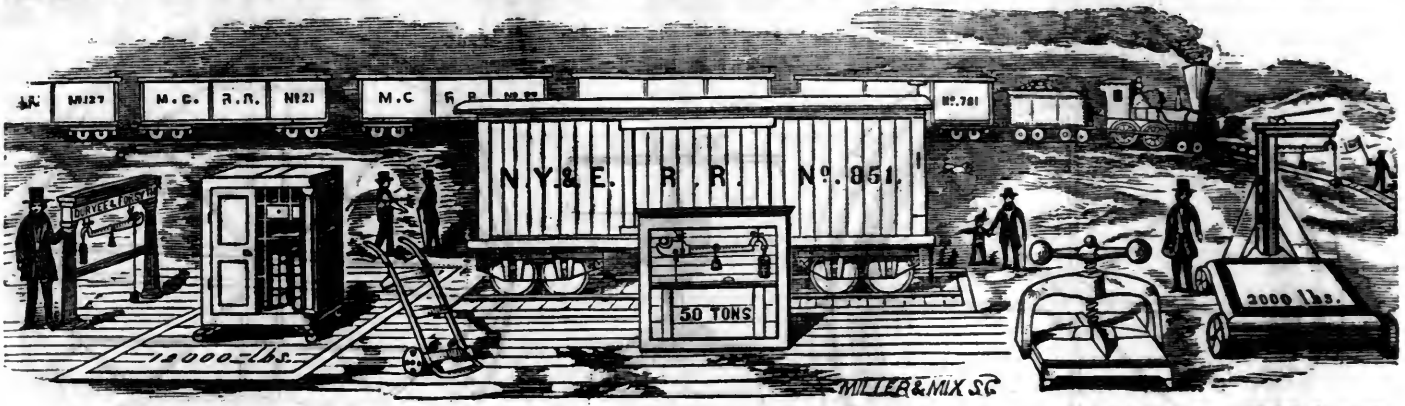
Railroad Iron, Chairs, or

any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq., Philadelphia.
C. C. Jamieson, Esq., Baltimore. 38tf

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

TO MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

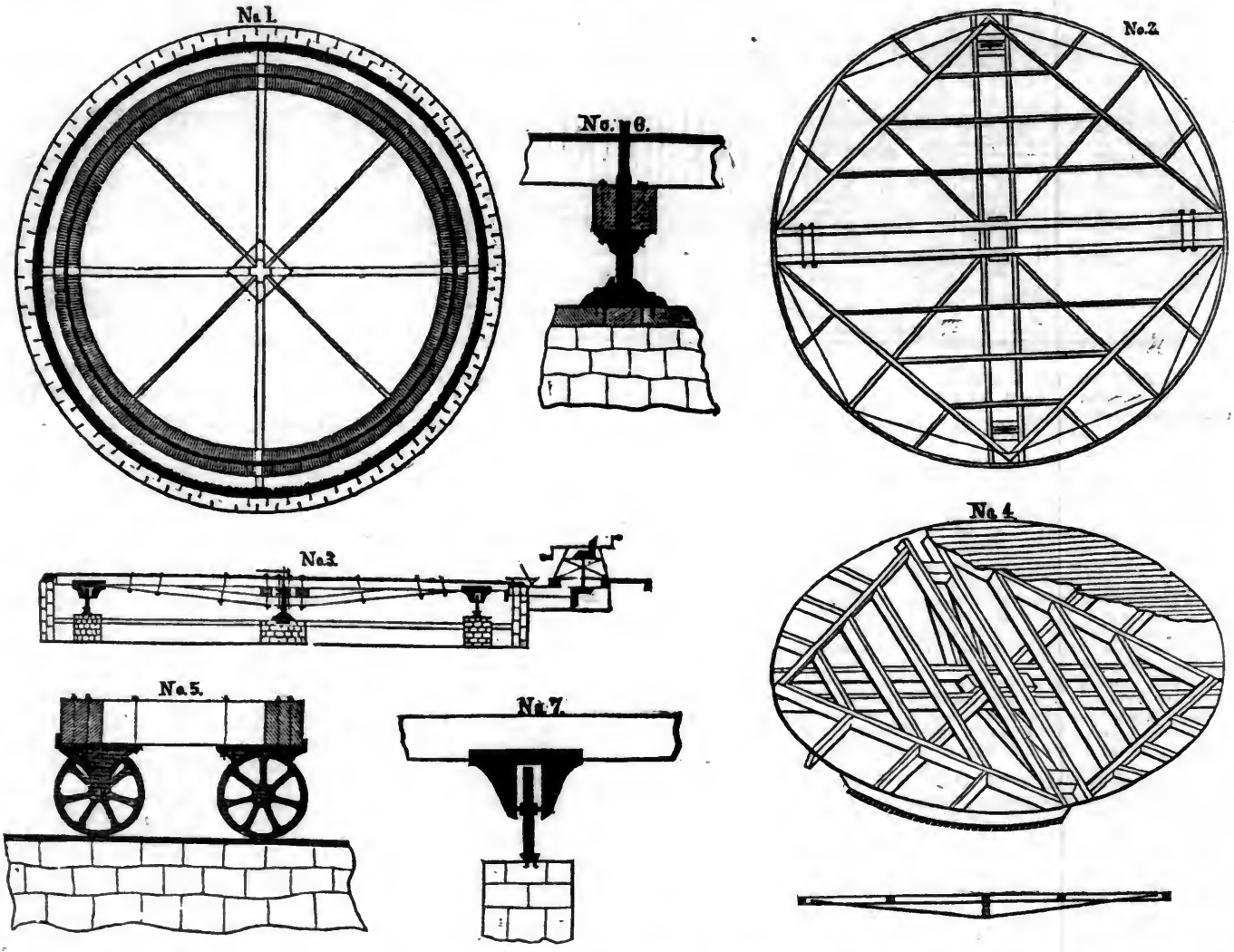
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20. 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JRE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,

No. 139 GREENWICH STREET,

NEW YORK.

Smith & Tyson,,

IRON COMMISSION MERCHANTS,

BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shot Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer,*

(Open to a New Engagement,)

Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 41] SATURDAY, OCTOBER 9, 1852 [WHOLE No. 860, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Shall we Admit Railroad Iron for New Works Duty Free ?.....641
Journal of Railroad Law.....616, 643
Railroad Convention at Springfield.....643
Plattsburgh and Montreal Railroad.....643
State Fairs and Railroad Fares.....644
European and North American Railway..650, 645
American Superiority at the World's Fair.....645
Harrisburgh and Lancaster Railroad.....646
Hartford and New Haven Railroad.....646
Railroad Convention at Knoxville.....647
Railroads in Massachusetts.....647
Fox River Valley Railroad.....647
Cincinnati, Hillsborough & Parkersburgh R R.647
Cincinnati, Wilmington and Zanesville R. R..647
Mississippi Central Railroad.....648
Straight Line R. R. from Utica to Syracuse...648
Stock and Money Market.....649
Baltimore and Philadelphia in Connection with Western Roads.....650
New Railroad Route between the Lakes and New York.....651

American Railroad Journal.

Saturday, October 9, 1852.

Shall we Admit Railroad Iron for New Works Duty Free ?

It has been a subject of grave consideration with us for some time past, whether we should not advocate the admission of railroad bar for our new works, *duty free*; and, although our paper has always been a firm though moderate advocate for protection, we have come to the conclusion that the best good of all our great interests imperatively demand the remission of duties upon all such railroad bar as is required for our *new* works, or in other words for the *first* track of roads, for reasons that we believe will be entirely satisfactory to every one that will impartially consider the subject.

The great want in this country are suitable avenues for the transportation of our products to markets. These are so widely separated from the great producing regions, that in many portions of the country a railroad is the only agent which can impart value not only to the products, but to the soil itself. The development of our vast resources is impracticable without such works; and although their effects may be more visible and striking in the newly settled agricultural districts, they are, in increasing the supply, and diminishing the cost of nearly all the prime necessaries of life, in the vast impulse they impart to business, and in the increased demand they create for the products and industry of the latter, of equal importance to our manufacturing and commercial interests. But we need not dwell upon the necessity of railroads to this country. We cannot by any description of our own, strengthen the conviction that every man in the community feels as to their importance. They are universally admitted to be indispensable to the greatest development of our social and material interests, and we can form no adequate conception of the greatness we shall attain when all our vast resources are brought into full development and activity.

While all interests and classes are equally benefitted by railroads, the building of such works as are now in progress, falls upon those sections furthest removed from market, consequently the least able to furnish the necessary means for their construction. It is with the greatest difficulty, and only by making great sacrifices, that the means for our new works are secured, and this can only be done by the most liberal use of *credits*. Such being the fact, the question for consideration is, whether it be either just or politic to impose a heavy burden upon a class of men who are laboring for, and who are directly benefitting every person in the country to an extent, compared with which the duty paid on rails is a mere bagatelle, and whether it would not be a wise policy, both in reference to an increase of revenue, as well as to the promotion of the general prosperity of the country, to encourage railroad construction by admitting railroad bar for our new works duty free.

With the present abundance of money, our work now in progress, with such new projects that will come before the public, will require at least 1,500,000 tons of railway iron during the next four years, for which our railroad companies will pay, at the present rate of duty, more than $15,000,000 into the United States treasury. This money our companies will be compelled to raise by selling their securities as low on the average as 85 cents on the dollar.

We are thus taxing at the rate of about $4,000,000 a year an interest more important we may say, than all others, to the proper developement of our resources, one that will add vastly to our internal revenue, and one that of all others is the least able to bear this heavy burden.

The objection to remission of duties is the loss that our revenue will sustain, and the withdrawal of protection from a class of our iron manufacturers. Both of these admit of a similar answer; which is, that any railroad creates a consumption of at least double the amount of iron that goes into rails; consequently the revenue, and our manufacturers would be vastly the gainers, by the construction of railroads, even should the rails come in duty free.

The amount of iron used in the construction of a fully equipped railroad is estimated to be equal to the quantity required for rails, and there can be no doubt that the demand created for this article in all forms by the various enterprizes to which railroads give birth, by the towns and manufacturing establishments which spring up on its line, and the general stimulus imparted to every kind of business is at least equal to the one-half the aggregate of what is used for the road and its equipment. At any rate, we cannot be mistaken in saying that every railroad we build creates a market for double the quantity used for rails. Were all this increase imported, then would our railroad companies secure government by their own exertions, *twice* the amount of duty paid for rails. Were it to be supplied by our domestic manufacturers, they would double their orders, though they might lose altogether the market for rails. So much for the justice of the claim for the remission of the duty on railroad iron as far as our companies are concerned, and for the effects of such a step upon our revenue, and upon our manufacturing interests.

But we may take another view of this subject. For a series of years past, the duty on railroad iron has not operated in affording *protection* to the make of rails in this country, because we have made none, comparatively speaking. Only two or three establishments in Pennsylvania have pretended to keep up the business of rolling rails, and these have only produced a few thousand tons each year. The largest of these establishments has run mostly upon orders taken from roads in operation, as the concern furnished a superior article, and asked higher rates than those for which English iron could be had. Practically, therefore, we might just as well have attempted to protect the production of tea and coffee in this country, as rails; so that, with a continuance of the low rates for rails that have ruled for two or three years past, the question of protection is not really involved in that

of removing the duty from railroad iron. We have not made it with protection. The only party therefore benefitted by the duty is the general government, which has now an overflowing treasury, without any legitimate object to which it can be applied. Every day this surplus is increasing, and as it is made up entirely of gold and silver, this surplus is already creating a stringency in the market; and the very money our roads have paid in duties, by being withheld from circulation, is depressing materially the prices that they would otherwise obtain for their securities.

A duty should no longer be laid upon rails for new works for *revenue*, because our imports already yield a sum much greater than the wants of government demand. It should not be levied for *protection*, because as we have already seen, no interest has been protected by it. In fact, the iron manufacture throughout the country has been going down for years past under our present rate of duties; so much so, that many branches of it are becoming nearly extinct.

In proposing any modification of the existing tariff, we would advocate a rate of duties which, while they should allow the introduction of railroad iron for new works, duty free, would impose such an increased rate on merchant bar, and upon railroad iron used for roads already in operation, as should promote a healthy and steady growth of this great arm of national industry. The increased duty should be such as not to foster speculation, but protect the manufacture in districts, where iron is the *appropriate* product; that is, where the ore and stone coal lie side by side. Such districts in the end must monopolize the business in this country, as do certain districts in England and Wales, and we have abundant locations where, under similar conditions, iron can be made as cheap in this country as in any part of Great Britain. The rate of duty we do not pretend to name, as this point can only be satisfactorily determined upon by a careful investigation of the whole matter, by competent persons familiar with the manufacture. We are confident that no intelligent iron man would desire to see a *high* duty imposed, for the reason that it is not needed to protect the make in this country, and it would only invite a domestic, which would be equally disastrous with foreign competition. We are satisfied that the duty should be *specific;* a certain and uniform duty; even if low, being more conducive to a healthy state of the trade, than a high one, subject to the constant fluctuations of prices and the caprices of legislation.

While we are arguing in favor of low duties on iron for our new works, we are equally satisfied that it is for the interest of railroads to have such an increased duty imposed upon other kinds as shall promote the manufacture, wherever the proper conditions exist. In looking through the exhibits of our leading lines south and west, we shall hardly find one that does not give the transportation of iron as one of the leading sources of prospective increase. We can scarcely instance a report that does not illustrate this fact. In Alabama, for instance, one of the great objects in the Alabama and Tennessee road is to open an outlet for the iron and coal fields of that state, and we are satisfied that the intelligent directors of that road would regard their interest as best promoted, by a duty which should stimulate the working of the coal and ores upon their line. So with numerous roads in Tennessee, Missouri, Ohio, Kentucky and Illinois, in the west, and Pennsylvania, Maryland and Virginia in the east. It is manufacturing establishments and a domestic commerce, that sustain railroads. Look at Massachusetts for an example of this. The gross receipts upon the railroads of that state the present year will be $8,000,000, or about $7 50, to each individual. This immense traffic is due to the vast number of manufacturing establishments scattered over that state.

A given number of persons engaged in agriculture, do not pay one-third as much to railroads as an equal number employed in manufacturing. Our railroad companies are therefore directly interested in the growth of our manufacturing interests, and this can in no way be so effectually accomplished as in extending suitable protection to that of iron.

Again, the price of iron does not depend so much in the long run upon duty, as *monopoly*. In this country we can have no monopoly, because there are 50 districts at least, each of which could furnish all the metal wanted in this country for 100 years to come. As well might there be a monopoly of corn growing as iron making, in this country. Were there a *prohibitory* duty on iron, the manufacturer would be no better off in a year or two than the cotton planter, or wheat grower. Capital drawn into iron making would reduce the profits of the business to the level of other investments. Domestic competition regulates all these matters and reduces the profits of every branch of industry to the same general standard. Where the raw material exists in such an abundance as with us, the above principle is too often lost sight of in the claim which is often senselessly raised against the policy of protecting particular interests.

For a number of years the price of iron has ruled very low. The result has been that most of our furnaces and rolling mills have been closed; in other words, they have been broken down by English competition. As soon as the English maker has effected his object, and secured the market to himself, by breaking down the manufacture in this country, he puts prices up 75 per cent, to a figure much above what iron can be manufactured for in this country, which we are compelled to submit to, because we have no other sources of supply. We must pay his price till we can construct works and supply ourselves with a domestic article. But capitalists have no inducement to commence the manufacture in the present condition of things. It would require years before he could get fairly under weigh, and by that time the foreign manufacturer, having made good all his losses, and compensated for a period of low, by a period of high prices, would drop down to the old mark, till he shall again, as in years past, run all our great establishments under water. The result is, that by pursuing the above policy, the English manufacturer does a good business in the long run, and makes money, and we, as a necessary consequence pay high prices, yet still find this great interest almost completely broken down by foreign competition. Reasonable protection, on the other hand, would not only secure to us the article at as low prices on the average as those we now pay the Englishman, but at the same time secure to us all the immense advantage of manufacturing it in our own country. Such is the common sense view of the matter, and such has been the history of the iron trade for a series of years past, and such will it continue to be, under the *existing* tariff. Let us see what effect the plan we propose would have upon the domestic manufacturer, and the prices of rails.

By the first day of January next, we shall have about 15,000 miles of railroad in operation in this country, for which about 1,500,000 tons of rails will have been used. Estimating upon this quantity the wear and tear at 5 per cent, and the demand for double tracks, turnouts, etc., at 5 per ct. more, and we shall need 150,000 tons annually for our own old roads. To be on the safe side, we will place this amount at 100,000 tons, which is above the utmost capacity of all our works making railroad bar. But the demand for these purposes will increase yearly, at the rate of from 15 to 20 per ct., affording ample employment for a reasonable and healthy increase of the make. To retain the duty upon iron for new roads would not benefit, as we have seen, the iron maker in the slightest degree because we leave to him in this branch of the manufacture, more orders than he can possibly execute.

By increasing the duty on merchant bar, for the manufacture of which all our mills are adapted, and which is a much simpler process than the manufacture of rails, we give to them the domestic market at steady and fair prices, and secure to the trade a much larger amount of business than the present capacity of our works in operation can possibly supply. This would lead to the gradual development of this interest, and to the construction of works *south and west*, where the raw material exists in the greatest abundance, together with cheap labor and cheap food, and where nothing is wanted but uniform prices for a series of years, to render that section of the country the seat of vast manufacturing establishments, which shall create a demand for the products of the soil, which are now comparatively worthless.

The policy we have been advocating would have the most favorable influence upon the price of imported rails. By increasing the duty on ordinary bar, we should materially check the importation of this article. The loss of this market for common bar would necessarily drive the English making in rails, and competition for the only article admitted free, would bring prices down to the lowest living point. We should not be surprised to see English rails, admitted free, go down to $30 per ton. Under the present rate of duty importations have been made as low as $35 per ton, all charges paid.

Unless we adopt some such plan as we have recommended, we are firmly convinced that our railroads will be compelled to pay exorbitant prices for rails for some years to come. There is a tendency to higher prices for rails both in this country and Europe, from other causes than those which usually enter into the calculation. Labor is becoming less and less abundant in Great Britain, and prices may permanently advance from this cause alone. Unless we increase the rate of duty on common bar, the removal of duty on railroad iron would have but little influence. Unless we can stimulate production in this country, the foreign maker can control the price for years to come. But let us take from him a portion of his market, and competition for what we leave him, will bring prices down to a satisfactory point.

We throw out these suggestions for the consideration of railroad companies. We intend shortly to present the subject in a more definite shape, and invite their co-operation in carrying out the plan proposed. In the mean time, we should be pleased to be favored with the views of those most deeply interested in this most important subject to our railroad interest. The present is a favorable time for action, both for railroad companies and the iron interest, and both will suffer by any delay in adopting some well defined and definite policy for the future.

Journal of Railroad Law.

ASSESSMENT OF DAMAGES—"A FINALITY."

The case of Aldrich, vs. Cheshire railroad Co., reported in Foster's New Hampshire reports p. 359, is well worthy of the attention of all whose land is likely to be required for the purposes of railroads. The case in question forcibly shows the importance of vigilantly examining, not only questions of obvious, but also of *contingent* and *prospective* damages—so that they may be duly and seasonably submitted to the Commissioners of Assessment.

In this case, the plaintiff's buildings were supplied with water from a permanent spring. After an examination had been made in his land for the purposes of a railroad, water appeared in the exsmination about 15 feet below the surface of the ground, and the spring disappeared. Damages were assessed to him *before* the examination was made. In an action against the commissioners the jury awarded the plaintiff $300 damages. The defendants moved to set aside the verdict, and the following decision was rendered by Judge Gilchrist.

"The act requires the commissioners "to assess the damages sustained by the owners of the land." Whether the commissioners take into consideration all the circumstances proper to be adverted to by them, depends upon their attention to the subject, and their capacity to come to a correct conclusion. But the result they reach is *conclusive* upon the party, unless there be an appeal provided for, from their decision. This is plainly the intent of the statute, for the institution of this Tribunal would be useless, unless their estimate should be regarded as final. Any other view of the question would lead to great practical difficulties; for if we might go behind their assessment, it would be impossible to draw any line beyond which we might not proceed. There would be scarcely any injury a landholder could sustain, which might not be said with more or less plausibility, to be one which the commissioners did not take into consideration. They are not bound to specify each injury and the sum awarded for it, and thus enable us to ascertain in what manner and upon what grounds their judgment has been made up, and when this is not done, it is obviously impossible for the Court to say, that for this or that special injury the landowner has received no compensation. To require this of them would take from them all power of action as an independent tribunal. It would not permit them to exercise their own judgment without any supervision over the merits of a case, as the Statute intended, unless where an appeal has been interposed; but would compel them to be interrogated as to the manner in which they have discharged their duties. Having the power to consider all the injuries the owner has sustained, and having made an assessment, the presumption is that they have done their duty, and have considered all matters worthy of their attention.

When the Legislature has authorized an act, the necessary and natural consequence of which is damage to the property of another, and at the same time has prescribed the particular mode in which the damage should be ascertained and compensated, he who does the act cannot be liable as a wrongdoer—if we were to consider the remedy by award as merely cumulative, we should defeat the manifest intent of the Legislature, which was not to give an additional remedy to the party injured, but to substitute one proceeding for another, in the first instance; and this mode of indemnity was supposed to be more convenient than the other and usual remedy at common law. In other States the decisions in respect to this subject have been similar to those in this State. Stevens, vs. the Middlesex canal, 12 Mass. 466. Steele, vs. the Western Inland Co., 2 Johnson 283. In this case there is nothing to show that the damage complained of was not the necessary consequence of a lawful act. That the commissioners could not prudently have anticipated as a matter of fact, the cutting off the stream of water in the place excavated for the railroad, and the consequent injury to the plaintiff, may be an argument against the expediency of the remedy provided by the law, but not against its obligation.

Verdict set aside.

Recent Railroad Convention at Springfield.

This convention comprised delegates from most of the New England railroads, and was called by a committee of the New York and New Haven R. R. The objects intended were to give to each company the benefit of the experience of all, in the construction and use of their roads and machinery; in their rules and regulations relative to the government and discipline of their conductors and other officers—the rates of fare—ticketing and payment to conductors—connection of trains—interchange of reports, timetables, etc.

At the meeting held as above, a proposition was adopted for a permanent association of railroad companies, by means of a convention, to consist of two delegates to be chosen annually from each of the railroad companies in New England, N York, New Jersey, and the British possessions in North America connecting with railroads in the U. States. The convention is to be one merely for consultation.

A resolution was adopted that the delegates from all railroad companies to the R. R. convention shall receive free passes over all roads sending delegates to these conventions.

A resolution was adopted declaring that, for a large portion of the freighting business upon the roads recommended in the convention, the rates of transportation are entirely inadequate, and that without increased prices it will be difficult if not impossible to sustain many of the New England roads. An attempt was made to recommend some general plan and tariff, which, however, was unsuccessful.

It was resolved that all companies, members of the association, exchange their annual reports, time tables, and general rules and regulations so far as printed, and give notice of any change of the time table that may be important to any connecting line, at least one week in advance of such change.

It was resolved that there be a concert of action among the companies composing this association, in all negotiations for patent improvements, applicable to railroad service; to produce which, it was recommended to refer all such claims to the association of superintendents for examination, and report thereon before closing such negotiations.

It was also resolved that the expenses incident to the examination of and defence against all patent claims, where it is adjuged no valid claim exists, and where actions are commenced against any particular road for alledged violation, or where the association of superintendents shall have advised a defence against such claim, be assessed upon the several companies composing the association, upon some equitable basis. A committee of five to fix this basis was appointed.

It was resolved that as a general rule, it be recommended that complimentary free tickets be confined to the presidents, vice presidents and superintendents of such railroads as conclude to interchange such courtesies, or directors or other officers of connecting roads, having business relations of a character which shall be deemed to warrant the extension of the privilege to them. Also, that in all cases conductors require of a person traveling in the cars, the presentation of a ticket furnishing the evidence of his right of passage.

The committee on ticketing and payment of fares to contractors, reported that in their judgment the common system of ticketing to connecting roads will give the passenger greater facility in his transit from one road to another, and will promote largely the convenience of the roads in regulating their accounts and effecting ready settlements. Also, that it is important for the protection of the several roads that tickets should be purchased at the offices. The committee advise that in all practicable cases each passenger who neglects to purchase his ticket at the office, be required to pay five cents in addition to the usual fare. Reports accepted, and recommendations adopted.

A committee, to whom was referred a resolution upon the subject of the minimum rate of fare per mile of a passenger, which may be safely established with a due regard to revenue, reported an opinion that it is impracticable to specify the precise rate without exact data provided in the case of each road. The committee are of opinion however, that in no case would it be expedient to consider the cost per passenger per mile less than one cent, and the actual cost should be a minimum. The profit which each company should demand from its passenger business, is a question which each ought to determine for itself. It may be politic, however, to impose the heavier portion of the profit in proportion to the whole business on the passenger traffic rather than on the freight. The committee further expressed an opinion that the rate for passengers established upon certain lines, is entirely too low for remuneration, and that a decided benefit to the owners of the lines referred to would be secured by an increase of their rates. The report was accepted.

The convention adjourned after adopting a resolution to meet again in Springfield, on the second Wednesday in Nov. next, at 2 o'clock P. M.

The above synopsis embraces all the business of importance transacted by the convention. As we understand the matter, its action is merely of an advisory character, and is not binding on any of the roads represented therein.

New York.

Plattsburg and Montreal Railway.—The new road leading from Montreal to Plattsburg was opened for travel on the 20th ult. That part of it extending from Mooers to the banks of the St. Lawrence, has just been completed, and the whole line opened on Monday. Passengers at Montreal for New York, take the Montreal and Lachine R. R., nine miles long, going up the river to the head of the rapids. Here a steamboat conveys them across lake Champlain to Burlington, from whence they reach Troy by the Burlington and Rutland, Western Vermont, or Rutland and Washington roads, to Eagle bridge, and thence to Troy by the Troy and Boston railroad, and thence to this city by the Hudson River railroad. The new road from Montreal to Plattsburg reduces the running time from about one hour to one and a half hours, provided the starting time be the same. This road is well built with heavy T rails, resting on large cross-ties and sleepers of tamarac, and nearly double as many ties as usual are laid down. The rails are well secured in strong wrought chairs, and well fastened with heavy spikes. The grade of the road is nearly a dead level the whole distance, and nearly in a straight line.

It is contemplated to extend this road due south along the western shore of lake Champlain to White Hall, to which place we have rail communication with New York. When this is accomplished it will be easy to make the trip from New York to Montreal in twelve hours. The present route by the roads on the east side of the lake consumes sixteen hours. The road on the west side of the lake will be entirely within the state of New York to the Canada line, while those on the east side of the lake are exclusively New England roads, and are mostly in the Boston interest. The country on the west side of the lake is very valuable in agricultural and mineral resources, within twelve miles of iron forges, at the State prison in Clinton county, and directly through other manufactories of iron etc. This road will greatly aid in the developement of the resources of the state, and should be built without delay, The St. Lawrence at the head of the rapids, never freezes over in winter; but to enable travelers to take the cars in Chambers street, and be put down in twelve hours or even less, in Montreal, it is proposed to bridge the St. Lawrence, at Lachine, and measures are now in progress to obtain a charter for this purpose from the Canadian parliament.

State Fairs and Railroad Fares.

The question of railroad fares is a problem of vital importance, not only to the owners of these expensive works, but to all the inhabitants of the country they traverse; and no part of the duty of a director is more incumbent than so to arrange these charges that the maximum of profits may be obtained. And this maximum must not be taken to mean a temporary large influx, such as avarice is continually tempted to grasp, but which would soon check the growth of travel or raise up at once an active competition to secure a share in the excessive gains realised by the blind and suicidal policy. Like the other blessings of science and invention, the rapid means of locomotion afforded by the railroad cannot be monopolised nor turned merely to subserve the selfish ends of corporations. With the opening of the first railroad a new standard as well in charges as in speed was introduced, and the public would not be willing that the rates of the old stage routes should be kept up even while admitting the superiority of the iron horse over the animals which once transported them at the rate of six or seven miles an hour over the turnpike. The power which rules over this matter and decides it at last, actually has created these corporations, and is the party daily and hourly treating with them for a passage over their iron track, and ready at once to remedy any long continued policy detrimental to the public interest. It is a matter of congratulation, that railroad companies with commendable unanimity have adopted a liberal system towards the business and travelling community on the subject of the rates of tolls and freights. There is it is true some variance, but where the rates are high it will generally be found that the travel is light, and we believe that railroad companies are more frequently found losing money by running their cars with few passengers at charges not greatly exceeding those of other roads, than making exorbitant profits on a line of heavy travel, protected by any advantage natural or legal.

This general moderation in fares has been productive of great benefit; it has actually given rise to travel, and classes who would never have travelled in any other way have been attracted to the railroad because of its cheapness as well as rapidity. Reduce the charges, and thousands who would never under other circumstances dream of leaving home become travellers, and their increased number makes up for the diminished charge per head. The same thing takes place even on temporary occasions, and the same reasoning is applicable. At the time when political conventions or agricultural fairs are to take place, calling together large assemblages of visiters, and making necessary the transportation of great numbers of persons, the same rule will apply. The largest return is yielded by a moderate tariff of rates. A reduction in the regular fares is therefore justified by the best of all reasons, the interest of the stockholders. We believe that very generally this reduction has been made by the management of our railroads at these periods, especially during the holding of State fairs in their vicinity. Of course there is a limit in the distance to which the reduction will extend; roads far removed from the point of meeting will have no very large increase in the number of their passengers, and those who attend will be able to pay the regular fare, but on roads terminating at or near the place of concourse, the cars will be thronged, and the fares ought to be proportionably diminished.

These Agricultural State fairs would never have been possible without the existence of railroads. County fairs might have been held; but to bring conveniently together, from the distant parts of an extensive State, representatives of those sections, requires the rapid transportation of the locomotive and train. The numbers thus brought together stimulate competition, and give respectability and value to the exhibition. At the recent New York State Fair, held at Utica, the receipts for entrance were estimated at $10,000, and it would be safe to assume a total of from 80 to 100,000 visiters. Even if but a quarter of these came over the railroads leading to that inland city, we have an extraordinary travel of twenty or twenty-five thousand to be shared by the railroads of the vicinity. The attendance at the Ohio state fair at Cleveland, was even more numerous; the receipts exclusive of a subscription to defray expenses by the citizens of that place amounting to $14,000. The Cleveland Herald describing the closing scene, mentions that a single train in the direction of Pittsburg numbered fifty-two cars, and had for freight over 5,000 passengers. Probably over a hundred thousand persons visited this fair, and the railroad travel may have been swelled to thirty or forty thousand. At the fair held at Toronto this year, the number of visiters on the ground on one day was estimated at 30,000, and probably as many more visited and left during the other days. These numbers, though approximations, indicate the large increase of the travel, and show that a reduction during the week when they are to be held, by the railroads leading towards the place of assembly, would be productive of no loss, but rather of gain, in still farther swelling the number to be transported.

The indirect advantage accruing to the railroad interest from the influence of these fairs is, though not so easily traced, even of greater importance. It cannot be denied that our agricultural standard is generally not so high as it ought to be, and that the emulation excited by these fairs and the knowledge disseminated among our farmers by occular proofs of good husbandry, does tend to elevate their system of tillage. The cultivation of the soil, and the general management of the farm are becoming more and more practically scientific, and the farmer begins to add to the narrow and often erroneous maxims of routine, the better rules which he can find in modern books, where the observations are checked by the results of the laboratory and the accuracy of the chemists balance. The ratio of increase in the productiveness of a country and the corresponding agricultural surplus attendant on the introduction of superior methods of husbandry, can hardly be estimated, but the whole of it will go to swell the freight tolls of the railroads of the country, for they alone will render this surplus valuable by placing it down at a market.

The policy pursued by railroad companies has been liberal, and we do not make these remarks in any spirit of fault finding. The roads for example in the state of Ohio, transported persons wishing to attend the fair at half the usual fare, and articles intended for exhibition were transported free of charge. This was just and right, for these very railroads will sooner or later reap a rich harvest from the improvements adopted by intelligent farmers who have attended these fairs. The improved plows and machinery to assist in the labor of the farm exhibited at them will be adopted and more bushels of wheat and barrels of flour will begin to roll over their road without asking for any extraordinary reduction of fare. The money expended in the transportation of the superior utensil was well laid out, and will be paid with an overflowing interest. The attendance and the interest of these fairs, very much depend on the course adopted by the railroad companies, if they choose to levy a heavy tax, the attendance will be meagre and but few articles exhibited, and the standard of agriculture will have a tendency to fall; if they unanimously and freely adopt a different course, they will gain, and the developement of the resources of the country, of which their works are the foremost auxiliary, will be carried along proportionally to their own profit.

During the course of the next year we shall have a World's Fair in New York, at which the products of the national mind will no doubt be largely exhibited, and agricultural instruments of various kinds will fill no small department. We think that the very best possible understanding should be cultivated by the gentlemen who have this enterprise in hand, and the managers of our various roads in all sections of the country. A system of through passes at a moderate rate might, we think, be profitably organized to and from New York, and to remain good during the continuance of the fair, and for a reasonable time after it. These tickets admitting holders to the ground might be countersigned by the agents of the roads between the home railroad terminus of the visiter and this city. The same arguments which apply in the case of the state fairs, have increased validity in reference to this great gathering of industry from home and abroad; and we believe that a stream of travel before unprecedented, will then set from every section of the country to this its commercial and financial centre. Our railroad system will then be largely increased, and this will be as much a railroad era as anything else; it will try and exhibit its capabilities, and the travel over them will be still further enhanced by the foreign visitors to the fair, who will desire to see more or less of the country after a voyage to its principal sea port. Such a plan will no doubt be adopted; the eminent administrative talent of the managers of our World's Fair must hit on some such arrangement, and it will be seconded by the R. R. directors to whom many of the names they will see comeing recommended to their consideration by the remembrance of financial negotiations, no small item among the associations of a railroad president or director. The country generally, we are of opinion, asks for an understanding of this kind to be regularly adopted, and especially for the coming exhibition we have mentioned.

Indiana.

Lawrenceburgh and Upper Mississippi Railroad.—The new board of directors elected their officers at a meeting held at Lawrenceburgh on the 21st Sept., George H. Dunn, Esq., was unanimously re-elected President, and Wm. G. Dunn, Secretary.

C. S. Stevenson, Esq., having resigned the office of Treasurer, the duties of which he had very satisfactorily discharged, A. R. Forsyth, Esq., of Greensburgh, was unanimously elected Treasurer.

The directors passed in the cars, over the road to the twelfth mile, and we learn, were highly pleased with the track, and with the success of the work.

Every energy is applied to complete the line to Greensburgh, this season, and the remainder of the work is in rapid progress to Indianapolis—the greater part of the foreign iron for the road, is in this country, and will be forwarded regularly. The laying of the track on the western part of the road will progress next season at several points, and be pushed vigorously.

European and North American Railway.

Our exchanges from the Lower Provinces are completely filled with accounts of proceedings in reference to the European and North American railway. In yesterday's paper we copied an article from the New Brunswicker, announcing the consummation of the contract with William Jackson, Esq., M. P., and associates, for building the entire line across New Brunswick, from the frontier of Nova Scotia to the frontier of Maine, with a branch to Shediac Bay on the St. Lawrence Gulf—embracing a distance of 214 miles in all, with a provisional agreement for branch lines to Miramichi and Frederickton.

Our readers will see in this result, the carrying out of the plan of the Portland convention. A brief review of these matters seems to be appropriate to a full understanding of the whole question.

The plan unanimously agreed upon at the Portland Convention contemplated the building of the line from the valley of the Kennebec river to the eastern coast of Nova Scotia, in separate sections, but in subordination to a common plan, forming when finished, an unbroken line, 475 miles in length, from the most available port for trans-Atlantic communication on this continent, with all the railways in the United States and Canada, with a line of Ocean Steamers of superior capacity for passing the Atlantic ferry.

Maine and New Brunswick following out this idea, incorporated private companies for the purpose of accomplishing this result. Nova Scotia attempted to accomplish her share of the work by constructing her line as a government undertaking, to be built and managed by the Provincial Government. The assistance of the Imperial Government was asked by Nova Scotia in aid of the Provincial securities, and the whole scheme was thus brought prominently before the government and people of England. The various negotiations since are too well known to our readers to be again repeated.—The result of all these efforts and negotiations by the several Provinces, was, a final refusal by the home government to furnish the proposed aid.

It is found out at last, that the home government felt at liberty to withhold the aid requested, because *private capital* was found fully equal to the execution of these works. A company of the richest capitalists of England submitted to Earl Grey an offer in writing, for the building of the European and North American railway on terms which were within the ability of the Provinces, unaided by the Imperial government, to carry out.

The Hon. Mr. Jackson came to America to carry this offer into effect. The company represented by him, having prior thereto, entered into agreements to build the Quebec and Richmond railway, and the line of railway from Montreal to Hamilton or Toronto to a point of connection with the Great Western railway of Canada, extending from Hamilton to Detroit.

The Quebec and Richmond railway is fully contracted for; the provincial guarantee for one half its cost is given, and the work is in active progress—the contractors taking all the stock and bonds not wanted by other parties. The stock of this road not taken up, was offered on the London Stock Exchange on the 2d of September, and £375,000 sterling, all that remained unsold was immediately taken.

The parties contracting for the execution of this work, are Wm. Jackson, M. P., Thos. Brassey, Sam'l M. Peto, M. P., and Edward L. Betts, whose financial ability and practical experience furnish the highest guarantee of success.

Mr. Jackson, after completing the contract for the Quebec and Richmond railway—in company with his son, Henry M. Jackson, Esq., Capt. Wm. Rhodes, President of the Quebec and Richmond railroad, Mr. Alexander Ross, C. E., of London, proceeded to New Brunswick, by the way of the river Du Loup and Madawaska.

The Executive committee for Maine who have charge of the European and North American R. R., Messrs. E. L. Hamlin of Bangor, John A. Poor of Portland, and the Hon. A. G. Chandler of Calais, were invited by the directors of the E. and N. A. R. R. of New Brunswick, to meet Mr. Jackson on his arrival at Frederickton, in a conference with the Executive of that Province. Mr. Poor attended on behalf of the company in Maine, and Mr. Morton who had been appointed Chief Engineer of that company by the government of New Brunswick was in attendance.

The New Brunswick company was unwilling to contract for their part of the line, unless Maine should be prepared to construct her portion of the work. Such assurances however were given that the company in New Brunswick consummated the contract with Mr. Jackson and his associates which was signed by the parties on the 29th of September last.

The event was noticed by a royal salute and other public demonstrations at St. John. After passing over the line from St. John to Halifax, Mr. Jackson submitted an offer to the Executive of Nova Scotia for building the Nova Scotia portion of the line on the same terms as those accepted in New Brunswick.

Mr. Jackson and his party in company with the Hon. J. H. Gray of St. John, a member of the Executive Council of New Brunswick, arrived in Portland on Saturday morning in the Admiral and left in the afternoon by an express over the Montreal road, in company with Mr. Little, the President of the railroad, and other friends, making a party of some twenty-five in all. The impression left on all minds was, that the consummation of the entire work of constructing the European and North American railroad is now placed within our reach.

Mr. Jackson had an opportunity of spending some hours here, and of seeing the commercial advantages of Portland, and in passing over the line of the Atlantic and St. Lawrence railroad, expressed his satisfaction with his visit to our State.

On the consummation of the bargain for the construction of the Montreal and Toronto railroad, Mr. Jackson will depart for England, to take his seat in Parliament, which is summoned to meet for business on the 11th of November next.

The abundance of money in England, favors the construction of railways in British North America; and the arrival of Mr. Jackson, under the circumstances of his mission, is a matter of interest to Maine. We hope to see the best plan adopted to bring all our railway interest into harmony, under the full belief that such a result will secure at once the construction of our leading lines.

We cannot but congratulate the friends of the Montreal railroad, and of the European and North American railway, on the auspicious results of their labors, and to hope that Maine is now so far advanced in commercial importance, as to secure at an early day, the great destiny to which her friends have assigned her, and that, on the return of the Hon. Mr. Jackson to Portland, we may be able to assure him of our ability to ensure the accomplishment of our portion of the great work now devolved upon Maine.—*Portland Advertiser.*

St. Lawrence and Lake Huron and Peterborough Junction Lines.

The report of the engineer of the St. Lawrence and lake Huron line has been issued. It is proposed to connect the Ogdensburg route with Peterborough and the Georgian bay. It has not yet been determined where the southern terminus shall be located, whether at Kingston or Prescott; the original proposition was to the latter town, but in view of the early construction of the Trunk line, Kingston may it is said be selected as saving distance and answering the whole purpose. An application is about to be made to parliament for a charter to construct a junction line between Toronto and Peterborough—and a reconaisance has already been made of the route. Whether as a portion of a traffic line (by which it is affirmed the distance would be less than by the lake shore) or a loop line to it, by which to connect the back townships with Toronto and Kingston respectively, the scheme appears to be well worthy of favorable consideration.

Sixteen citizens of Albany have already subscribed $125,000 to the Albany and Susquehannah railroad, and a large amount in addition has been subscribed in that city, the sums varying from $300 to $3000. The enterprise is greatly favored in Albany, as one which will contribute very greatly to the prosperity of that city.

American Superiority at the World's Great Fair.

This is the title of a very elegant chromo-lithographic print, containing in tastefully designed compartments a number of the leading articles of American ingenuity, exhibited at the World's Fair of 1851. It is itself a very beautiful specimen of American art, as well as an appropriate memorial of what was presented on the part of our country, at that remarkable exposition of the industry of the world. In spite of the sneers of many more hostile, perhaps, to republicanism than aught else, the Eagle and the folds of the American flag spread over products of human art, adding more largely to material wealth and national strength than those which were collected under any other banner. Such a triumph though the full strength and interest of the country was hardly aroused, deserves not to be neglected, and we hope it will stimulate to new efforts and new trophies at the World's Fair of 1853, to be held on the shores of the Western Continent. The polychromatic print contains, we believe, 14 distinct tints having all the richness of oil painting, and involving a passage as many times beneath the press. The central compartment is occupied by a sea piece, with the Yacht America carreering over the waves. On the left hand, and beneath the flag of the Union, is the set of gold plate manufactured by Ball, Tompkins and Black, and presented by the merchants of New York to E. K. Collins, Esq., the enterprising projector of the triumphant line of American steamships. Near-by is the engraving representing Colt's Firearms. The bridge of the New York Iron Bridge company is in the back ground of the centre piece. On one side is Power's Greek Slave, on the other a bust of Hobbs the famous lock picker, supported by Day & Newell's Parautoptic lock. In the centre, and beneath the yacht, is an astronomical clock devised by the Cambridge astronomers, Prof. Bond and his son, in which the observer is assisted in making his record by the electric current. In this important department the Americans have taken the lead, and the instruments of the Bonds, and those of Prof. Locke, of Cincinnati, and Prof. Mitchel, now the Engineer of the Ohio and Mississippi railroad, though they have secured the credit of the application of electricity to astronomical observations for the country, still leave in considerable doubt the claims of the individual inventors. Dick's anti friction Press, the self-acting lathe from the Lowell Machine Shop, McCormick's famous Reaper evince the capabilities of the artists in representing machinery. Nunn & Clark's Piano is also beautifully drawn on the stone. Last, not least, is Herring's Safe to deposit the wealth obtained from our national enterprise and genius.

Accompanying the lithograph is a volume containing a description of the American contributions to the Fair, and some very handsome lithographs drawn on the stone by the artist, and therefore securing the greatest breadth and finish. We were particularly struck by the engraving of the steamship Baltic on the 60th page, as exemplifying what we have stated. The plates are drawn by Thurwanger & Brothers, and lithographed by A. Brett & Co., of Goldsmith's Hall, Library st. Philadelphia, and the work is edited by Charles T. Rodgers, by whom it is appropriately dedicated to the American people. We have gone into detail because we hope that the country will not disappoint expectation at the coming Exhibition in New York; but that from far and near specimens of American labor and the results of American genius may be

sent in to our Crystal Palace, that worth and excellence may be truly rewarded, and thus the efforts of mind redound to the advancement of peace and universal comfort and happiness, among men. In these contests and trophies, we see the evidences of a civilization far transcending the palms of the Grecian wrestler or the prouder laurels of the Roman general. Peaceful labor is after all the best foundation of national importance and grandeur.

Pennsylvania

Harrisburg, Portsmouth, Mountjoy and Lancaster Railroad Company.—The annual meeting of this company was held Sept. 3d, at the office of the Co. No. 95½ Walnut street Philadelphia. The following gentlemen were elected directors for the ensuing year:

Joseph Yeager, Seth Craige, Wm. Ford, Algernon S. Roberts, Francis R. Wharton, Henry Buehler, Harrisburg; Dr. John Holmes, David Lapsley, Robt. V. Massey, Wm. W. Longstreth, James Magee, James Mehaffey, and Chas. Keen, of Marietta.

The directors re-elected Joseph Yeager president, and Geo. Taber Secretary.

The report for the year ending Aug. 31st, 1852, gives a very satisfactory exhibit of the operations of the road during that period. The total income for the year is.....$200,249 85
And the expenses for the same time have been..... 93,316 48

Net earnings.....$101,933 37

Leaving a profit to the stockholders after paying the interest on the debt and expenses of $69,673 about 9 per cent on the capital stock of both roads which has been applied to dividends and construction of road.

The number of passengers over the main line has been 80,186, being an increase over the number carried last year of 13,900.

The tolls on freight transported by the Pennsylvania Co.....$32,672 33
The tolls on local freight..... 32,962 53

$65,634 86

The receipts of the main line on passengers through and local.....$87,309 68
On freight..... 43,814 90

Total.....$131,124 58

The receipts of the branch road on passengers through and local.....$28,662 83
On freight..... 21,820 29

$50,483 12

A contract for the reconstruction and ballasting of the entire road from Dillerville to Harrisburg was entered into on 24th Dec. last, and will be completed during the present month of October. The grade of the road between Harrisburg and Portsmouth has been reduced from 28.80 to 18 feet to the mile, corresponding to the grade on the Columbia branch. Contracts have been made for grading so as to adapt the road for a second track between Harrisburg and the intersection with the Columbia branch. The bridge over the Conawago creek has been rebuilt during the year, and protected as far as possible against the weather and destruction by fire. It has been shortened 150 feet, which distance has been replaced by a solid embankment.

The report states that the settlement of the rates of charges between the company and the Pennsylvania road have been satisfactorily made and the amount to be received by the Co. increased. The tolls have been diminished, but the directors are satisfied that the income will be amply sufficient to pay the usual dividends, with a fair prospect of increase in the future.

Railroad Law.

Justice Gibson, of the Supreme Court of Pennsylvania, has just delivered a very important decision in regard to the liabilities of railroads, in which he takes broad ground. It was in a case where an action was brought to recover the value of a cow run over by a train of cars on the Erie railroad. Judge Gibson's remarks relative to the opinion of the Court below are as follows:

The charge was accurate in its outline, but not in its details. As has already been said, there was no evidence of negligence on the part of defendant. In another part, he even took the fact for granted. "The simple fact," he said, "of permitting, for a limited time, the cow to wander on the railroad, would not, of itself, be such negligence, as to excuse all negligence on the part of the defendant."

Had there been evidence to raise the point, the direction might have been well enough; but the application of the principle in the particular instance was wrong. In Sills vs. Brown, 9 C and P 605, it was ruled that in cases of accident with carriages or ships, mutual negligence, *if contributive to the injury*, bars an action for it—a principle enforced by this court in Simpson vs. Hand, 6th Wharton, 311. But it was erroneous to predicate it of a case in which the negligence was all on the side of the plaintiff.

He further charged the Jury that, "if the plaintiff *knew* his cow was wandering on the railroad, it was his duty to drive her therefrom. He had no right to suffer her to be there, and if he suffered it *knowing* her to be there, he was guilty of such negligence as would prevent his recovery. But if his cow casually wandered away, ordinary care being used to restrain her, the simple fact of her being on the track would not excuse the defendant's negligence."

Now, the making of this gratuitous imputation of negligence, and the ignorance of the cow's whereabouts, the turning point of the cause is the root of the error. As the loss of the property is not a penalty for the owner's supineness in the care of it, of what account is his ignorance of its jeopardy? The irresponsibility of a railway company for all but negligence or wanton injury, is a necessity of its creation. A train must make the time necessary to fulfil its engagements with the post office and the passengers; and it must be allowed to fulfil them at the sacrifice of secondary interests put in its way, else it could not fulfil them at all. The maxim of "*salus populi*" would be inverted, and the paramount affairs of the public would be postponed to the petty concerns of the individuals.

Every obstruction of a railway is unlawful, mischievous and abatable at the cost of the author or owner of it, without regard to his ignorance or intention. It may seem cruel to make a dumb brute suffer for the fault of his owner, but it must be remembered that the lives of human beings are not to be weighed in the same scales with the lives of a farmer's or a grazier's stock; and that their preservation is not to be left to the care which a man takes of his uncared for cattle. Allowing them to prowl for their food, he may not wash his hands of the consequences of it. In a country so obnoxious to the charge of indifference to human safety, it is a high and holy charge of the Courts to hold to their duty, not only those to whom it is immediately committed, but also those by whose delaults it may be remotely endangered, and to hold them hard. We are of opinion that an owner of cattle killed or injured on a railroad, has no recourse to the company or its servants; that he is liable for damage done by them to the company or its passengers.

Judgement reversed.

Railroad Subscriptions.

The *Greenville Press* says that $600,000 have been subscribed to the Pittsburg and Erie railroad, which renders it certain that the work will be successfully prosecuted to completion. Of this amount $450,000 have been subscribed by the counties of Lawrence, Mercer and Crawford, in their corporate capacity.

Memphis and Charleston Railroad.

We learn from the Huntsville Advocate that the board of directors which met at Memphis on the 13th inst., made several new calls upon the stockholders. The contractors are generally at work upon the line of the road from Decatur to Crow creek—the Lagrange portion of the road will be completed this year—the re-laying of the Tuscumbia road is prosecuted as fast as possible, and will be finished during the winter. To ensure the constant and unremitting prosecution of this work, it is necessary for the stockholders to respond to the action of the directors and promptly meet the calls now made upon them.

Col. A. E. Mills was elected President of the road in place of Col. Geo. P. Beirne, who declined a re-election—still, however, serving the company as a director. Col. Mills is too well known—his ability, zeal, and entire devotion to the great work—are too apparent not to give the public and the company assurance that he will make a most efficient President, and devote his entire energies to its successful prosecution.

The passenger cars for the road have arrived at Memphis. The Eagle states that by the 1st of October they will commence running to Collierville, a distance of 25 miles. The grading to Lagrange is nearly completed, and cross ties provided to lay down the iron to that point.

Connecticut.

Hartford and New Haven Railroad..—The annual meeting of this company was held on the 5th September last, at Hartford, when the board of directors made their report of the operations of the road to their stockholders. The income for the year ending August 31, was:

From passengers.....$396,383.37
" Freight..... 172,546.82
" Rents, mails, etc..... 31,478.55

$600,408.74

Operating road, and repairs to road and equipments..... 239,685.08
Paid for engines and cars..... 28,500.00
Interest on bonds and loans..... 31,599.09

$299,784.17

Net income.....$300,624.57

The total receipts from passengers and freight were for the year ending 31st August, 1851..... 526,580.90
For the year ending 31st Aug., 1852... 568,930.19

Increase..... $42,349.29

The whole number of passengers carried during the year is 492,228, being an increase over the number carried last year of 46,100. This large number has been carried without accident or personal injury. The mileage of freight and passenger trains is 256,874, of gravel and wood trains 22,354.

Twenty-four miles of double track were laid at the time of making the report, and eight more from Springfield to Thompsonville were to be completed in the month of October. This addition to the double track, it was stated, would greatly facilitate the operations of the road. The cost was about $8,000 per mile.

The report speaks in high terms of the comfort of Mr. H. M. Paine's method of ventilating cars, which has been tested on this road with very satisfactory results.

The Legislatures of Massachusetts and Connecticut have authorised an addition of 6,500 shares of $100 each, to the capital stock of the company, making a total of 30,000 shares.

It is stated that 472 bonds of $1000 are now outstanding, 82 being due on the 1st August next, and the balance on the 1st of February ensuing. The board recommend a temporary provision for those first coming due, and the settlement of the whole amount by an issue of stock or by a new loan.

A dividend of 5 per cent., payable on the 1st Ocber inst., was made, and a vote of the stockholders has instructed the new board to make an extra dividend on the 1st January next, of 5 per cent., making 15 per cent in all for the year.

The following gentlemen have been chosen directors for the year:—Charles F. Pond, Chas. Boswell, Hartford; C. Vanderbilt, J. A. Robinson, N. Y.; C. W. Chapin, Springfield; Jas. S. Brooks, Meriden; F. R. Griffin, Guilford; Ezra C. Read, New Hampshire; Wm. Jarvis, Middleton.

Railroad Convention at Knoxville, Tenn.

A convention of delegates from the States of Tennessee and Kentucky met on the 22d September last at the Court House in Knoxville. The object was to secure the construction of a railroad from Knoxville, Tenn., to Danville, Ky. Great unanimity prevailed, and the hope was entertained that the measure contemplated by the convention would be speedily accomplished. The preamble to the resolution adopted states that a railroad between the two places above mentioned is the only link not in process of construction necessary to connect the cities of Louisville and Cincinnati and the great valley of the Ohio, with Norfolk, Charleston, Savannah, Mobile, and ultimately with Pensacola and New Orleans, and that charters have been already secured in the States through which the road is to run. The resolutions invite the States, railroad companies and citizens interested to aid in the accomplishment of the proposed road, and recommended at once the survey of the route to ascertain the nearest, best, and most practicable line. They further advise the commissioners appointed in the charters of incorporation to confer together with a view to a speedy and efficient organisation, and recommend applications to be made to the county courts of the several counties and to the people for county subscriptions.

The appointment of committees of correspondence, etc., was also called for in the resolutions, and they were so appointed by the convention. The following resolution offered by A. M. Lea, was also adopted:

That the convention regards the construction of the railroad from Knoxville to Charleston, by way of Rabun Gap, and eminently important to the interests of the road from Knoxville to Danville: and that the interests of the two roads are combined and mutual; and it is the opinion of the convention that the commerce of the country will speedily demand their construction.

Mobile and Ohio Railroad.

The Mobile Advertiser states that the lettings of the contracts on that part of the route reaching from a point 8 miles north of Winchester, Wayne Co., through Clarke, to the southern line of Lauderdale, a distance of 50 miles, were completed at Quitman, on the 15th ult.

There were numerous bidders, and the contracts were taken at a slight figure above the estimates. Some of the contracts were taken by planters and others along the route, payable in stock. The best spirit everywhere prevails as to the enterprise.

"There are now completed and under contract 138 miles of this road—to wit, 33 miles finished to Citronelle; fifty-five miles from Citronelle to near Winchester, which have been worked on 2 months, and fifty miles just let out. Besides this, one hundred and twenty-nine miles, from south line of Lauderdale to south line of Pontotoc, will be under contract by the 30th of Sept.—thus making a distance from Mobile of 267 miles."

Massachusetts.

North Danvers and South Reading Railroad.—A meeting of the friends of this project was recently held at South Reading. W. D. Northend, President of the Georgetown and Danvers railroad, made a clear and interesting statement of the nature and prospects of the proposed route. He was followed by Mr. Cunningham, who has been surveying for the road. Much interest was manifested, and great confidence expressed that in a few weeks the building of the road would be put under contract. A committee was appointed to confer with the officers and raise subscriptions to the stock.

Eastern Railroad.—The improvements on that portion of the railroad which is in Chelsea is going on rapidly. The bridges on the Salem Turnpike, and from the Mill hill to North Chelsea are in a state of forwardness, and the double track through the Cary estate is nearly completed. The distance between Boston and the East is shortened about two miles by these improvements, and the expense is much less than was anticipated.

Fairhaven Branch Railroad.—The following gentlemen have recently been elected directors—Ezekiel Sawin, William L. B. Gibbs, Lemuel C. Tripp, I. F. Terry, Nathaniel Church of Fairhaven, Abraham H. Howland of New Bedford, Loring Meigs of Mettapoisett.

New York.

Chemung Railroad.—At an election held by the stockholders of the Chemung railroad company, at the village of Elmira on the 5th inst., for the choice of thirteen directors to serve for the ensuing year, the following gentlemen were duly elected, viz: Robert Bayard, Isaac Otis, J. S. T. Stranahan, J. W. Baker, N. York; Simeon Benjamin, John Arnot, A. S. Diven, Wm. Maxwell, Elmira; Charles Cook, Havana; C. A. Cook, N. B. Kidder, W. N. Clark, W. W. Watson, Geneva. The directors met on the same day and made choice of the following officers, viz: Simeon Benjamin, Esq., president; Isaac Otis, Esq., treasurer; Henry H. Casey, Esq., secretary. This road, which unites the Erie road at Elmira with the Canandaigua and Jefferson at Jefferson, is leased to the Erie road for a long term at 8 per ct. per annum on the cost.

Fox River Valley Railroad Company.

The stockholders of this company met at Elgin, on the 22d, and elected a board of directors, consisting of the following named gentlemen:

John B. Turner, B. W. Raymond, E. S. Wadsworth, Chicago; John Van Nortwick, Batavia, Kane County; Morris C. Town, Elgin, Kane Co.; Joseph Tefft, Elgin, Kane Co.; J. A. Carpenter, Dundee Co.; Alfred Edwards, Dundee Co.; William Henry, Algonquin, McHenry Co.; A. H. Nixon, McHenry Co.; George Gage, Nunda Co.; William McConnell, Richmond county; Charles Burchard, Waukesha, Wis.

At a subsequent meeting of the directors in the evening, the board was organized by electing, B. W. Raymond, President; M. C. Town, Treasurer, and A. J. Waldron, Secretary.

The present prospects of the road are very encouraging, and with the above named gentlemen constituting the board of directors, an early completion of the road is insured.

The subscription to the stock, now amounts to over fifty-two thousand dollars.

Ohio.

Cincinnati, Hillsborough and Parkersburgh R. R.—The Western division of this road was opened by a celebration on the 22d Sept. last, at Hillsborough. From an early hour the people of Highland and the adjacent counties flocked into Hillsboro', and by noon between six and seven thousand were assembled at that place. About noon a long train drawn by two powerful locomotives arrived at the depot with the invited guests from Cincinnati.—After the arrival, an immense procession was marshalled under the direction of Col. David Miller, to the Court House, here the Cincinnati guests were welcomed by the Hon. Nelson Barrere, in an eloquent speech, which was responded to by Mr. Stratton, one of the City Council of Cincinnati, in a neat address. The assemblage then adjourned to the Barbecue ground, where the whole company were entertained with a substantial repast. After dinner the company collected around the stand, where addresses were delivered by the Hon. J. Winston Price, Hon. A. T. Ellis of the Ohio and Mississippi railroad, James H. Thompson, Esq., and Mr. Hays of the Cincinnati bar. The speaking over, W. H. Clement, Esq., Superintendent of both the Little Miami road, and the Hillsborough, treated about 500 of the company to a short excursion on the railroad, after which the whistle of the locomotive sounded return, and the guests from Cincinnati took their departure, then first realizing the important fact that the locomotive had penetrated sixty miles eastward from their city, and within 56 miles of the coal and iron mines of Ohio.

Ohio.

Cincinnati, Wilmington and Zanesville Railroad.—The board of trade of Zanesville, the directors of the Central Ohio railroad, representatives from the Akron branch, and the directors of the C. W. and Zanesville railroad company have recently held a conference at Zanesville, the principal object of which is to secure the construction of the C. W. and Zanesville road from Lancaster to Zanesville, at which animated speeches were made by leading advocates of railroad improvement, and over $80,000 subscribed. A committee of the board of trade and the directors of the central Ohio railroad have made a report of the result of the conference, the substance of which is, that the directory of the Cincinnati Wilmington and Zanesville railroad pledge themselves to make a connection with Zanesville with as little delay as possible, if the citizens of Muskingum Co. will subscribe stock to the amount of $350,000.

Of this sum $100,000 has already been voted by the county of Muskingum, and $25,000 by the city of Zanesville. The town of Putnam also has conditionally voted $25,000, which subscription, the present presumptive probabilities are, will become available, and great confidence is reposed in the success of an arrangement proposed to be entered into between the company and the Central Ohio R. R. company, to furnish or supercede another $100,000 thus leaving $100,000 to be made up from bona fide individual subscriptions by the citizens of Muskingum county.

Connecticut.

The Canal Railroad.—The books for subscription to the stock of that part of the canal extension railroad, lying within the limits of Connecticut, were lately opened at Plainville, and the whole amount subscribed, except a small amount reserved for the towns along the line. Nothing now remains, but for our citizens to make up the few thousands allotted to them, and the route must, we are assured, be

put under contract to Northampton immediately.—*New Haven Courier.*

American Railroad Journal.

Saturday, October 9, 1852.

Mississippi Central Railroad.

This is a project which has, as yet, attracted but little public attention, although great progress has been made in securing for it the means necessary for its construction. The line of the road extends from Canton to the Mississippi state line, a distance of about 180 miles. From thence it is to be prolonged to Jackson, Tennessee, there to connect with the Mobile and Ohio railroad, and also the proposed road from Louisville to Memphis. At Canton, its southern terminus, it will connect with the New Orleans and Jackson road, the line of which extends to that place. These two will, in fact, form parts of the same great line of road destined to connect the interior of Mississippi, and also the road in progress of construction, south and west with New Orleans. It will bear the same relation to New Orleans, as will the Mobile and Ohio road to Mobile.

The Mississippi Central road will traverse one of the most productive and richest portions of the state, a great part of which has no suitable outlet to a market.

The great staple of this region is *cotton*, which is now carted at very heavy expense to the Mississippi river. The vastly greater cost of transportation on the ordinary earth, over a railroad, and the rapid expansions of these works through the southern states, render the construction of a railroad in every district without natural outlets indispensible to enable the planters of such section to compete successfully with those more favorably situated. All our cities are compelled to build railroads in self defence, for the purpose of maintaining their trade and consequence. This is now become equally true of our planting and farming districts; those possessing railroads being enabled by the diminished cost of transportation, to undersell those who are not so favored.

As already stated the country pursued by the line of the above road, is of vast productiveness, and is one of the best settled portions of Mississippi. But to continue to prosper with other portions of the state, the people along its route feel the urgent necessity of a railroad, and they have, and are now contributing most liberally toward its construction. The whole cost of the road will be about $2,500,000, of which, at least, $1,500,000 of reliable subscriptions can be easily raised on the line of the road. We understand that the necessary surveys are now in progress, and that the road will be placed under contract without delay, and will be completed with the utmost dispatch

The route is a remarkably favorable one. No streams of magnitude are crossed in the entire line. *No rock* whatever is met with. The rivers are but very slightly depressed below the surrounding country, and can be bridged with very little expense.

In addition to its local traffic, which must be lucrative, from the fact that it will supply the only outlet to a most fertile country, it will form a part of the great route of travel between New Orleans and the north and north-east. The number of people passing up and down the Mississippi river annually, is over 600,000. The vast majority of these will be thrown upon railroads, and those going to and from New Orleans over the Mississippi Central. There can be no doubt whatever of the fact, that the construction of a railroad from N. Orleans to the mouth of the Ohio, would double the number of passengers between the above termini.

The gentlemen having the above road in charge, feel that the credit of the state of Mississippi is at a low ebb in our great money markets, and are determined to wipe off the stigma which now rests upon it. They are resolved to demonstrate the fact that they can build an important and extensive line of railroad without going abroad for money, or at best for only a small fraction of the cost of the road. From what we know of the wealth of the country traversed, and the ability of the parties having the project in hand, we do not doubt its complete success. A few such successful efforts would effect a wonderful change in the public sentiment in reference to the character and credit of the state, and would be effectual in placing her in a position which she should and will ere long occupy, as one of the richest of the southern states.

The president of the road is Walter Goodman, Esq., of Holly Springs, a gentleman very favorably known both in this city, as well as in Mississippi, and whose connection with any project, is sufficient guaranty of its soundness, and that its affairs will be wisely and carefully managed.

Straight Line Road from Utica to Syracuse.

We have already stated that a new road is proposed from Utica to Syracuse, for the purpose of cutting off the bend made by the present road, running by way of *Rome*, which is somewhat out of the direct route between the above cities. As an offset to this, a road is proposed from Rome to Rochester, running around the north shore of Oneida Lake, and approaching for a portion of the way, near to the shore of Lake Ontario.

We presume that neither road will be built at present, though we regard the last named project as much the most promising of the two, in not possessing the characteristics of a *rival* line, so much as the former. The road from Rome would traverse, for a portion of its distance, a pretty wide belt of country without railroad accommodations, and would afford a more convenient outlet for the city of Oswego, by railroad, than the one now used. There are, however, serious objections in the way of constructing any *detached* portion of road between Albany and Buffalo, independent of cost, difficulties of route, etc., etc., and these are the hostility it would meet from the great *through* line now in operation. The several companies that make up this line have established a sort of a defensive alliance, and would not probably form any business relations with any purely rival line; so that should a railroad be constructed from Rome to Buffalo even, it could get no *through* travel, for the reason that passengers taking this, would not be ticketed over any portion of the great line. This fact will probably deter capitalists from taking stock in any project like the one described, unless in a scheme that purposes to construct a *new through* road.

It was considerations like these, probably, prevented the commencement of the Mohawk Valley railroad last year. The charter of this company has now passed into the hands of the Utica and Schenectady company, which controls the right of way upon both banks of the Mohawk, the only practicable routes for a railroad between Albany and Utica to the table lands of central New York. Another objection to the new road is that it is not needed, except as a local work, (and of its merits in this particular we do not presume to speak.) Neither is its construction called for by public sentiment. The Albany and Buffalo line as it is, is well managed, and its rates of charges are altogether satisfactory. The rivalry of the Erie and its branches, will always be sufficient to secure to travellers good management and satisfactory treatment on the part of the former. The public are satisfied with things as they are; and as we see no way in which the new road can come in for any portion of the through travel, it appears to us that it would be wise for them to wait till they see better prospects ahead.

Baltimore and Ohio Railroad.

The following description of the progress of this work taken from a Baltimore paper, forcibly exhibits the vastness of the enterprise to be completed, as is confidently believed, by about the 1st of January next. At the workshop of the company at Baltimore, they have over one thousand mechanics constantly employed in preparing the necessary means for this object. The castings for sixty iron bridges, to be erected over the streams between Fairmount and Wheeling are nearly completed, including one for the Monongahela river at Fairmount, to be composed of three spans of 105 feet each, being the largest iron bridge in the world with the single exception of the one at Menai straits in England, about fifty locomotives are also being built, and a large number of burthen cars being constructed, all of which will be finished by the 1st of January, and if placed in a straight line, makes a train of at least seven miles in length. Besides these, there are also a number of locomotives and cars building at private establishments in the same city.

Louisiana.

New Orleans, Opelousas and Great Western R.R.—A meeting of the citizens of Franklin, in St. Mary's parish, Louisiana, was held at the Court House on the 16th Sept., the object of which was to forward the construction of the above road.—Judge Overton and Colonel B. H. Payne were the principal speakers. Resolutions in favor of taxation upon the realty of the Parish towards the construction of the road, and providing for the appointment of a committee of five to petition the President of the Police Jury for a meeting of that body, for the passage of a resolution submitting the question of an annual tax of one per cent. upon all the landed property of the Parish for the space of six years, were unanimously passed.

Vicksburgh and Shreveport Railroad.—The engineer employed to survey and locate the line, Peter J. Tournadre, Esq., and his assistants, commenced the survey at a point on the Mississippi, opposite Vicksburg, on the 15th September. It is expected that the whole line, from Vicksburg to Shreveport, will be surveyed and located by the 1st January or February next.

Florida.

Brunswick and Florida Railroad.—A telegraphic despatch from Elam Alexander, Esq., President of the Washington and New Orleans Telegraph Co., published in the Savannah Courier, announces that the board of direction of the Brunswick and Florida railroad company closed on the 23d September, a contract for 19,000 tons of railroad iron—1,000 tons to be delivered at Brunswick in November next, and 1,000 tons each month thereafter. The stockholders here paying about $400,000 in cash on the contract. The engineers were to be in the field on the 1st of October, by instructions of the board.

Winslow's Compound Rail.

This rail is steadily growing in favor, wherever laid down, and it has now been in use for some years upon various roads, and has given universa satisfaction. The testimony of all who have had experience in its use is uniform in its praise. Such is the remark made to us a few days since by the engineer of one of our roads, who was making inquiries as to the working of the compound rail, with a view of adopting it upon the road of which he had charge. It is 4 years since this rail was first introduced upon our roads. A sufficient time we contend, for a satisfactory test of its merits.

In this connection we would state, that the compound rail is to be used upon the extension of the Chicago and Aurora branch road now in progress, in Illinois.

San Francisco Water Loan.

We invite the attention of capitalists to the advertisemen: in our columns, for a loan for the construction of water works to supply the city of San-Francisco We shall refer to the subject of this loan more fully in a subsequent number of our paper.

Stock and Money Market.

The price of money has advanced very considerably for a few days past, and as a necessary consequence, the fancy stock market has suffered a very large decline. One cause of the advance in rates asked for money, is the large amount of specie in the Sub Treasury, which now amounts to $20,000,000, and which cannot be drawn from it, for want of specific appropriations. This sum will probably increase up to the meeting of Congress in December next. Money is sufficiently abundant for all useful purposes, and the panic in the street is entirely due to the peculiar position of the operators, (the bear interest having the advantage,) and should not be taken as any indication of the real condition of the market, which is thoroughly sound. Good securities maintain themselves, and first class bonds of new works can be negotiated without difficulty.

The following table shows the operations of the United States mint for September.

COINAGE FOR SEPTEMBER.

Gold.

187,360 double eagles	$3,747,200 00
24,550 eagles	245,500 00
61.330 half eagles	306,650 00
129,311 quarter eagles	313,277 50
192,526 gold dollars	192,526 00
595,077 pieces	$4,815,153 50

Silver.

13,000 quarter dollars	3,250 00
100,000 dimes	10,000 00
43,500 half dimes	2,175 00
1,566,900 three cent pieces	47,007 00
2,318,477 pieces	$4,879,760 00

GOLD BULLION DEPOSITED FOR COINAGE IN SEPT.

From California	$4,169,300
Other sources	84,700
Total	$4,254,000
Silver bullion deposited for coinage in Sept.	26,000

Gold Deposits.

	1851.	1852.
January	$5 071,669	$4,161,688
February	3,004,970	3,010,222
March	2,880,271	3,892,156
April	2,878,353	3,091,037
May	3,269,491	4,335,578
June	3,637,560	6,689,474
July	3,127,517	4,193,880
August	4,135,312	2,671,535
September	4,046,799	4,254,000
Total	$32,051,942	$36,099,571

The following comparative table will show the specie movement for nine months:

	1852.		1851.	
	Mint dep.	Exports.	Mint dep.	Exports
Jan...	$4,161,600	$2,868,958	$5,071,667	$1,266,281
Feb...	3,010,223	3,551,543	3,004,970	1,007,689
March	3,892,156	661,994	2,880,571	2,368,861
April..	2,091,037	200,266	2,878,353	3,482,182
May .	3,335,578	1,834,893	3,269,491	4,462,367
June .	6,689,474	3,556,355	3,637,660	6,462,367
July..	4,200,000	2,971,499	3,127,517	6,004,170
Aug..	2,675,000	2,835,900	4,048,800	2,673,444
Sept..	4,240,000	2,732,000	3,850,500	3,490,142
	36,295,155	22,262,508	31,868,629	31,261,271
Less for. gold rec'd.	2,200,000			1,782 550
		20,062,508		29,478,721
Excess mint dep..	16,232,647			2,389,903
	36,295,155			31,868,629

The amount in the United States Treasury, is about $18,000,000.

The following is an official statement of the tolls collected on the canals of this state for a number of years past:

	3d week in Sept.	Total to Sept. 28.
1846	$166,096	$1,777,323
1847	126,699	2,541,214
1848	144,392	2,012,794
1849	137,188	2,004,567
1850	132,812	2 021,121
1851	127,185	2,275,885
1852	124,201	2,666,784
Decrease from 1851 to Sept. 14		$206,683
Decrease from the 3d week in Sept. 1852.		2,984
Total decrease		$209,617

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 9, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	109½
U. S. 6's, 1862	116
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118½
U. S. 6's, 1868	119½
U. S. 6's, 1868—coupon	119½
Indiana 5's	97
Indiana 2½	52
" Canal loan 6's	95½
" Canal preferred 5's	42
Alabama 5's	97
Illinois 6's, 1847	82½
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	107½
New York 6's, 1854-5	108½
New York 6's, 1860-'61-'62	115
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	121
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110
New York 5's, 1854-'55	107
New York 5's, 1858-'60-'62	105½
New York 5's, 1866	110
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1886	109½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	100½
New York 7's, 1857	110
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113
Erie 2d mortgage, 7's, 1859	102
Erie income 7's, 1855	96
Erie convertible bonds, 7's, 1871	97
Hudson River 1st mort., 7's, 1869	105½
Hudson River 2d mort., 7's, 1860	99
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	102½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Sept. 30.	Oct. 7.
Albany and Schenectady	106	105
Boston and Maine	107	107
Boston and Lowell	—	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	89	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	98	98
Erie	86½	82½
Fall River	—	—
Fitchburgh	105½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	72	69½
" preferred	111½	111½
Hartford and New Haven	—	132
Housatonic (preferred)	35	35
Hudson River	73	71½
Little Miami	—	—
Long Island	28½	25
Mad River	—	99
Madison and Indianapolis	107	116½
Michigan Central	110	111
Michigan Southern	123	123
New York and New Haven	113	113
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53	48
Ogdensburgh	26½	27
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	34½	34½
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	95
Rochester and Syracuse	122	121
Stonington	59½	57½
South Carolina	—	122½
Syracuse and Utica	130	130
Taunton Branch	115	115
Utica and Schenectady	139	138
Vermont Central	18½	17
Vermont and Massachusetts	20	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Baltimore and Philadelphia in Connection with Western Roads.

The people of Baltimore and Philadelphia profess, and we have no doubt believe, that the roads they are severally constructing are destined to turn the great current of western trade to themselves. Allowing that such will be the *tendency* of their respective lines of improvement, it may be well for our neighbors to consider the capacity of their works to accommodate, before allowing themselves to feel too sanguine as to the result. They now reason in this manner: "New York commands the trade of the west, not because she is in fact the most favorably situated in reference to it, but because she possesses the only avenue by which it can reach a market. Give us," say they, "our railroad, and we, being some hundreds of miles nearer to the heart of the west than New York, can control the trade now enjoyed by the former." Let us look at these assumptions for a moment, and see how far the Baltimore and Ohio railroad is calculated to accomplish its object, and accommodate the business now passing over the New York canals.

The tonnage delivered at tidewater the present year by the New York canals will not vary far from 2,500,000 tons. For a railroad to deliver an equal amount, would require the arrival every *twenty minutes* of a train laden with 75 tons of freight, (a large average load for assorted merchandise.) As the return trips would of necessity equal the number of arrivals, only *ten* minutes would elapse between the arrivals and departures. Now to say nothing as to the impossibility of receiving and accommodating such a vast amount of freight at any railroad terminus, it is easy to see that upon no single, nor double track road even, could the above number of trains, which would amount to 144!! daily, be moved. In fact upon a road of the length of the Baltimore and Ohio, which is about 400 miles, not more than six or eight distinct freight trains daily could be moved with an economy necessary to secure a large through trade. This calculation would cut down the amount of transportation to Baltimore to 100,000, against 2,500,000 now reaching market through the New York route!!

The Baltimore and Ohio is a single track railroad. Now it is well known that the longer a single track railroad, the greater the cost of transportation. The reason of this is obvious. Upon a road of 400 miles there may be twenty trains running the same day, and an accident to one may derange the *time* of the whole. Should *one* train fail to make time, *all* may be delayed. Should one portion of the road be impassable, operations upon the whole line must cease; so that we think we may state as a safe rule, that, with a single track road, 100 miles is the economical limit of length. Any increase in distance would not, we are confident, diminish cost of transportation.

It is easy to see, therefore, that neither the Baltimore and Ohio, nor the Pennsylvania roads, are to make much impression upon western trade, until they shall have double tracks, which cannot be built on either road for some time to come. Admitting the superiority of their *routes* over the New York, they cannot become competitors for the business of the former, for the reason that the capacity of both for *through* traffic would be equal only to a mere fraction of the tonnage of the Erie canal. Until other avenues than these we have been discussing shall be built, allowing all that is claimed as to the superiority of railroads over canals, the producer of the west would be compelled, until new avenues should be opened, to take the Erie canal route, even though Baltimore and Philadelphia were the appropriate markets for such products, instead of New York.

In 1850, the tonnage arriving at tidewater thro' the New York canals was 2,033,863. The present year it will probably reach 2,500,000. To accommodate a tonnage equal to that of 1850, the State Engineer in his report of 1851, calculated that it would require at least *six* double track, well equipped, railroads. Allowing 313 working days, 2,033,863 tons would give a daily movement of 6,498 tons, or about 1,100 tons daily to each road, which being assorted merchandise, was estimated at about the capacity of a double track road. This would involve a movement of 338,979 in one, or what amounts practically to the same thing, 677,958 tons in both directions. From this estimate it will be seen how unequal must be the contest between the Baltimore and Ohio, a *single* track road, and the Erie canal for the trade of the west.

Another consideration in favor of the canal which must not be lost sight of in the calculation, is not only the low cost at which freights can be moved, but taken care of after they reach tidewater. Take *grains* for instance. After a boat reaches Albany, a steam tug tows it, with some twenty others, at a cost of a few dollars, to New York. As a greater part of these grains are exported, they never go into warehouses, the boat serving this purpose until a sale is effected. As soon as sold, the boat is towed alongside of a vessel, and the cargo discharged directly into the hold of the latter. All expenses, excepting the slight one arising from the detention of the boat, are avoided. The boat's captain acts as factor, and the whole transaction may be completed without any intervention whatever of the commission merchant, or any charge for warehousing. In this respect, New York enjoys an advantage not possessed by any city in the United States; an advantage little considered, but one which adds vastly to her strength. The entire length of the Hudson from New York to Albany, a distance of 150 miles, affords a perfect harbor for all kinds of river and canal craft, where such can lie with perfect safety and at slight expense, for any length of time. Were all the receipts by canal at Albany compelled to go into warehouses, no idea can be formed of the vastly increased cost of transportation.

Our Baltimore friends will do well to bear in mind that the annual increase of business in the Erie canal will exceed the full capacity of their road. The ratio of this increase for the future is to bear no reference to the past. This business thus far has been mainly collected from the borders of our navigable lakes and rivers, and has represented only a tithe of the ultimate capacity of the great West. With all the works in progress, the only State that is really making suitable preparations for the accommodation of this trade is New York, and these are the enlargement of the Erie canal.—Although our railroads are engrossing public attention almost entirely, it is the canal that constitutes the strength of this city. Through this channel she must hold, if she continues to retain, the trade of the West. If this trade is to be carried on only by railroad, then might this city well be solicitous as to the result. But the canal constitutes her strength, and through this work she must continue to maintain her position, although its importance is lost sight of in the popular favor felt toward railroads. It is the only work whose capacity is at all commensurate with the volume of Western trade, which it must monopolize, for the want of other channels, if for nothing else.

As great as is the present capacity of the Erie canal, the enlargement now in progress will more than double it, and at the same time, will reduce the cost of transportation nearly in the same ratio. The total tonnage capacity upon the enlargement will be 11,640,000 tons, or 5,820,000 in either direction. It is expected that the cost of transportation will be reduced to five mills per ton per mile, making the entire charge from Buffalo to Albany only $1,82, or a little more than $2 per ton, from New York to Buffalo, a distance of over 500 miles.—Upon the lakes, the transportation will be still cheaper, so that it may be safely calculated that heavy freight will be taken from Chicago to New York for from $3,50 to $4 per ton.

We have written this article, not from any unkind or improper feeling toward either Baltimore or Philadelphia, only to point out to them the strength of the rival they will have to contend with, and the necessity of adopting every possible means within their reach, to give the utmost capacity to their own lines. The first step should be to construct double tracks to their roads without delay, otherwise we are satisfied, they will be sadly disappointed as to the result.

European and North American Railroad.

We find in the New Brunswick papers the details of the contract which has been entered into between the Government of the Provinces, the directors of the European and North American railway company and Mr. Jackson, the celebrated English contractor. The company abandons all claim to the lands heretofore secured to them by the Land Facility act of 1851, which act is to be repealed.

The contract embraces the building of the road from Amherst to the boundary of the State of Maine, *via* St. John. This distance is estimated at 214 miles. The rate per mile for which Mr. Jackson agrees to build the road from St. John to Amherst is £6,500 sterling. Of the entire sum the Province takes £1,200 per mile by subscription, amounting to £250,000 in the whole, being the sum provided by the Money Facility Act, and in addition, loans to the company £1,800 per mile, to be secured by a first mortgage on the road, its rolling stock, etc.—The rate on that portion of the line from St. John to the State of Maine is not yet fixed, the route not having been surveyed or located. The bonds are to run for 20 years, and the interest to be paid by the Province will be about £15,000 per annum.—The road is to be completed in three years. The work is to be done in the most thorough style with heavy iron rails. There are to be 9 station houses between St. John and Shediac, to be built in the best style. The bridges are to be built of iron and stone. The locomotives and cars are to be of the very best description. When completed, it is intended this road for solidity will be among the best in America, and on the authority of Mr. Morton, the celebrated Engineer, it will cost less than many of the first class American roads. The crossing over the falls will be by a tubular bridge similar to that erected over the Menai Straits, this will cost $120,000.

The contract was signed on the 29th September, and it is supposed that a special session of the Legislature will be at once called to ratify the arrangement, and make the necessary alterations in the acts incorporating the European and North American railway company.

The survey of the line between St. John and Amherst is now nearly completed, and that of the remaining part between Carleton and the American boundary will be soon commenced. The Branch lines to Frederickton and Mirimichi are also provided for in the contract. This is a large undertaking, and from the well known energy and ability of the contractors Mr. Jackson represents, its completion according to the terms of the contract may be looked upon as certain.

New Railroad Route between the Lakes and New York.

The construction of the Lackawanna and Western railroad bids fair to exert a powerful influence in securing new and convenient routes of commerce and travel between New York and the great lakes. The opening of this road, has been the signal for the commencement of other roads for the purpose of supplying Western New York, Canada, and the Steam marine of the Lakes, with coal. Already are three railroads in progress to connect the coal fields with *Lake Ontario*, that would not have been undertaken but for the above purpose, viz: the Syracuse and Binghampton, which will supply the important port of Oswego; the Lake Ontario, Auburn and New York railroad, extending from Little Sodus Bay to a junction with the Cayuga and Susquehanna railroad, a distance of about 75 miles, and the Sodus Bay and Southern railroad, extending from Great Sodus Bay to the Canandaigua and Corning road. All these roads are aiming, through their connections, at the coal fields of Pennsylvania, and expect to derive a large traffic from the coal trade which is to supply the Lakes, and Western New York. There are also numerous lines of railroad in operation and progress, connecting the Northern coal fields of Pennsylvania, with Lake Erie, through their connection with the Lackawanna and Western, and the Blossburgh and Corning roads. Among these may be named the Erie, Buffalo and New York City, Buffalo, Corning and New York railroad, Canandaigua and Niagara Falls railroad. Upon all these roads the coal trade will form no inconsiderable portion of their traffic.

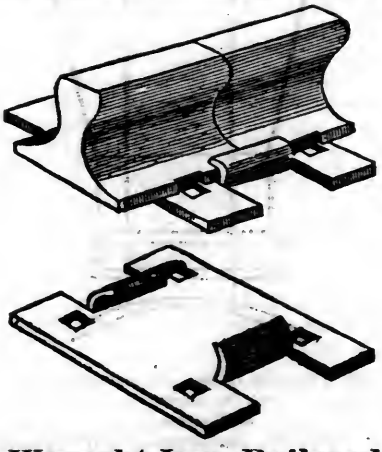
This traffic being only in one direction, *toward* the Lakes, it follows that the trains must return light, unless they can form some connection at the coal fields with roads running to New York. With such, the return trains would take, at a nominal rate, full loads of western produce for the New York market, which would break bulk at the coal mines, and be forwarded to New York over other roads.—Were there for instance, a railroad from New York to Scranton, Pennsylvania, the Southern terminus of the Lackawanna and Western road, there can be no doubt but that an enormous traffic would pass over the above road, in connection with those extending from that point to the Lakes. The outlay necessary for the vast tonnage of coal forwarded by the roads running *north*, would accommodate an equal amount of *return* tonnage, at a very low cost; so that as far as the distance from Scranton to the Lakes is concerned, the above roads could successfully compete with all other lines of improvement,

These considerations, we are happy to say, are now arousing public attention to the importance of opening a direct railroad communication from New York into the Lackawanna valley. The progress of other roads, has now rendered this work a comparatively trifling affair. From New York to Scranton, the distance is only about 125 miles.—Eighty miles of this extending from New York to the Water Gap, is nearly completed, the unfinished portion being in progress by the Morris and Essex railroad. From the Water Gap to Scranton, 45 miles is the only link to be filled, over what is stated to be, a favorable route.

The above route, when opened, would be one of the cheapest, most convenient and shortest route, between New York and the Lakes; and when we consider how little there is wanting to constitute the above a *through* route, between New York and the West, and how vastly valuable the unsupplied link would become, as a *new coal* road to New York, we can only wonder that it has not been opened long before this. We have supposed, and still think it very probable, that the persons holding the charter for the road from Scranton to the Water Gap, have been deterred from moving, from the fear that their project might injure the Erie railroad, in which we believe they are somewhat interested. Whatever may be a fact in this case, all such partial considerations must, in the end, yield to those of a more general and comprehensive nature, and the former never can be listened to, without in the end, aggravating the evils they seek to avoid.

Resignation of C. B. Fisk, Esq.

This gentleman, for a long time chief engineer of the Chesapeake and Ohio canal, has resigned his office. Having been appointed by the government one of a board to survey the route and report upon the cost of an additional canal around the falls of the Ohio, he has gone to Louisville to meet his associates, Col. Long, and Col. Turnbull, with the view of discharging the duties of the commission.



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired. Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:

John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D., X. & B. Railroad, Xenia.
A. Degraffe, Railroad Contractor, } Dayton.
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank. } Dayton.

October 8, 1852.

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DeWOLF, Jr.

Oct. 2, 1852. 1y*

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent.*

SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO, of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon short notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

$250.000

San Francisco Water Loan.

Ten per cent. Bonds of $1,000 *each, with Coupons, payable semi-annually, in the City of New York, redeemable on 1st November*, 1862.

THE UNDERSIGNED, PRESIDENT OF the Mountain Lake Water Company, of the City of San Francisco, in the State of California, will receive sealed proposals at the office of Messrs. Dias & Thomas, No. 52 Wall street, in the city of New York, until Thursday, the 4th day of November, 1852, at 2 o'clock P. M., for the whole, or any part of the above mentioned Loan, which will bear an interest at the rate of ten per cent. per annum, payable semi-annually in the City of New York, and be redeemable on the 1st day of November, 1862, in the city of New York.

The undersigned will avail himself of the usual privilege of rejecting conditional bids, and of declining such as he may deem not advantageous.

Bids should be directed "Proposals for San Francisco Water Bonds," and sent to the subscriber.

Twenty per cent. and the premium will be payable on the day after opening the bids, and the balance with accrued interest may be paid at the option of the bidder any time before the first day of February next, thus giving Capitalists an opportunity to secure a most reliable and permanent investment, without precipitately disturbing their financial arrangements.

The debt created by the issue of these Bonds, is for the purpose of paying for the necessary pipes, and fixtures, more than sufficient means being already provided for the purpose of building the dams; reservoirs, laying the pipes, and completing the works; the entire capital of the Company ($500,000,) having been subscribed by the citizens of San Francisco; the subscribers embracing many of its most wealthy and respectable Merchants and Bankers. This is the first and only debt of the Company, and the repayment of the same is secured, by the Transfer in Trust, to James B. Bond and William M. Burgoyne, of all the property and franchises of the Company, valued at upwards of One Million of Dollars.

The Company have by law the exclusive right of laying pipes within the city limits, and own by purchase the only source from which water can be introduced into the city.

The Stock of this Company will probably be the best paying stock in the Union.

Copies of the Laws, Reports of Engineer, etc., can be had by calling at the office of Messrs. Dias & Thomas, No. 52 Wall street, second story.

SAMUEL PURDY, President.

New York, October 2, 1852.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.
Portland, Sept. 21, 1852. tf

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.
September 9, 1852. 2m

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—

DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To Chief Engineers.

A YOUNG MAN is desirous of a situation, either in Field Work, or as Practical Draughtsman. Has just completed an engagement in this country; before which, was engaged for six years with an Engineer in Scotland—part of the time as Draughtsman. Is in possession of all instruments necessary for Surveying, Leveling, etc. Please address J. H. STEWART, Box 70, Post Office, New York.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

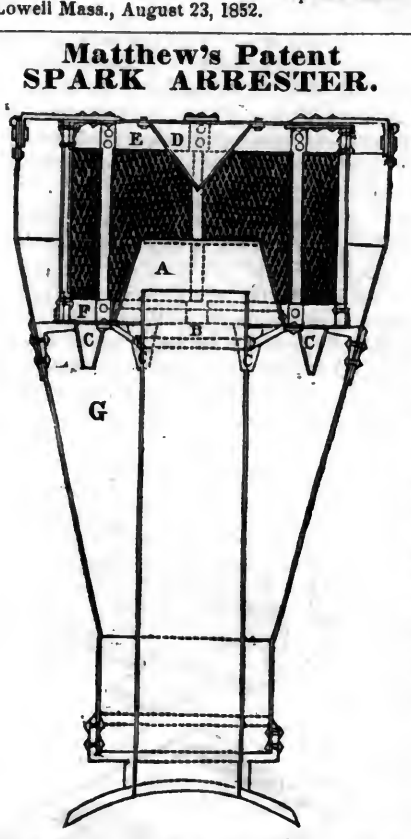
Also—

MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.
Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester," several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others.

Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respecttully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them.

J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road.

E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice.

EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is.

JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester.

HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies nave been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,

Importer of Stationary 191 Pearl st., N Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.

July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S,—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL RAILROAD, NEW YORK, SEPTEMBER, 1852.—Sealed Proposals will be received at the office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging, and Superstructure, or either of them, with, or without materials on the following Divisions of the Illinois Central Railroad, to wit:—

3rd Division from Township No. 1, North of the Base Line of the 3rd principal meridian, including sections 113 to 151	39 miles.
4th Division, terminating at Decatur, including sections 152 to 204	53 miles.
5th Division terminating at Bloomington, including sections 205 to 247	43 miles.
7th Division from Lasalle to Freeport, including sections 309 to 386	78 miles.
11th Division from Urbana to S. line T. 12, including sections 583 to 630	48 miles.
12th Division terminating at the junction of Chicago Branch with the Main Line, including sections 631 to 704	74 miles.
Total	335 miles.

Proposals may be for the entire length of each division, or for the following sections:

3rd Div.,	for sec.	113	to 135	inclusive	23	miles.
"	"	136	151	"	16	"
4th "	"	152	180	"	29	"
"	"	181	204	"	24	"
5th "	"	205	226	"	22	"
"	"	227	247	"	21	"
7th "	"	309	312	"	4	"
"	"	313	324	"	12	"
"	"	325	352	"	28	"
"	"	353	370	"	18	"
"	"	371	386	"	16	"
11th "	"	583	608	"	26	"
"	"	609	630	"	22	"
12th "	"	631	650	"	20	"
"	"	651	669	"	19	"
"	"	670	681	"	12	"
"	"	682	690	"	9	"
"	"	691	704	(more or less)	14	"

Proposals will be received at the office in Chicago, until the 11th day of October, 1852.

Profiles, Plans, and Approximate Estimates of quantities will be ready for inspection, and blank forms for proposals will be furnished at No. 50 Wall street, New York City, or at the office of the Chief Engineer in Chicago, Illinois, and after ———1852, the same as relates to the 3rd and 4th divisions at Vandalia, to the 5th division at Bloomington, to the 7th division at Lasalle and Freeport, to the 11th division at Urbana, and to the 12th division at Vandalia.

Payments will be 80 per cent cash, and the balance on the completion and acceptance of the work in cash, or 7 per cent construction Bonds, at the option of the Company.

Satisfactory references will in all cases be required. R. B. MASON, Chief Engineer.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,
ALSO,
Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

I on Tubes for Artesian Wells, screwed together flush on either side.

HOMAS PROSSER & SON, Patentees,
28 Platt street, New York.

To Contractors.

Office of the Dauphin and Susquehanna Coal Co.
No. 54 Wall-st., New York, Sept. 22, 1852.

PROPOSALS will be received until the 15th day of October next, for the graduation, masonry and bridging of that part of the Dauphin and Susquehanna Coal Company's Railroad extending from near Ransch Gap on the line now open for travel, to Auburn on the Philadelphia and Reading Railroad, a distance of about 31 miles.

The character of the work is such as to render it well worthy the attention of contractors, and payments will be made in cash.

The Directors reserve the right of rejecting any proposals that may be deemed unsatisfactory.

Plans, profiles, etc., can be seen, and further information be obtained, by application to the Chief Engineer, Richard B. Osborn, at the Company's Office, No. 73 South 4th st., Philadelphia, after the 9th of October next, or on application to the undersigned.

Proposals to be addressed to A. G. Jaudon, Secretary, (marked Proposals for grading, etc.,) at the office of the Company, 54 Wall-st. New York.

THOMAS CHAMBERS, President.

Notice to Contractors.

OFFICE OF THE DAYTON AND CINCINNATI (SHORT LINE) RAILROAD COMPANY.—CINCINNATI, Sept. 20th, 1852.—RAILROAD LETTINGS.—Sealed proposals will be received at the office of the Company; situated on the south side of Sixth street, between Main and Walnut, until Wednesday, October 20th, 1852, at 5 o'clock P. M., for the preparation and construction of section No. 1 of the road of said Company ready for the superstructure.

This section is the heaviest on the line, and embraces the excavation of a tunnel measuring some six thousand feet in length, with two thousand feet of arched approaches in addition, and from two to four miles of the road bed. The job of masonry on this section will be heavy, and the whole offers to responsible and energetic contractors, one of the most extensive and compact sections of work ever offered in the West.

The tunnel passes through stratified blue fossil limestone and indurated marl, and will be of a width to accommodate double tracks, walled with stone, and arched with brick. The Company desires that the work shall be commenced as soon as possible after the letting, and completed at the earliest practicable period.

Other portions of the work are in course of preparation for letting, and if adjusted may be offered at the same time.

The plans and specifications will be ready for inspection at this office at least two weeks prior to the letting.

By order of the Board of Directors.

SAMUEL H. GOODIN, President.
JOHN C. THORP, Secretary.

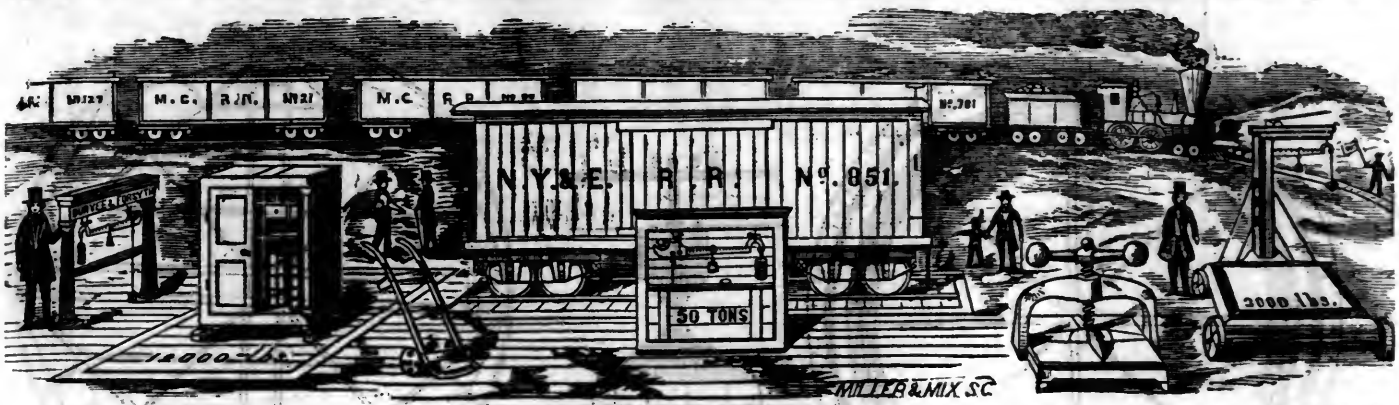
A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,
21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:
Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq., Philadelphia.
C. C. Jamieson, Esq., Baltimore. 38tf

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates;* Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	" Chicago, Ill.
Crawford & Reynolds,	" Cleveland, Ohio.
Joseph E. Elder,	" St. Louis, Mo.
Byram, Millier & Shreve,	" Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

Messrs. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly a hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

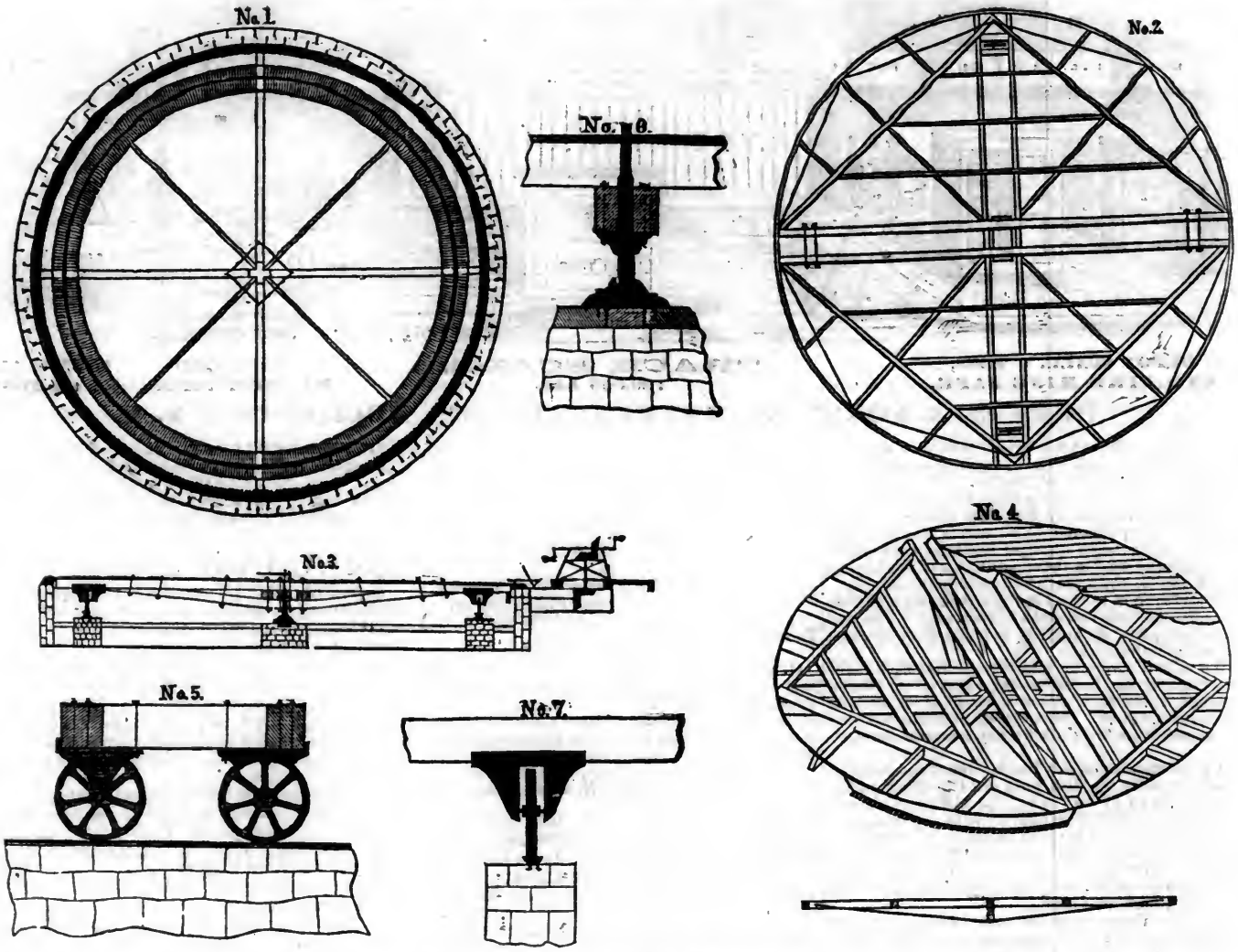
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 42] SATURDAY, OCTOBER 16, 1852 [WHOLE No. 861, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Memoir of Wm. Spencer Brown.....657
Sodus Point and Southern Railroad.....658
Cleveland and Mahoning Railroad.....658
Railroad Land Grants.....659
Lawrenceburgh and Upper Mississippi R. R..660
Finances of New Orleans.....661
The Cotton Trade.....662
Taunton Branch Railroad.....662
Virginia and Tennessee Railroad.....662
Cincinnati and its Railroads.....663
Rochester and Syracuse Railroad.....663
London and Northwestern Railway.....663
Wellsville and Wheeling Railroad.....663
Railroad Iron.....664
Great Trunk Line Railroad.....664
Industrial Resources of the South and West...664
Stock and Money Market.....665
Journal of Railroad Law.....666
Sackett's Harbor and Ellisburgh Railroad.....666
Louisville and Covington Railroad.....667
Buffalo and Olean Railroad.....667
Boston and Maine Railroad.....667

American Railroad Journal.

Saturday, October 16, 1852.

Memoir of William Spencer Brown,

CHIEF ENGINEER OF THE GREENVILLE AND COLUMBIA RAILROAD.

The melancholy and sudden death of William Spencer Brown has spread sorrow among his friends and in the profession he graced by his talents and worth. We copy from the Palmetto Banner the substance of a memoir of his life. He was the son of Maj. Gen. Jacob Brown, General in Chief of the United States Army, and was a worthy son of that illustrious man. Born at Brownville N. Y. 27th May, 1815, he graduated at West Point in 1835, received a 2d Lieutenant's commission in the same year, resigned in 1836, and became an Assistant Engineer on the Erie Canal enlargement. In 1836 and '37, he was employed on the Norristown and Valley railroad. In 1837 he married Elizabeth D. Barnes, daughter of Judge Barnes of Philadelphia. This accomplished lady accompanied him soon after his marriage to the South, and cheerfully encountered the privations of an Engineer's wife, in what was then almost an Indian country. In 1837 he was appointed on the Atlantic and Western railroad, Georgia, where he continued to 1843, and during a portion of this time and afterwards till 1847, was Chief Engineer on the Memphis Branch, and also acted in the same capacity on the Coosa and Tennessee road. In 1847 he was elected Engineer on the Greenville and Columbia railroad, and in that year he gave the well known reply to the President of the road in answer to the question whether it was practicable to construct a road between Columbia to Greenville—"Give an Engineer money and he can go anywhere?" A glorious confidence in a profession that knows no impossibilities.

In the same year Mr. Brown was elected Professor of History and Ethics in the State Military Academy, but declined the appointment. In July, 1847, he organized the corps of Engineers who ran the direct experimental line of the Greenville and Columbia railroad, 110 miles in about forty days. Subsequent considerations induced a change in this location.

Mr. Brown afterwards located the road on the east bank of Broad river, in the winter of '47 and 48, and the company appointed him commissioner to obtain a relinquishment of the right of way from Columbia to Saluda. This delicate duty he performed with admirable tact. In 1848, the line to Anderson was located and the work pressed with great activity. In 1849, Mr. Brown, on the resignation of Mr. Rea, was advanced to the post of Chief Engineer on the Greenville and Columbia railroad. By his advice in 1849, a contract was made with the South Carolina railroad to take at $45 per ton, delivered at Columbia, in payment of their bonds at par, as much of their flange iron as should bear his inspection. The company received a little over 30 miles of this iron under this agreement. In the summer of this year the location of 1847 was modified, and the route from Belton to Greenville adopted, a branch from Cokesburg to Abbeville was also established.

In Sept., 1849, the track began to be laid down at Columbia, and during the session of the Legislature of that year, the Engine Abbeville ran a few miles on the road much to the gratification of that body and the Judges.

In 1850, everything promised a rapid completion of the road, but the spring rains of that year retarded the work, especially the bridge over Broad river. The undertaker of the stone work having been dismissed, Mr. Brown took upon himself the arduous duty of having this work done. He succeeded, but in July, many of the hands engaged on the wooden superstructure were seized by sickness and fled from the work. Here again his unconquerable energy was put in requisition; aided by Mr. H. F. Peake, the Superintendant, he took the whole construction on himself. He hired hands, and by passing them down every evening to Columbia secured their health. The work progressed steadily till the memorable freshet of 24th August. Three spans were up and the scaffolding for them, and a fourth. The flood carried away the scaffolding but left the bridge and road uninjured. On this occasion Mr. Brown displayed that intrepidity which at last probably consigned him to a watery grave. From that time to the completion of the bridge, he might be seen day after day on the flats and scaffolding in Broad river, urging on the work, regardless of the exposure and the risks he was encountering.

In 1850, he became the consulting Engineer of the Laurens railroad, and put it under way. In 1851, he was appointed consulting Engineer of the King's Mountain railroad.

In March, 1852, the Greenville and Columbia railroad reached ninety-six miles, between this point and Greenwood, a delay of two months was encountered from the fact that the iron could not be forwarded by the South Carolina railroad. The first week in July the road reached Greenwood, and in six weeks fourteen miles were added to its length. No doubt was entertained that by the 1st of October the road would be completed to Belton, and to Anderson by the 1st December. These expectations were not however permitted by a wise Providence.

On Tuesday, 24th of August, he left Columbia for a brief visit over the road, intending to return on Friday ensuing. On Thursday he was induced to visit Laurens, and locate the depot at that place. The rain of Thursday night and Friday detained him till Saturday morning, when, in company with Col. Irby, President of the Laurens road, he swam on horseback the Little river near the town, and reached the head of the Laurens railroad, thence he came to Helena, where he stopped the G. and C. passenger train, from which place his anxiety carried him as far up the road as he could go; he then made his way to Chappel's and saw the great flood in the Saluda, on Sunday evening he descended the road from Little river to Helena. On Monday morning, the 30th, he left in the train for Columbia,

but it was obliged to stop on account of injuries done to the road before it reached Crin's creek, and he ordered it back to Helena. He got on to the Broad river bridge opposite Alston, and saw Broad river in a flood never surpassed, and only approached by the Yazoo freshet of '96, there he saw Alston in ruins and four spans of Broad river bridge swept away. Here he met his friend, Col. A. G. Summer, and stated his plans for restoring the bridge. Anxious to reach Columbia, and contrary to the advice of Col. Summer, in company with Mr. McCollum, Mr. Jefferson, and a son of Mr. McCollum's he attempted the descent of the river and finding his way thus to Columbia. His double object was to examine the injury done the road and to reach his family. They descended safely along the line of the railroad for 4 miles, when Mr. Brown proposed to throw the batteaux into the current and thus float down the stream. In less than a mile they ran into a cross current at Freshley's falls and the boat was overturned. Jefferson clung to the boat and was carried with it some miles, until it struck against a tree, which he climbed, and was thus saved. McCollum and his son and Mr. Brown swam near each other, till a floating limb struck McCollum and carried him and son down, the father rose and saw Mr. Brown still swimming near him and said—"Colonel I hope we shall get out yet," some reply was made but McCollum did not hear it. He struck out for the land reached it and was saved. Mr. Brown, after swimming still further down the river, was seen to rise and sink by a man and his wife who did not know him but described part of his dress so as to identify him. His body after being three weeks in the sand and under water was found within a short distance of the place described where he was seen to perish.

The above notice is abridged from a most eloquent memoir of Mr. Brown, prepared by the venerable and excellent Judge O'Neal, president of the G. & C. railroad, between whom and Mr B., the most intimate relations of friendship existed. Those who know Judge O'Neal, know how pure and excellent a man must be to sustain such relations towards him.

We were also favored with the perusal of a letter from the wife of the deceased, acknowledging the sympathetic notice of Judge O'Neal, which exhibits the character of Mr. Brown in all the relations of life, in a most favorable light. His death was a terrible blow to his family and friends, but the sting of it is taken away by the memory of his excellent life.

New York.

Sodus Point and Southern Railroad.—A recent number of the Railroad Journal contains a summary of the exhibit of the advantages of position and the commercial prospects of this projected road. The report of the Chief Engineer, P. Sours, Esq., has just been received, pointing out the physical character of the route. The report is accompanied by a further statement from the directors, and a large map of Great Sodus Bay and a profile of the line. The location begins at Sand Point, a peninsula projecting into Great Sodus bay, and ends by connecting with the Canandaigua and Corning railroad, 29¼ miles from Jefferson. The line is favorable, the ridges and valleys being generally north and south in direction, and requiring the removal of but little material in the formation of a road bed. The cuttings are mostly of loam, sand and gravel, and little rock will be encountered in the graduation. The masonry and bridging is very light, the streams crossed being few and small. The gradients vary from a level to 43·8 feet per mile. This maximum is adopted in passing the elevated ground between the Erie canal and the Canandaigua outlet. The length of gradients exceeding 37 feet per mile is 6·72 miles, descending towards the north, and in the line of the greater traffic. Where the highest grades occur the line is straight or curved so slightly as to afford little resistance to the passage of cars. The minimum radius is 1000 feet, which occurs at Sodus Point near the northern terminus. On no other portion of the line will a curve of less radius than from 2000 to 2500 feet be required.

The graduation, bridges, etc., on the road 37 6 miles, is estimated at	$123,370
Iron, fencing stations, etc	313,608
	$436,978
The equipment consists of 3 locomotives, 6 passenger, 2 baggage and 20 freight cars, and is set down at	52,400
Total for road and equipment	$489,378

or $13,485 per mile. We learn that the graduation of the road is to be immediately placed under contract.

The President of the company is Wm. D. Cook, Esq., of Sodus Point; Vice President, Albert Banta; Secretary, Stephen Culver; Treasurer, A. T. Blackmar.

The following gentlemen compose the Board of Directors:—John Daggett, L. L. Rose, Newark; A. P. Waterman, Kendall King, Ulysses Warner, Phelps; B. C. Fitzhugh, E. W. Sentell, J. C. Rogers, Enoch Granger, Sodus.

Ohio.

Cleveland and Mahoning Railroad.—We learn from articles published in the Cleveland Herald, that the managers of this railroad intend soon to present their claims before the citizens of that place in regular form. The surveys on the road are fast approaching completion, and it is believed that they will present a most favorable line both as to grade and directness. The new road will open up a large coal bearing region to the city of Cleveland and the markets of Lake Erie. The coal of that city is now furnished from the Chippewa and Clinton coals by the Ohio canal, and the Briar Hill coal from the beds in the Mahoning valley on the cross cut canal. The Yellow creek coal on the line of the Pittsburgh and Cleveland railroad has not proved to be of saleable quality, and the road itself has been too crowded with other business to transport large quantities of it.

The Ohio canal coal is transported a distance of about 60 miles, and pays from ten to twelve cents toll per ton. The Mahoning coal is transported one hundred miles, and pays twenty cents toll per ton. In the face of this great disproportion in the expense of delivering them here, the Mahoning coals have regularly furnished to Cleveland about two-thirds of her whole supply—thus demonstrating that, at considerable odds in price—practically about fifty cents per ton—they will command the market: nor is there any doubt that this greater demand is justified by their superior quality. They are coarse, and bear transportation without breaking, burn freely in a grate without forming clinker, are entirely free from sulphur, and are the only coals, accessible to Cleveland, that can be used in the manufacture of iron.

The line of the Mahoning railroad will enter this coal region at a distance of fifty-nine miles from Cleveland, and will pass through it about sixteen miles in the immediate vicinity of the beds, just below the level at which the coal is found, and in the most favorable position to receive it upon the line. It will pass thence to Cleveland, over grades not exceeding twenty feet to the mile, and, perhaps, not over fifteen. There can be no question that such a line of road, if terminating at a convenient point in that city for the handling and shipping of coal, will take the trade from an imperfect canal navigation one hundred miles in length, and reduce the price of coals laid down in the city, besides furnishing an unfailing supply during the winter months.

The articles we have alluded to dispose of the objection that a railroad cannot compete in coal carrying with a canal, by adducing the instances of the successful competition of the Baltimore and Ohio railroad with maximum grades of 80 feet to the mile, against the Chesapeake and Ohio canal, and that of the Reading railroad against the Schuylkill canal. Both these canals are about the same length as their rival railroads, and are 60 feet wide at the water line and 6 feet deep.

The Cleveland and Mahoning railroad will carry coal sixty miles over very favorable grades, in competition with a hundred miles of canal, only 40 feet wide and 4 deep.

The rate of transportation on the Reading railroad are 1¼ cents per ton per mile, and on the Baltimore and Ohio a fraction less than a cent, per ton per mile. The Mahoning road can charge two cents and still deliver the coal at less than the lowest possible canal rates.

The amount delivered this very year at Cleveland was greater than the amount transported over the Reading railroad in 1843, exceeding 4 millions of bushels, two thirds of this supply came from the Mahoning beds. In 1851, the amount was 2,992,000 bushels, and in 1850, 2,347,000 bushels. This year, the amount transported from the Mahoning valley will exceed 100,000 tons, being more than 500 tons during the season of navigation, and in two years, at the present rate of increase it will be one thousand tons per day. Taking 500 tons per day the year round to be transported sixty miles at 2 cents per mile, this will yield an income of $10 per mile of road per day, or on a road of one hundred miles in length an income of $360,000 per year. The Shenango coals now travel by the Erie extension canal to Erie, which is a large coal exporting point, but the Shenango coal field by a branch of this road will obtain a nearer and cheaper access to Cleveland than it can ever have to Erie, and render the former the great coal depot of the Lake and its markets.

The point wherein the new road will compete with the Cleveland and Pittsburg R.R. is in the local passenger trade of Trumbull and Mahoning counties which now reaches it at Ravenna and Hudson. The through trade from the west and south will be left entire to that road.

The Cleveland and Mahoning road will drain the large and rich region lying to the North and East of the Mahoning valley, and now seeking railroad connection with Cleveland. It has been said that by a branch from Warren to Ravenna or Hudson on the Cleveland and Pittsburgh railroad the same ends could be accomplished, but the route by the former place to Cleveland would be 12 miles longer, and by the latter 10 miles longer than by the Mahoning route.

The Pittsburgh route would, in case of such a connection by its Mahoning branch, command the entire product of that valley as well as the coals of the Ohio river and Pittsburgh. Such a monopoly

in the hands of any company, no matter how liberal their policy may be, is considered by the advocates of the present road to be dangerous. This lengthened route, and the heavier grades encountered by it, the diminished supply of coal will affect seriously the growth of Cleveland, to the extent as is stated by one writer, of thousands in the population within the next five years, and within fifty years of tens of thousands.

Deep Diving.

At present, the owners of the ill-fated steamer Atlantic are engaged in measures to secure possession of the wreck, which lies in Lake Erie at the depth of about one hundred and fifty feet. The following interesting account of the operation is from a Buffalo paper:

Mr. Maillefert and his companions returned from Long Point last evening, after a second and a successful attempt to reach the wreck of the Atlantic, although from unavoidable circumstances nothing has yet been accomplished towards raising the Express company's safe or commencing operations upon the wreck. We have been furnished by Mr. John Green, the diver, with a very interesting account of his descent.

Mr. Green arrayed himself in the marine armor dress, and started on a second trip to the bottom of Lake Erie. He descended without any difficulty, and landed directly in the interior of the steamer's smoke pipe, the top and sides of which he felt with his feet and hands. He was then elevated again some little distance, and allghted the second time on the braces, following down until he got on to the cross braces. He did not, however, succeed in making a firm footing on the deck, owing to the unsteadiness of the small steamer used on the occasion, which communicated too much motion to the hose and ropes.

There was much risk of the intrepid diver getting entangled in the ropes and wood work so as to be unable to extricate himself, or to tear the dress, and being again elevated he descended a third time alongside and clear of the wreck. He now went down fourteen feet below the upper deck and even with the guards, his head being one hundred and thirty-nine feet, and his feet one hundred and forty-four feet below the surface of Lake Erie. This is the deepest dive ever made, one hundred and twenty-six feet being the greatest depth ever before reached. The new hose was found to be perfectly successful; the diver felt quite at ease, and went down and up without the slightest injury to dress, pipes or man.

The marine armor consists of a perfectly air-tight India rubber dress, topped by a copper helmet with a clear, thick plate of glass in front. The pipes which supply and exhaust the air, lead from the top of this helmet. The pumping requires much labor; four, and sometimes six men being employed upon it at the same time, and compelled to work hard at that. A great pressure of air is experienced by the diver upon his lungs, equal to 75 lbs. to the inch, and very few individuals could bear it for any length of time.

When first going into the dress, the sensation of oppression is very overcoming, but passes away in a great measure after entering the water. When a depth of ten feet is reached in the descent, the dress becomes entirely emptied of air and collapsed to the body, causing a pressure all over the diver equal to the heft of a ten pound weight, excepting as to the head, which is protected by the proper helmet. The difficulty in breathing now becomes great, and a painful sensation is experienced by the diver, the jaws becoming distended, and the head seemingly splitting. This continues until after descending another ten or twelve feet, then the pain is relieved, the diver feels comfortable, and experiences no further inconvenience.

When about sixty feet below the surface, hundreds of the legitimate inhabitants of the water surround the diver, nibbling at their strange visitor as though he was "food for the fishes." After reaching seventy-five feet, all is perfectly dark—a black, impenetrable darkness—and an electric flame plays around the inside of the helmet, caused by the friction of the pump. At about one hundred and sixty feet the water is very cold, being in the present season within four or five degress of freezing.

Mr. Maillefert has returned in order to obtain a large steamer, and to wait for settled and calm weather before making another attempt. Two most excellent divers besides Mr. Green are in company with Mr. Maillefert. We shall look with much interest for the result of the next trial, but that it will be successful we have no doubt.

Changes in the Course of Trade.

Under this title the *Boston Journal* has an article showing the paramount influence of railroads over the course of trade, and how far the most important natural advantages are inferior to these efforts of *art*. The lesson taught has universal significance.

The most magnificent natural commercial channels in the world are those connected by the Mississippi and its branches. Draining by navigable waters an area amounting, exclusive of the territories, to over half a million of square miles, the most beautiful and productive agricultural region in the known world, it poured the products of its rapidly developing trade into the lap of New Orleans. Situated as that city is, near the entrance of the Mississippi into the gulf, and approachable by every class of vessels, propelled either by wind or steam, no man would suppose otherwise than that she would enjoy almost a monopoly of the western trade; and that she would assume a position in the commercial world beyond the competition of every other city in America. But such opinions have proved unfounded. While she has increased in population and commercial importance in common with all our other cities, that increase is by no means commensurate with what might be deemed the advantages of her position.

Lake cities, the outlets of whose commerce have been furnished by artificial means, have sprung up almost in a day, changing the solitude of the wilderness into the noisy commercial mart. Chicago, Milwaukee, Detroit, Cleveland, Buffalo, Oswego, and Ogdensburg upon the lakes, and Rochester, Syracuse, Utica, Troy and Albany upon the artificial channels of trade, have risen into the importance of first class commercial cities. A curious phenomenon is presented in the course of the Mississippi steamers laden with the rich products of the north-west. On reaching the mouth of the Illinois, or of the Ohio, in their descending course, they head up the last named streams in the direction of Chicago and Cincinnati, instead of pursuing their previous direction towards New Orleans; and sending forward their freights to the lakes by means of artificial channels of communication connecting the tributaries of the Mississippi with the great Northern Lake route, return again freighted with the manufactures of our eastern states, carried thither over gigantic lines of transit, which are the results of human energy and skill. Not only the agricultural productions of the west and north-west, but even the cotton, sugar and tobacco of the south-west are taking the same direction. The climate of a more northern latitude is an infinite advantage over that of the Mississippi and Gulf route; and pork, beef, butter, cheese and grain are insured against the contingencies of a hot climate, the humidity of a sea voyage, and long delay.

And all this diversion in favor of northern ports, which have no *natural* continuous communication with the west, has been effected by a liberal and extended system of internal improvements. Boston, which is really only the *natural commercial* depot of New England, which embraces an area of only 7800 square miles of territory, the most inhospitable and unpromising in soil and climate in the whole country, is now, and will continue to be, one of the first commercial cities in America, extending her Briarean arms in all directions, and bringing to her port by means of canal and railroad, the productions of remote localities, which, without them, would have sought the seaboard at the distance of two thousand miles. No limit to this diversion of trade can be fixed if the north and east are only true to their own interests. Natural channels of trade are of infinite importance, but artificial ones can be constructed, or imperfect natural ones improved, which will build up great and flourishing communities in localities that otherwise would have remained a desert. As the torrent of a mighty river pouring over a rocky barrier unheeded for ages, is diverted from its natural course by the hand of man, and compelled to lend its powerful aid to the propulsion of loom and hammer, leaving the original channel comparatively dry, so does the enlightened foresight of a community, which opens for itself lines of communication with remote localities, draw in an unremitting stream all the elements of a progressive commercial prosperity."

Missouri.

Railroad Land Grants.—The Legislature of this State, at its recent session, granted to the Hannibal and St. Joseph's railroad the lands appropriated by Congress to that line, and adjourned without any action in reference to the lands given for the Pacific road. The reason for non-action in the latter case, was the great diversity of opinion as to the question of *route*. The following is an enumeration of the different routes, whose claims were pressed upon the Legislature, viz:

First—"The River, Boonville and Lexington route." This is in part a new route; diverging from the termination of the section, or forty miles of road already constructed, it would run to the Missouri river, and follow its banks up to Jefferson city—from Jefferson city to Boonville—from Boonville across the country to Lexington, and from Lexington, by the straightest line, to Kansas. This route, between St. Louis and Jefferson city, has been surveyed and is well understood. Beyond Jefferson, to Boonville and Lexington, the surveys or reconnoissance are in progress. On this route, it is estimated that there will be about 425,000 acres of government land, which may be claimed under the act of Congress.

Second—"The River Straight route." This route diverges at the terminus of the portion already constructed; and follows the banks of the Missouri river to Jefferson city, and from thence, on the straightest practicable line, through the counties of Moniteau, Pettis, Johnson and Jackson, to the mouth of the Kansas. This route has been very thoroughly examined and measured, and is found to be the most direct and cheapest route from St. Louis to Kansas. On this line, there is about seven hundred thousand acres of land applicable to the construction of the road, under the act of Congress.

Each of these routes may be called Missouri river routes. The Boonville and Lexington interests unite in making Kansas the terminus, but insist on making their towns a point, and offer large subscriptions to aid in the construction, at the same time urging the application of the lands to the construction of the "Southwestern route," described hereafter. They are willing to give up the land to secure the construction of "the River, Boonville and Lexington route." The Jackson interest contends for the land, hoping that the increased am't of lands will confine the location on the straight line from Jefferson to Kansas.

A direct line from the terminus of the road constructed to the city of Jefferson, will appear upon the map to be the shortest route. But actual surveys have demonstrated that the river route between these points is about twenty miles the shortest, and practically about thirty miles the most direct. This results from the fact that the direct line from the terminus of the road now constructed to Jefferson, passes over a broken country, requiring a great many curves to follow the streams and valleys, to overcome the elevation between the Gasconade and Osage, and between the Osage and Moro, and to reach the city of Jefferson. Hence the increase of distance on the route. Again: this section of the route involves heavy and expensive working on tunnels, bridges, grading and filling, and compels the adoption of difficult and expensive grades.

Third—"The Inland route," or "Middle route." This route commences at the terminus of that part of the road already constructed, thence by the Merrimac Ridge through Morgan, Miller, Henry and Johnson counties, to Kansas, passing near the town of Versailles. This route is about 20 miles longer than the "River Straight route," but its

claims are pressed, on the ground that it penetrates further into the interior, diverges more in favor of the mineral sections, and that the amount of lands acquired under the act of Congress is larger and more valuable than are either of the two first named routes. There is on this route about 800,000 acres of land.

Fourth—"The Southwestern route." This route runs on the south side of Osage river, and through most of Franklin county, will take the inland route, and thence through Crawford, Pulaski, Laclede, Wright and Green, to some point, not yet fixed, on the western boundary of the State. On this route, the amount of lands applicable to the construction of the road is stated at 1,200,000 acres, and much of it is very valuable.

This, says the St. Louis Republican, is as fair a statement of the actual condition of the questions pertaining to the Pacific railroad, as can be made.

Now, the proposition of one portion is to secure the construction of one route, and that whatever lands may be applicable to that object shall be applied to that road only. On the other hand, there is a strong party who desire to effect this object, and we hope they may prevail: They wish the Pacific railroad company to bind themselves, upon the reception of aid by the credit of the State (the State to be secured from loss by a subscription to the stock by private individuals and corporations, in the manner heretofore prescribed in relation to this road), to construct virtually three roads, viz: To give them such power as will enable them to make the "Southwestern route" the main trunk, thus securing the largest amount of lands—and the land thus obtained, with a liberal individual subscription and the aid of the credit of the State, will enable them to build it in a short time. That the company shall, within a given time, construct a road or branch on some one of the three first mentioned routes, upon individual subscription and the credit of the State; and shall also construct, on the same terms, a branch to the Iron Mountain. This last proposition would be acceptable to the company. They would be able, with the lands, and a liberal loan of the credit of the State, secured upon a subscription by individuals and corporations, to undertake the construction, within a reasonable time, of the main trunk and the two branches This would secure the development of the wealth of the State, and open up avenues of communication to almost every section of the southwest.

It would secure the construction of a road to Kansas, or in that vicinity; a road in the direction of the southwest corner of the State, and a road to the Iron Mountain. It would make a line of communication that would bring every foot of the lands, whether mineral or agricultural, into cultivation and use.

Population of the United States.

The venerable geographer, Wm. Darby, has communicated to the Intelligencer the following tables on the past and prospective population of the United States:

Table I.—Population of the United States, as recorded in the Tabular view of the Seven Enumerations made by the Decennial Census, 1790 to 1850, inclusive.

1790	3,929,872
1800	5,305,952
1810	7,239,814
1820	9,638,131
1830	12,866,920
1840	17,063,353
1850	23,144,126

Table II.—Prospective view of the Population of the United States from 1860 to 1950, inclusive, on the ratio of one and a third decennially, as found by Table I, very nearly.

1860	30,958,000
1870	41,115,000
1880	54,839,000
1890	73,144,000
1900	97,525,000
1910	120,034,000
1920	160,045,000
1930	213,360,000
1940	285,480,000
1950	379,307,000

Report of the Lawrenceburg and Upper Mississippi Railroad Company.

It is with much pleasure the board is enabled to state, that within the last year, many favorable changes in the condition and prospects of the road have taken place. Its importance as a leading road has begun to be fairly appreciated at home and abroad, resulting in largely increased subscriptions of stock, and in the sale on advantageous terms of all the company's issue of 7 per cent bonds, and of the city and county bonds issued in payment of stock by the city of Lawrenceburgh and the county of Decatur.

In January last, the graduation, masonry and bridging, furnishing cross-ties, and laying track of all the line between St. Omer and Indianapolis, was let to Messrs. Wilson, Vance & Co.; the road bed to be completed by the first of July, 1853, and the track laid by the 1st of October following. With the exception of $20,000 in money, this work is to be paid for entirely in stock and company bonds.

Being sufficiently strengthened by increased subscriptions of stock, and the favorable sale of bonds in May last, the board believed it to be their duty to make some improvement in the line, particularly between Greensburgh and Shelbyville. A new and perfectly straight line being run between those points, was found to be one and one-sixth miles shorter, and the graduation over $12,000 cheaper than by the former line, and was accordingly adopted. $27,000 of work on the old line was thereby abandoned, and the company will also lose the benefit of the conditional subscription of stock made at St. Omer, which was the original inducement for going by that place. But the importance in avoiding the curves in the first line, and obtaining what with the line west of Shelbyville, is equivalent to a straight line of 45 miles in extent, and the saving of one and one-sixth miles less of track, and the running of a track that much shorter, and without curves for even a very few years, will, however, more than make up any present loss or inconvenience.

The force of the old line was at once transferred to the new, and the work upon it is progressing with commendable rapidity. It will not, however, as was before expected, be ready to receive the superstructure this fall, but the contractors are engaged to have it ready for the track early next spring.

In consequence of this change, the work between Shelbyville and Indianapolis is far in advance of that east to Greensburgh, and could without much exertion be prepared for the iron this season. But it is not intended to lay this part of the track until spring, when it will be completed and ballasted by the time the line between Shelbyville and Greensburgh is ready for the superstructure.

The construction of the road bed east of Greensburgh has not proceeded as rapidly as we could wish These contracts were payable mostly in stock and real estate, and the board were compelled in several instances, to modify them with additional cash payments, to enable the contractors to press forward as desired. In several instances, also, the company had to take the work from the contractors, and put their own men upon it, to insure its being kept out of the way of the track-layers.

All of the iron purchased last year has come to hand, and in April last 8000 tons more was purchased, at favorable rates, and before the rise in rails took place. The same quantity would now cost $60,000 more than we gave for it.—This lot of rails is of 56 pounds per yard, except 1000 tons, which is of 60 pounds, and all of Welsh manufacture except 2000 tons of American. 950 tons of this last purchase has arrived at Lawrenceburgh, 2200 tons in New York and on the way to the west. These quantities are sufficient to complete the road to Greensburgh. The 2000 tons of American rail will be delivered at Pittsburgh, ready to be shipped upon the first rise of water, and the residue of 3000 tons is to be delivered at New Orleans in December, and will be forwarded by way of the Jeffersonville road to Shelbyville, for use at the end of the line.

Twelve miles of track is now in use, and the work is progressing at the rate of one and a half miles per week. Six miles further will take us out of the creek valley and upon the level table land, with generally straight lines, upon which the track layers expect to make from two and a half to three miles per week.

On the 23d inst., the members of the board passed over the line so far as laid down, and were much gratified at the substantial manner in which the work was being performed.

Six inches of gravel has been distributed over 11 miles, and shovelled under the cross-ties, and on four and a half miles the track has been filled in the second time. Only one engine has yet been employed; another is now on its way, two more are to be delivered next month, and two more in November; with this force we hope to be able to put at least one foot of gravel upon the whole line to Greensburgh before spring. A sufficient force will then be transferred to the work between Shelbyville and Indianapolis, and from that to the line between Shelbyville and Greensburgh.

Final locations have been made of the line thro' Shelbyville, Indianapolis and Lawrenceburgh, and very eligible spots have been procured in each place of ground for the use of the Co. At Lawrenceburgh, the company have purchased property for these purposes, fronting 1400 feet on the Ohio river by 150 feet deep, and also a wharf of 300 feet front, extending to low water. The residue of the company's property fronts on the public wharf for its whole distance, and is in the most public and business part of the city.

A very valuable block of 2¼ acres, in New Lawrenceburgh, has been purchased as a location for an engine house and work shops, besides which, in the same neighborhood, the company possess two lots of 8 and 21 acres. which will be reserved for future use. Also, at Indianapolis, in addition to the depot lot, which is within three squares of the centre of business we have purchased a lot of ten acres, adjoining the city limits for company use.

In running the line over town and city lots, we have generally found it advisable to purchase the entire lot rather than pay the damages required. In this way many valuable lots have been obtained; ultimately it is believed, the remnants will repay the company their entire cost.

The rolling stock consists of one engine, and another daily expected; forty gravel cars, now in use; five platform eight wheel cars—fifteen more nearly ready; two eight wheel boarding house cars, and some few horse and hand cars. With the exception of the wheels and axles, these have all been built at the company's shops.

In addition, we have wheels and axles for eighty eight wheel cars, which will be prepared for use this season; one passenger car has been purchased and is on its way to Lawrenceburg; five engines, and wheels and axles for one hundred eight wheel cars have been purchased for delivery next season; and it is designed to purchase, ready made, twenty five horse cars for use this winter. Thus, by the opening of the road to Indianapolis, we shall possess a force of 11 engines, and over 250 cars, to which must be added, at least, four more passenger cars, and perhaps some more freight cars.

Sales of real estate have respectably increased without any special effort to effect them; and it is gratifying to perceive that the company are to sustain no loss in their real estate operations, it being our present impression that we will realize from it the entire cost, with interest, taxes, and repairs:

In April last, these sales amounted to	$73,562
Now amount to	104,216

When not sold to contractors for work, these sales have generally been made one-fourth cash, and one, two, and three years' interest, bearing paper for the residue.

Since the expose published in April last, our stock has increased to the sum of	$943,396
From this must be deducted the amount of conditional subscriptions on the St Omer line, which will probably be withdrawn, say	20,000
	$923,396

The increase of stock has been principally in real estate, accompanied with 20 per cent of money subscription, payable in instalments.

For the several causes which have been stated—such as the change in the line of road, requiring a refunding of payments made on conditional stock—damages for right of way in running the line over

town lots—procuring property for work shops and depot grounds—change in certain contracts from stock and real estate to a larger money payment—increase in the quantity of machinery, etc., the cash expenditures of the company will be largely increased the present season, and require on the part of our stockholders, a prompt payment of all arrearages of stock due this fall. Notwithstanding all that can be done in this way, so much of our later subscriptions are on postponed payment, that a considerable sum must be obtained from other sources.

The work done, and expenditures for various purposes, now amount to—

For construction	$240,271
Damages for right of way	10,871
Two locomotives, cars, etc	42.550
Iron rails, including transportation	392.748
Cross ties, laying track and ballasting	26,000
Engineering, salaries, discounts, taxes, incidentals	42,774
	$755,214

Expenditures required within the present year:

Transportation 2200 tons of rails from N. York to Lawrenceburgh	$20,000
Transportation 2000 tons of rails to Pittsburgh	12,000
Transportation wheels, axles, spikes and 4 locomotives	2,500
Cost of constructing 20 more gravel cars (exclusive of wheels and axles)	2,000
Cost of constructing 50 platform cars	10,000
Cost of grading yet to be paid in money.	30,618
Cost of laying track and ballasting to Greensburgh	11,480
Cost of cross ties yet to pay for	6,077
Cost of chairs	3,150
Cost of real estate and damages for right of way	6,000
Expenditures required on depots, water and wood stations, Union track, etc	10,000
	$113,917
To which may probably be added, depending on the rise of water, the transportation of 2,000 tons rails from Pittsburgh to Lawrenceburgh, and 3,000 tons to Jeffersonville	20,000
	$133,917

One hundred thousand dollars of this sum the board deem it best to provide for by a temporary loan, which they think can soon be refunded out of the sales of Decatur county bonds, $50,000 of which will be due the company on reaching Greensburgh with the track—by the sales of real estate, which will largely increase on the advance of our road into the interior where the property is situated, and by the falling due of stock instalments.

The board would express their entire confidence in being able to reach Greensburgh—42 miles—with the track in January next; when, it is their opinion, a very respectable amount of business will be realised; and that the entire road will be under travel to Indianapolis by the 1st of October, 1853. They also have the pleasure of stating that the work on the Ohio and Mississippi road, between Lawrenceburgh and Cincinnati, is now progressing; and that we are promised a connection with Cincinnati as soon as we can complete our line to Indianapolis. Until that is done, arrangements will be made with the packets now running between Lawrenceburg and Cincinnati, for the transport of our freight and passengers, which can conveniently and readily be effected, as our line will terminate directly upon the public landing.

The limits prescribed for this communication will not permit the board to indulge in any observations upon the business prospects of the road. It may be proper, however, to say that, since the former report, the Terre Haute road has been completed; and that the Lafayette and Bellefontaine roads will be, within a few weeks; while several miles will be added to the Peru road the present season—so that every expectation of the importance of our connections at Indianapolis, are to be realised even before our own road can be completed.

G. H. Dunn, President.

September 25th, 1852.

Finances of New Orleans.

We abstract from a statement made by Wm. H Garland, Esq., of New Orleans, of the debt and finances of that city the following facts.

The indebtedness is divided into two classes, the old city debt prior to the division into municipalities, and that which has been incurred by the municipalities since.

The following is the date and amount of bonds constituting the old city debt:

Date	Rate of Interest.	When due & payable.	Amo't.
1830, May 1	6 per cent.	1850	$57,000
1833, March 1	5 "	1851	177.000
1833, February 1	5 "	1853	150.000
1847, January 16	5 "	1854	9.000
1835, March 20	5 "	1855	9.000
1830, July 1	6 "	1855	100.000
1834, November 1	5 "	1855	350.000
1835, January 1	5 "	1859	100.000
1835, January 1	5 "	1860	100.000
1835, September 1	5 "	1860	100.000
1833, December 30	5 "	1863	200.000
1834, August 1	6 "	1864	359.000
1834, September 15	5 "	1864	45.000
1836, January 1	5 "	1866	500.000
1833, July 20	5 "	1873	364.000
1836, March 1	5 "	1876	46,000
			$2,666,000
Interest coupons due and unpaid on the 8th November, 1851			202,065
Total of Old City debt			$2,868,065

At the division of the city a sinking fund was provided, but bad management and commercial revulsions have rendered these assets almost worthless. With the exception of $60,000 of assets, the amount to be obtained from sales of the Batture and the hope of realizing something from the lands, etc., donated by Stephen Girard to the city, the liquidation of this debt will be a tax on the resources of the city. Some $500,000 of bonds were issued to the Commercial Water Works in exchange for stock, and from the dividends paid on the stock, a portion of the bonds was redeemmed, leaving $364.000, while the city still holds $500,000 in stock. It is believed that this stock will rise sufficiently in value to pay off the balance of the bonds. From the sale of the Batture, it is estimated sufficient to pay the interest past due, will be received. These sums amount to $566,065, and reduce the debt to $2,302,000. The act of March, 1836, defective in providing for the payment of this interest, and apportioning it on the Municipalities, and this joined with their jealousies, the result in part of the different character and origin of their respective populations led to neglect in the payments, and threw consequently a cloud on the credit of the city.

The debt contracted by the Municipalities is as follows:

Municip.	Funded debt.	Floating debt.	Total.
First	$492,300 00	$664,256 80	$1,156,556 80
Second	1,749,660 00	1,011,650 98	2,761,310 98
Third	636,480 00	263,705 37	900,185 37
	$2,878,440 00	$1,939,613 15	$4,818,053 15

From this deduct cash assets	$577,826.69
and we have the total debt of the city.	
Old city debt	2,302,000
Debt of Municipalities	4,240,226
	$6,542,226

The real estate of the three Municipalities is:

First	17,449.300
Second	30.195.710
Third	6,794.623
	54,439.633
Capital and slaves	14,826.435
Total	$69,266.068

The estimated expenses of the city government for 1852, are:

First	$492.355
Second	615.791
Third	117,223
	$1,225,369

The receipts of the Municipalities other than from direct taxation, are:

First	$269,250
Second	355.978
Third	114,475
	$766,703

Leaving a balance of $458,666, to be raised by direct taxation on real and personal estate, for the ordinary city expenses of the year.

The recommendations of the author of this statement have been already carried out in the amended charter of the city, and the payment of city liabilities made the first and indispensable duty to precede every other description of business. The credit of the city has been restored, and from this statement it will be seen that the city has abundant means to give assistance to the great lines of railroad, the completion of which must be her sole reliance if she would maintain her old command of the export trade of the valley of the Mississippi.

The trade and commerce of New Orleans for the 12 months ending August 31st, 1852, will be found of interest in the same connection.

The value of products received from the interior during that time is, $108,051,708, against $106,924,083, during the previous year. The value exported was $76,344,669, of this $48,076,197 was to foreign ports, and $28,268,327 coast-wise.

The total receipt of cotton from all sources was 1,429,183 bales; the average price was 8 cents per pound, and the average weight per bale 438 pounds, giving an aggregate weight of cotton received at New Orleans of 625,982,154 pounds.

The sugar crop of 1851 proved to be 236,547 hhds estimated at 257,138,000 pounds; to this must be added the stock on hand at the close of last season, 2,200 hhds, which has been distributed as follows:

Shipments out of the state	hhds. 53,000
Consumption of city and neighborhood	18,000
Taken for refining in city etc	15,000
Stock now on hand	3,000
Quantity taken for the west	149,547

The total consumption of the United States is put down at 321,736 tons.

The product of molasses is set down at 18,300,000 gallons, and of this 15,600,000 gallons is the quantity taken for the consumption of the south and west.

The stock of tobacco at the commencement of the year was 23,871 hhds. The total receipts subsequent are 89.675 hhds, including 11,740 strips and 2,118 stems.

The receipts of flour were 927,212 bbls., against 941,106 last year, and of Indian corn 3,750,000 bushels, against 3,300,000 last year. The total exports of flour amount to 544,711 barrels, against 583,418 last year: of this quantity 138,569 barrels were shipped to Great Britain; 70,445 to the West Indies, and the balance to coast-wise ports. Of Indian corn the total exports have been 2,182,000 bushels, against 1,300,000 last year.

The exports of lard for the year are equal to 992,543 kegs, against 738,956 last year.

The exports of lead since 1st Sept., are 256,939 pigs, against 320,608 last year.

The receipts of hemp were 17,149 bales against 25,116 last year, the exports are 15,728 bales all to northern ports.

The import of coffee from Rio was 353,616 bags; from Cuba, etc., 12,525, and received coastwise 35,000, making a supply of 425,141 bags, an increase of 71,384 over the supply of the previous year. The total number of arrivals from sea since 1st Sept., 1851, is 2,351. The entries at the Custom House for the year ending 30th June, 1851, were, whole number, 2,266, tonnage 910,855

The Cotton Trade.

The Savannah Republican, in a long article under the head of the production and consumption of Cotton, estimated the supply of Cotton for 1852, as follows:

	Bales.
Crop of the Southern States	3,015,000
Crop of Pernambuco, Aracati, and Ceara, about	75,000
Crop of Bahia and Macio, about	40,000
Crop of Maranham, about	30,000
Crop of Demarara, Berbice, etc., about	1,000
Crop of West Indies, about	7,000
Crop of Egypt, about	135,000
Crop of East Indies, about	125,000
Crop of all other places, about	24,000
Making the crop of 1852, about	3,448,000
To which add stock on hand Jan. 1, 1852, viz:	
Liverpool	425,000
Havre	23,000
United States	128,000
And we have the total supply of Cotton, for 1852, about	4,024,000
This crop of 1852 was thus distributed:	
United States home consumption, bales	603,000
" " exports to England, bales	1,668,749
" " exports to France, bales	421,375
" " exports to North of Europe, bales	168,875
" " exports to other foreign ports	184,647
Imports from other countries in England, about	375,000
Imports from other countries in France, about	25,000
Consumed at other places	1,354
Total	3,448,000

The increase in the supply of Cotton for the year ending on the 1st of September last, The Republican estimates at 660,000 bales, as compared with that of the preceding year, and then proceeds to show that the consumption has been fully commensurate with the increased production. It elucidates its position thus:

Stock 1st Sept., 1852, in the U. S. bales	91,000
Stock 1st Sept., 1852, in England	617,400
Stock 1st Sept., 1852, in France	63,000
Total stock on hand	771,400
Deduct increase of last over the previous crop of the South	660,000
And it would leave a stock of only	111,400

Against a stock of between 700,000 and 800,000 bales on the 1st September, 1851, thus showing that the increased product has been all taken up.

The average weekly deliveries for consumption for 1852, are estimated at:

In the United States, bales	11,595
In Great Britain	38,500
In France	8,750
To North of Europe, Germany, etc	10,550
To other foreign consumers	3,550
Making the weekly consumption	72,945

Showing a consumption of 3,793,140 bales for the year. On these premises, The Republican concludes that:

If our estimates of the weekly deliveries of cotton for consumption be near the truth and the present rate of consumption is not checked, it appears that the demands of commerce require a crop this year of nearly 3,800,000 bales. This amount of the raw material must be produced, otherwise the stock remaining over from the last crop will be consumed. The supply this year will, in all probability, not be greater than it was the last. It is not anticipated that the supply from foreign production will exceed that of last season, say about 450,000 bales. Is it probable that the present crop of the Southern States will go beyond 3,000,000 bales? If not, and we estimate the supply of the raw material from all quarters the same as that of last year, and consumption should continue at the same rate, it would result as follows:

	Bales.
Estimated production of cotton in the world	3,450,000
Estimated stock, Sept. 1, 1852	771,400
Total supply for 1853	4,221,400
Probable consumption at present rates	3,793,000
Leaving a stock of	428,400

Thus it appears, that even allowing the supply from all quarters to reach the maximum of 4,225,000 bales, at the present rate of consumption there would only be a stock of 428,000 bales left of it at close of the next cotton season, being 40,000 bales less than the stock on hand 1st Sept. last.

Massachusetts Railroad Statistics.

Taunton Branch Railroad.—Incorporated in 1833. Opened in 1836. Length, 11 miles, (single track.) Cost, Jan. 1, 1852, $307,100.

The following table exhibits the operations of the road, during the last ten years; its cost, and the market price of the stock, at the beginning of each year:—

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842	$250,000	$112 per sh.	$77,170	$54,850	$22,320	8 per cent.
1843	.....	"	74,251	50,666	23,385	8 "
1844	.....	112	96,687	69,328	27,359	8 "
1845	.....	125	116,537	81,504	35,033	8 "
1846	.....	118	123,067	90,903	32,164	8 "
1847	.....	"	113,910	85,695	28,215	8 "
1848	293,400	111	108,101	89,142	18,959	8 "
1849	303,700	113	108,398	84,979	23,419	8 "
1850	305,100	112	114,466	86,908	27,558	8 "
1851	306,400	110	131,293	104,291	27,002	8 "
	307,100	111	$1,063,880	$798,466	$265,414	Av. 8 pr ct.

The Danville Railroad.

As a proof that we have never overestimated the importance of this road, we will take a simple statement. It will carry conviction along with it.

In March the receipts were a little above $6,000. In April they had risen above $7,000. In June, they were upwards of $9,000, and during the month of August, they were more than $12,000! When it is recollected that it has only gone sixty five miles, some idea may be formed of what it will be when it gets into the rich portions of Halifax, Charlotte and Pennsylvania, and obtains command of the tier of tobacco counties lying along the frontiers of North Carolina and Virginia.

We think the public here will justify us for pushing this road through. At first they were disposed to laugh at us.—*Richmond Dispatch, Sept. 22.*

The Magnetic Telegraph in Hindostan.

A magnificent system of magnetic telegraphs is to be immediately introduced into Hindostan. For some time past Dr. O'Shaughnessy, of the medical staff, has been engaged in trying various experiments with short lines, with a view to ascertain the best form of wires and poles for traversing the vast spaces of that country. These trials have given complete satisfaction to the court of directors, and orders have been issued to commence the works forthwith. The lines will commence at Calcutta, and make the tour of the Peninsula. From the "City of Palaces" they will traverse the province of Bengal, following more or less regularly the course of the Ganges, to and through the holy suburbs of Benares, and up to the conjunction of that river with the Jumna at Allahabad, thence they will pursue a pretty direct route to Agra the ancient capital of the Mogul Empire while Delhi was but a provincial town. From Agra they will branch off in a north-westerly direction through Delhi to Lahore, to form the final letter for the subject kingdom of Runjeet Singh. With this immense line of telegraphs, other lines are to be in connection, travelling the entire length and depth of the Peninsula, as these will traverse its breadth. One of these lines will run from the banks of the Hoogley to the Coromandel coast; another will stretch across the Carnatic, traverse Hyderabad, and issue on the shores of the Arabian sea. The three presidencies of Bombay, Madras, and Bengal, will be brought into direct and instantaneous communication with each other, and with the remote provinces lying under the Himalaya mountains, or about the sources of the Indus—a consummation of supreme importance, not only to the security of our military position in the country, but as a means of acting on the inhabitants in the interests of civilization. Railways and magnetic telegraphs will be potent enemies to low superstitions, barbaric habits, and debasing ceremonials. The lightning spirit will be more likely to startle the congregated pilgrims than a regiment of Sepoys at full charge. The length of the lines now projected is upwards of 3000 miles—further than from London to New York—yet it is confidently asserted that the whole system will be finished and in operation in about 3 years. —*Atheneum.*

Virginia and Tennessee Railroad.

The early completion of the Virginia and Tennessee railroad is, in every point of view, a matter of vital importance to this community. The work has already enhanced the value of property in Lynchburg in a very great extent, but the effect of the completion of the road, and the vast amount of trade which it will create, must be to give a still greater value to real estate. The holders of property in Lynchburg have already received a full equivalent for the stock subscribed to the company in the increased value of their property. But, although this is the case, the people cannot avoid feeling the taxes imposed on them to pay the railroad subscription as a burthen. It is desirable to get rid of this burthen as soon as possible. Complete the railroad, and not only are the taxes removed, but there will be at least 4 per cent more dividend on the stock than the amount required to pay interest on the bonds. Not only to the city of Lynchburg, but to the State and to every individual stockholder—the road is worth from 6 to 10 per cent. more for every year saved in its completion. The early completion of the road will also have the effect sooner to develop all the resources of the country which it is to penetrate.

These reflections have been suggested by the very gratifying intelligence, that arrangements have been made to complete the entire work without further delay. Contracts have been entered into for finishing the road, and putting it into complete operation by the 1st day of January, 1855. The work has been let at the lowest prices heretofore paid in cash, and it is to be paid for in bonds of the company, bearing 6 per cent interest, and payable in 20 years. Nothing could be more fortunate than such an arrangement. It is believed that the next Legislature will not fail to extend all the aid desired to the Virginia and Tennessee railroad, but the experience of the past warns us not to place too much dependence on such tardy justice. This intelligence must be peculiarly gratifying to our Southwestern

friends, who have so nobly given their means to be expended on this end of the road. They will gladly hail this assurance of the speedy realization of their hopes.

They have been long groaning under the load of transit charges which have excluded them from the markets of the world. They will be glad to know that in two years, the railroad will carry the products of their fertile soil to the Atlantic coast. Our friends of Tennessee need no longer fear that we shall fail to shake hands with them at the State line, and solemnize the marriage of the Chesapeake Bay with the father of waters. Tennessee must arouse all her energies to be ready for us. In two years from the 1st day of January next, the Virginia and Tennessee railroad will be finished, and will in all human probability, from that day, pay a profit of ten per cent per annum on the entire cost of the work.—*Lynchburg Virginian.*

Cincinnati and its Railroads.

The Cincinnati Price Current, in its annual commercial review of the commerce of that city, gives the following notice of some of the railroads terminating at that city:

This thriving city is now the center of an immense railway connection; and, like Boston, she is rapidly feeling the good effects of it, by an immense increase in the value of her taxable property, the augmentation of her commerce, and the prosperity of her manufacturing interests. St. Louis must follow the example of the cities we have named—and like them, the benefits will be apparent. The stock of the "Little Miami railroad," says the reviewer, is now worth $54 per share, for $50 paid. It seems that so little confidence was placed in railroad enterprises when this road was first projected, that parties who had subscribed for the stock, offered to sell out for $12 50 for $50 paid—and in one instance, it was actually sold for $7 per share.—Now it pays a dividend of 10 per cent, and the stock is sought for with avidity at $54.

In relation to the Ohio and Mississippi railroad, the Current says:

"The Ohio and Mississippi railroad is making satisfactory progress, and since our last report has been placed under contract for its entire length, 335 miles. Messrs. H. C. Seymour & Co., the contractors for the road, have sublet that portion of the line extending from this city to its intersection with the Jeffersonville railroad in Indiana, and also the western division extending through the state of Illinois from Vincennes to the Mississippi river opposite St. Louis. Engineering parties in large force, are preparing the remainder of the line, (about 120 miles) which will, doubtless, be sublet in a few weeks. Already the laborers are at work at various points in the three states, and additional grading forces are daily being added to those already on the ground. New vigor has been imparted to the enterprise, and with the present prospects it is confidently anticipated that cars will be running in connection with the Madison and Indianapolis railroad within twelve months, and the entire distance between this city and St. Louis within three years. "The survey, as made, establish the important fact that this route is nearer to an air line than that of any other in the United States. The intersecting lines in Indiana and Illinois, which are built, or will be finished within three years, are a valuable feature in the future productiveness of this road, and the completion of the routes east from this city will offer a choice of roads to the traveler or shipper, of great value. The Parkersburg route of the Baltimore and Ohio railroad will, when completed give a continuous line of rails from St. Louis to Baltimore, and this latter road is in a state of vigorous prosecution, with hopes of completion in two years from this time.

"We confidently anticipate that funds will not be wanting to complete this important line of communication between our city and St. Louis.

In reference to the last paragraph, the St. Louis Intelligencer says, "we speak advisedly when we say to our Cincinnati brethren that the road is now in such hands that there need be no fears of a want of funds to carry this gigantic enterprise through to early completion. Harmony prevails in the councils of its managers—the contractors to finish the road are men of great energy, respectability and judgment, and backed by capitalists of the largest means. We know of no impediment to finishing the road within the period designated by the famous resolution of the city council, viz: "within three years."

New York.

Rochester and Syracuse Railroad.—The Rochester and Syracuse company are making extensive improvements to accommodate their increasing business, in the north-east part of the city. Three tracks are nearly complete from Pitt street—the next east from St. Paul—to West North street, and there is room for a fourth, which will doubtless be put down soon. Their engine house, situated between East and West North streets, is now being roofed. It is about the size, and resembles very much in appearance the building recently put up for a similar purpose by the Niagara Falls company. Workshops are also to be put up by the company in that vicinity. The new track by the straight route to Syracuse, is in a state of forwardness, and a large portion of it completed, with the exception of gravelling. It is expected that freight trains will run on the route this winter, and passenger trains early in the spring. The trip from this city to Syracuse will thus be made in two instead of three hours, as at present. The new passenger depot now in progress on the site of the old one, is built by the three companies who use the present one, jointly, we believe. It is to be of brick, a little wider, and some fifty feet longer than the old one. When these and other contemplated improvements are completed, the facilities for business of all the railroads will be increased, and those of the R. & S. road greatly enlarged. With this great increase of railroad interest, the value of the property and the business of our merchants, manufacturers, and all other classes, in fact, improves in a similar proportion. As the business of railroads, in this section of the state in particular, is yet in its infancy, we may conclude that the same remark is equally applicable to the business of our city, its growth and prosperity.—*Roch. Union.*

Massachusetts.

A very large and spirited meeting of the citizens of North Danvers was held at Granite Hall on Thursday evening, to take measures to construct a railroad from that village to South Reading, under the charter granted the last winter. Joseph Adams was chosen chairman and Joseph S. Black, secretary. The project was explained to the meeting by Wm. D. Northend, Esq., president of the Danvers and Georgetown railroad, and by Mr. Cunningham the engineer. Mr. Charles Flint, of North Reading, Mr. Danforth of Lynnfield Centre, Mr. Eben S. Poor of South Danvers expressed the interest which their respective towns had in the enterprise, and pledged their proportion of the stock of the road. A subscription paper was started at the meeting which was headed by Mr. Gilbert Tapley, who subscribed for 100 shares. About 500 shares were taken by other individuals, and a large committee was appointed to solicit subscriptions. It is believed that the stock will be immediately taken up, and the road put under contract in October.—*Freeman.*

The Advantages of Railroads.

The Journey from Washington to Lachine Performed in Twenty-eight hours.—Sir George Simpson arrived at the Hudson Bay House, Lachine, by the Montreal and New York railroad, on Saturday, having reached that place from Washington, in the unprecedented short time of twenty-eight hours, and from Philadelphia in eighteen hours, including stoppages at all places along the different lines.

The following will show the exact time occupied in running the whole distance between Washington and Montreal, 607 miles:—

Left Washington at	4	o clock	P. M.
" Baltimore	5¼	"	P. M.
" Philadelphia	1	"	A. M.
" New York	6	"	A. M.
" Burlington	4	"	P. M.
" Plattsburg	6	"	P. M.
" Lachine	7.55	"	P. M.

Average time, 22¼ miles, including stoppages.—*Montreal Herald.*

Speed and Fares on the Great Western, and London and North Western Railways.

It appears from a comparison of the speed and fares of the express trains upon these railways, that the speed of the fastest trains between London and Bristol on the Great Western is 43 miles per hour, and on the London and North Western, between London and Birmingham, 40 miles per hour; the difference in favor of the former company being three miles per hour. The speed of all the mixed trains between London and Plymouth, and London and Liverpool, is 35¼ miles per hour on the G. Western, and 36¼ on the London and North Western—being one mile per hour in favor of the latter. The average fares per mile on the Great Western are—for first class, 3·068d., and for second class, 2·502d.; while on the London and North Western the average is, for first class, 2·676d., and for second class, 2·178d.; showing a difference in favor of a passenger traveling by the London and North Western railway of 0·392d. for first class, and 0·324d. for second class. A comparison of the time occupied and fare charged on a journey of 246¼ miles on both lines, shows a difference in time in favor of the London and North Western of 34 minutes by a first class train, and of twelve minutes by a mixed train; and also at the same time a saving of 8s. 1d. for that distance by the first class, and of 6s. 8d. by the second class; the fares on the Great Western railway for first class being 63s., and for second class 50s. 6d.; while on the London and North Western the fare for the first class is 54s. 11d., and for the second class 43s. 10d. By the mail trains, the average speed per hour is 25 miles on the Great Western, and 28 miles per hour on the London and North Western; the difference in favor of the latter being three miles per hour. The average fares per mile on the former railway amount to 2·724d. for first class, and 1·867d. for second class; while on the latter railway they amount to 2·419d. for first class, and 1·775d. for second class; showing a difference in favor of the latter of 0·315d. for first class, and 0·092d. for second class. A comparison of the time and fares calculated on a journey of 246¼ miles, shows a saving in favor of the London and North Western of 58 minutes, and of 6s. 3d. in first class fares, and 1s. 10d. in second class fares. By the ordinary trains, the average speed per hour on the Great Western is 25 miles, and on the London and North Western 26¼ miles, being 1¼ miles in favor of the latter. The saving in the first class fares being 0·583d., and in second class fares 0·291d. per mile also in favor of the latter company. A comparison of the time occupied on a journey of 246¼ miles, shows a difference in favor of the London and North Western of 21 minutes, the time occupied by the Great Western trains being 9h. 53m.; by the London and North Western 9h. 32m. The saving in the first class fares is 12s. 4d., and in the second class fares, 6s. 1d. in favor of the latter company.—*C. E. & A. Journal.*

Ohio.

Wellsville and Wheeling Railroad.—The recent fair at Cleveland carrying thousands of the citizens from this region of country to the Reserve, over the railroad from Wellsville to Cleveland has aroused a new spirit in favor of the extension of that road to Wheeling. They have seen the capacities of the road, the trade it opens, the character of the people and the products of the country, and all unite in saying the road must be built and that promptly, either one side of the river or the other. It has already been delayed for months by the apathy of those on the west side, and a manifestation of a spirit of opposition in Steubenville, and by some of the farmers along the route.

It is now determined, we learn, by all parties, that if that state of things continues on the west side, the road must be made on this. We know that a large proportion of the citizens of Wheeling prefer this side. Be it which it may there should be no delay in it. The road is needed, will be profitable, can easily be built if the people put their shoulders to the work, and will form one of the most valuable national works in the Union.

This road will cost about $650,000 only, it will unite us with long roads on the north and on the south, form the shortest route between the great lakes and the Atlantic, and prove the best outlet for our products in either way. It is plain that the

road ought to be made, the connection formed.—Now which side of the river will do best, which furnish the most stock, and the greatest facilities? Wheeling has done her part, Cleveland her part, are those along the lines ready to take it up and say where they will have it by furnishing the stock and the ground?—*Wheeling Gazette.*

American Railroad Journal.

Saturday, October 16, 1852.

Railroad Iron.

Railroad iron cannot now be imported at less than $56 or $52 per ton. Within a year from date, the English article has been laid down upon our wharves at $35. The advance therefore is equal to from $15 to $17 per ton. Notwithstanding the high figure it has reached, we do not see any prospect of an immediate decline.

This advance operates with peculiar hardship upon such of our companies as are now compelled to purchase. A company having a road of 100 miles in length will have to pay from 150 to $170,000, in *duty* alone.

There is certainly a great injustice in subjecting railroads to this heavy burden. These works are great public blessings, by which the national treasury is as directly benefitted as are the people themselves. The great increase of our revenue over atl precedent and expectation, is attributable to the rapid progress of our roads, which increase vastly the ability of our people to purchase. Were it our object to adopt a policy for the purpose of augmenting the revenue of government, there would be none so effectual as to encourage railroads. Those works are securing to us an overflowing treasury, independent of what is paid by them in the shape of duties. It would certainly be a wise, as it would be a just course, to yield the less, for a vastly greater good.

We are satisfied that high prices must rule for some time to come. At present, prices in England depend upon the *labor* question. It is a grave question whether the vast immigration to Australia from Great Britain, will not increase *permanently* the price of labor there, and reduce the great disparity, in this respect, between that country and this. That such will be the result to a certain extent, there can be no doubt. The surplus Irish population is pouring into the United States, while the corresponding classes in England and Scotland are moving off in immense hordes to the gold regions in Australia.

We can now see that it has proved a great misfortune that so many of our iron establishments have been closed. The make both in this country and England has gone into few hands. In such a state of things it was inevitable that iron should go to a high figure the moment the demand should exceed the supply. The present prices must rule for a comparatively long period, as it will require some years to get new works of sufficient capacity to meet the increased demand, under weigh.

The extraordinary fluctuations which a course of years throws in the prices of iron indicates an unnatural state of the trade. The supply of raw material, both in this country and Europe is inexhaustible; and the production does not in any degree depend upon the vicissitudes of the season. Were we entirely supplied by the domestic product, these violent fluctuations could not occur. Our establishments would be scattered over nearly the whole extent of the country, and their annual make and capacity would be suited to the extent of the demand. The gradual increase of demand would, as in other kinds of business, be foreseen and provided for; so that there would be but little danger either of over or under production. While on the other hand, we depend entirely upon a foreign maker for this prime agent in all departments of industry, we must continue to experience what we have always suffered, great and unforeseen changes in price. The foreign maker is governed by present demand. The prospective wants of our country do not enter into his calculations, and consequently he is in no condition to meet them when they shall arise. Such is the present condition of the manufacture in England. Cannot we adopt some policy which shall secure to us both reasonable and uniform prices?

Great Trunk Line Railroad.

It appears probable that Mr. Jackson, the distinguished English contractor, will get the contract for the construction of this road, which is to extend from Montreal to Hamilton. About the time of his arrival in this country, certain parties in Canada had obtained control of the charter, by subscribing the requisite amount of stock, and organizing the company. This movement compelled Mr. Jackson to negotiate with a private company, instead of the Government, and the parties had not up to a recent period, been able to agree upon terms; the company insisting that Mr. Jackson should take the contract at £6,000, while his proposition was for something like £8,000 per mile, we believe. The late Canada papers we see, expresses the opinion, that a compromise will be agreed upon, and that Mr. Jackson will take the contract at something like £6,000. We do not vouch however for the correctness of any of the above statements.

Laying aside the question as to *price* to be paid, we think it would be a good thing for the Canadas to have the contract given to Mr. Jackson. The Provinces need the road at once; and we understand that Mr. J. represents a large amount of capital, which could be brought to bear upon the project, and would probably secure its completion at an earlier day, than if the work were let to different contractors in the ordinary mode.

California.

Sacramento Valley Railroad.—A company has been formed to construct a railroad from Sacramento city to a point on the Yuba river, ten miles above Marysville, Mountain city. The necessary stock for organization, under the law, has been subscribed, the money paid into the Treasury, and the papers filed in the office of the Secretary of State. Books were to be opened for subscription and the work commenced immediately. The last advices from Australia furnish a parallel to this in the contemplated construction of a railroad in the gold regions of that country, and leading from Mount Alexander to Melbourne.

Maine.

Kennebec and Portland Railroad.—At a meeting of stockholders, at Augusta, on the 30th ult., it was voted to choose seven directors, and the persons elected were—Ruel Williams, I. D. Lang, F. Lally, M. S. Hagar, G. F. Patten, W. D. Sewall, and Jos. McKeen. A vote was passed authorising the directors to issue bonds, to an amount not exceeding $250,000, to be appropriated for the payment of bonds falling due, land damages and claims upon the company, which it was supposed would free it from debt. A vote was also passed for liquidating the interest on the original stock up to the time the road went into operation, in January, 1852.

Industrial Resources of the South and West.

BY J. D. B. DE BOW, PROFESSOR OF POLITICAL ECONOMY IN THE UNIVERSITY OF LOUISIANA.

This is a collection in three volumes, of a large number of statistical and other papers mostly connected with the progress and social condition of the states of the south and the valley of the Mississippi. They exhibit not only the growing wealth and greatness of this infant empire, but reflect great credit on the industry and talents of Mr. De Bow, the editor of the Commercial Review, published in the city of New Orleans. The Review is warmly and intelligently devoted to the interests of the south, and has earnestly advocated the extension of internal improvements in those states, and especially the construction of those vast lines of railroad from New Orleans, which seem to rival not only the works of the north, but even aim at an equal extent with the great rivers that have hitherto fed the commercial importance of that depot of the products of the Mississippi valley. We think that no merchant or public man should neglect to secure the valuable information embodied in the authentic reports and statistical tables of these volumes. Professor De Bow's reputation as a scholar and statist, is a sufficient guaranty for the accuracy and completeness of every paper contained in the collection. The work is very neatly got up, and the present volume contains over 400 pages of closely printed reading matter. It is for sale at all the leading book stores.

Ohio.

Hamilton and Eaton Railroad.—The Eaton Register says the freights receivable there on the railway for the last week, amounted to $1,000. The amount of business on this way, says the Register, exceeds the anticipations of its most sanguine friends. A few days since, 23 loaded cars left Cincinnati for various points on the road, and it is not uncommon for even a larger number to be loaded with the produce of the country for the city. When the first efforts were made to obtain stock to build the road, the best informed estimated 40 as the number of through passengers each way per day, and 100,000 tons of freight per annum; and with that business it was thought the road would pay good dividends. These predictions will be more than doubled in the amount of business, and the net profit would be largely increased beyond that, were it not that the tariff of freights from Hamilton to Cincinnati are so low as to draw freight from the Eaton line to Dayton. The opening of the road to Eaton has had a very beneficial effect on the business of that town, and it is fast improving.

New York and Erie Railroad.

The six feet track of this road is soon to be extended to Jersey city, which is its natural *Eastern* terminus. The station at Piermont will only be used, we presume, in connection with the freight business. For the accommodation of this business it will continue to be very useful.

The work upon 125 miles of double track now in progress, is proceeding with vigor. From New York to Elmira at least, a double track is indispensable to the success of the road. The completion of all the branches that connect with this great work in the Susquehanna valley, will throw an amount of business upon it altogether above the capacity of a single track road. The double track will not only vastly increase the receipts, but will diminish in almost equal ratio, the cost of transportation,

Dayton and Michigan Railroad.

We understand, says the Dayton Journal, the work of putting down the iron on this railway will be commenced to-day. The iron is of American manufacture; the bars are twenty-four feet in length. A sufficient quantity has arrived to lay about four miles of track.

As soon as the iron is down to the gravel pits, three miles from Dayton, the road bed will be widened considerably. The grade was made of the present width, with the view of enlarging it by the aid of the locomotive and the gravel train.

Massachusetts.

Saugus Branch Railroad.—The Lynn News says the cars will commence running regularly on the Saugus Branch railroad in about four weeks. The work is progressing rapidly, and the track is already laid most of the way. The new depot, at West Lynn, is nearly finished, and is one of the finest buildings of the kind that we have seen. This R. R. promises to increase the business and prosperity of the western portion of the city.

Canada---Retaliation.

There does not appear to be much probability, that the Canadas will carry out their proposed Retaliatory measures, after all. The plan meets with a strong opposition at home, and as far as its effect upon this country is concerned, it is the most absurd proposition ever thought of. Reciprocity is not a difficult measure to carry, for the reason, that it can be shown to be eminently advantageous to all parties. When a measure possesses real merit, it is very unwise to endanger it, by taking an absurd and untenable position.

Stock and Money Market.

The money market is without any particular change. Money continues abundant for all the ordinary business operations and for all legitimate objects of investments. Railroad securities are in fair demand at steadily appreciating prices. The fancy stock market has recovered somewhat from the extreme low point of its recent depression. The fluctuations in such stocks are often independent of the condition of the money market.

Railroad securities, particularly those of new roads, are daily becoming more and more popular for investment. The results attending the opening of every *new* road tend to strengthen this favorable opinion. The aggregate investment in this country is highly remunerative, more so probably, than investments in any other branch of national industry. The average increase of earnings, the present over the past year, upon old roads, will exceed 20 per cent., while upon the new they far exceed the most sanguine expectations.

EARNINGS OF RAILROADS FOR AUGUST.

	1851.	1852.	Increase.
Erie	$263,964	$313,601	$49,637
Philadelphia and Columbia	36,170	39,869	3,699
Harlem	61,000	75,000	14,000
N. Y. & New Haven.	66,002	74,419	8,417
Long Island	24,337	26,022	7,689
Saratoga and Wash.	23,236	28,417	5,180
Ohio and Penn	.....	33,494	33,494
Ogdensburgh	26,442	48,041	21,599
Southern Michigan	.....	92,337	92,337
Norwich and Wor...	27,022	27,517	495
Cleveland and Pittsburgh	.....	30,428	30,428
Baltimore and Ohio.	126,845	147,383	20,538
Cleveland and Col..	.....	80,454	80,454
Stonington	21,906	21,161	.....
Little Miami and Xenia	.....	74,563	.....
Wabash Canal, Ind..	17,401	22,886	5,484
Cheshire railroad	26,855	32,082	5,673
Pennsylvania	107,725	149,996	42,270
Michigan Central	88,360	97,987	9,627
Albany and Schenectady	24,264	27,264	3,000
Rochester & Syracuse	105,878	86,317	19,561
Philadelphia, Wil. & Baltimore	75,423	80,538	5,113

American Stocks in Europe.—The Banker's Magazine has the following table of the estimated amount of American stocks now owned in Europe, or advanced on by foreign Houses, and issued for the various purposes of State, City, Banking, and railway companies, as compared with the amount of State stocks so held on the 1st of July, 1848:

	July 1, 1848.	July 1, 1852.
Federal	$11,000,000	$45,000,000
New York	16,000,000	40,000,000
Pennsylvania	30,000,000	47,000,000
Ohio	15,000,000	30,000,000
Michigan	2,000,000	6,000,000
Massachusetts	2,000,000	7,000,000
Maryland	6,000,000	10,000,000
Virginia	6,000,000	12,000,000
South Carolina	2,000,000	2,500,000
Georgia	700,000	1,200,000
Alabama	7,000,000	8,000,000
Mississippi	7,000,000	7,000,000
Texas	2,000,000	2,000,000
Arkansas	2,500,000	2,500,000
Tennessee	2,500,000	4,000,000
Kentucky	2,000,000	3,000,000
Indiana	5,000,000	10,000,000
Illinois	10,000,000	13,000,000
Missouri	500,000	1,000,000
Louisiana	12,000,000	10,000,000
Total	141,200,000	261,200,000

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 16, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	109
U. S. 6's, 1862	116¼
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¼
U. S. 6's, 1868	119¼
U. S. 6's, 1868—coupon	119¼
Indiana 5's	97¼
Indiana 2½	53¼
" Canal loan 6's	95¼
" Canal preferred 5's	42
Alabama 5's	97
Illinois 6's, 1847	82¼
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	107½
New York 6's, 1854-5	108¼
New York 6's, 1860-'61-'62	115
New York 6's, 1864-'65	122
New York 6's, 1 y., 1866	123
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110
New York 5's, 1854-'55	107
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	107
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1851	——
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1886	109½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	100½
New York 7's, 1857	110
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	96½
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	104½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Oct. 14.	Oct. 7.
Albany and Schenectady	106	105
Boston and Maine	106½	107
Boston and Lowell	—	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	89	83½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	97½	98
Erie	84½	82½
Fall River	—	—
Fitchburgh	103½	104½
Georgia	—	—
Georgia Central	—	—
Harlem	71½	69½
" preferred	111½	111½
Hartford and New Haven	—	132
Housatonic (preferred)	35	35
Hudson River	73½	71½
Little Miami	—	—
Long Island	27½	25
Mad River	—	99
Madison and Indianapolis	107	116½
Michigan Central	110½	111
Michigan Southern	123½	123
New York and New Haven	113	113
New Jersey	134	134
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	50½	48
Ogdensburgh	26½	27
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	34½	34½
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	95
Rochester and Syracuse	121	121
Stonington	58	57½
South Carolina	—	122½
Syracuse and Utica	130	130
Taunton Branch	115	115
Utica and Schenectady	139	138
Vermont Central	17½	17
Vermont and Massachusetts	22	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Journal of Railroad Law.

THE NECESSITY OF ORDINARY CARE.

The following is the report of a trial which occurred last week at Boston. No one should undertake to prosecute a railroad company unless he is fully fortified in regard to two points:—

First, That he has himself exercised ordinary care.

Secondly, That the defendant has been guilty of negligence.

SUIT FOR RAILROAD DAMAGES.

In the Supreme court this morning, the case of John F. Paul, *vs.* Boston and Worcester railroad was given to the jury. This is a suit for $12,000 damages in consequence of a collision at the Kneeland street crossing of the Worcester railroad in this city, between the defendants' train and the plaintiff's bake cart, by which the cart was broken up, the horse killed and Mr Paul's leg broken. Judge Fletcher, in an able and lucid charge to the jury, stated the facts as follows:—The accident happened between 5 and 6 in the morning. The Norwich steamboat passenger train had reached the depot in this city, had discharged the passengers, and was in the act of backing out as usual to switch off the cars to their place of deposit; the switchman had called out to the brakeman, all right; the brakeman had informed the engineer, and he started to go out of the house at the rate of three miles an hour, when the conductor, who was standing at the entrance of the depot, saw the plaintiff approaching at the rate of six miles an hour; just as the first car appeared outside of the depot, the plaintiff was from forty to fifty feet distant; the alarm was given, but the efforts to stop the train were fruitless, and the collision occurred. The questions to be decided by the jury were, were the defendants exercising usual diligence and care, and was the plaintiff also using that degree of care and diligence which men of common prudence generally use about their common affairs. The burden of proof was on the plaintiff to show not only that the defendants were negligent, but that he himself was exercising ordinary care. The court here alluded to a remark of counsel as to the frequency of R. R. accidents, and stated that the defendants were not to answer to any other matter than the case on trial. As to their conduct in the present case it had been testified to by four witnesses that the bell of the engine was rung when the train started, as required by statute, and four other witnesses testified that they did not hear it. The jury were to judge as to this positive and negative testimony. They were also to consider whether or no the plaintiff could not have seen the train in season to prevent the collision if he had exercised that care which was necessary in order to entitle him to recover.

The jury were not to be influenced by feelings of sympathy for the injuries sustained by the plaintiff, for in so doing they wronged the defendants. The jury failed to agree on a verdict.—*Boston Traveller.*

THE EFFECT OF AN EXCURSION TICKET.

In the 8 Common Law Reports, p. 362, we find the case of *Hawcroft against the Great Northern Railway Company*, decided in February last, and involving a point which is somewhat, if not entirely novel in courts of law.

The plaintiff bought a ticket of which the following is a copy:

GREAT EXHIBITION,
Barnsley to King's-Cross and back,
THIRD CLASS.

On the back of the ticket—

To return by the trains advertised for that purpose, on any day not beyond fourteen days after date.

It seems the defendants advertised certain trains called exhibition trains, as those which would leave the King's-Cross station during the month of August, for the conveyance of persons having excursion tickets. The hours at which the trains would arrive at various places on the line of railroad were mentioned in the advertisement. Barnsley was not among such places, but the time when they would proceed to Doncaster, and be conveyed from thence to Barnsley by a train of the South Yorkshire railway was stated; the Barnsley station house being situated upon the South Yorkshire railway, and not on the line of the Great Northern, which connects with the South Yorkshire at Doncaster.

It was agreed on the trial that the ticket was to be considered as issued by the authority of the defendants.

The plaintiff on Saturday, the 9th of August, still being the holder of the ticket, presented himself at King's Cross station, in London, shortly before six, in time for the train, which started at 6.45 A. M. for the purpose of returning to Barnsley by the train which was advertised to start at that hour, which train was admitted to be one of the trains referred to in the ticket. The train left King's Cross station for the places mentioned in the advertisement, but in consequence of the press of passengers the plaintiff could not obtain a seat. The plaintiff applied to the station master to forward him to Barnsley by a train which was about to depart, but he refused and told the plaintiff he must wait. The plaintiff went the same day by the advertised excursion train, which left King's Cross at 9.15 A. M. He reached Doncaster on Sunday morning, but no trains run by the South Yorkshire railway on Sunday. The plaintiff consequently hired a carriage by which he returned home, and brought a suit in order to recover the amount of the expense which he thereby incurred, and obtained a verdict.

The court refused to set the verdict aside, and held that under the circumstances the defendants were bound to provide means for conveying the plaintiff to Barnsley in accordance with the ticket. They expressed a strong doubt as to whether the fact of the cars being full, furnished any excuse for the non-conveyance of the plaintiff, inasmuch as the excursion ticket contained an unqualified agreement to carry from London to Barnsley without any saving clause, reserving the right to refuse so doing "in case the cars were full."

CONTRACTS WITH RAILROAD COMPANIES.

As a general rule, a contract with a railway company is not valid unless sealed. According to ordinary charters, the directors of a railway company cannot express the intentions of the company but by means of a sealed instrument in writing. To this general rule there are two exceptions—

1st. The directors may, without a seal, do such acts as the corporation was specially constituted to do. For instance, a trading company may without a seal draw bills of exchange.

2nd. They may dispense with a seal in cases of necessity, and on those of a trivial and constantly recurring nature.

Diggle *vs.* the London and Blackwall railroad company, 5th Exchequer reports 441. This decision was subsequently affirmed in Howersham *vs.* Wolverhampton Water works company. It is settled law in our country, that within their *especial sphere of action*, valid contracts without seal, may be made with corporations.

For the American authorities relating to this subject, see the case of *Brady vs. the Mayor of Brooklyn*,—1 Barbour 584.

Ohio.

The directors of the Scioto and Hocking Valley railroad company have adopted the line through Perry county to Newark, instead of through Lancaster.

New York.

Sacket's Harbor and Ellisburgh Railroad.—The exhibit of this company presents the following view of the main features of the road. It extends from the port of Sacket's harbor on the eastern end of lake Ontario, to a junction with the Watertown and Rome railroad, at Pierrepont manor, in the town of Ellisburgh, and is about eighteen miles in length. By it a continuous line of railroad communication is established from lake Ontario to Albany and Troy, and thence to New York and Albany, affording the shortest line between those cities and the lake and enjoying the advantage of a harbor at its terminus, excelling all others upon the lake for safety, facility of access for any description of vessels, and possessing a capacity to accommodate any amount of business. The most ample arrangements have been made at the Harbor for the accommodation of the railroad traffic and the storage of merchandise. Sacket's Harbor has advantages over Oswego and Ogdensburg in its safety, as vessels can arrive and depart in all kinds of weather without danger.

The road unites in the most favorable manner with the Watertown and Rome railroad, and will be operated on satisfactory arrangements with that company. The Rome and Watertown railroad have divided 10 per cent from its opening, and this alone is a sure guaranty of the success of the Sacket's Harbor and Ellisburgh road.

The local business derived from the flourishing villages of Henderson, Smithville, Belleville, Salisbury Mills and Ellisville, the most fertile portion of Jefferson county will create a large and increasing income.

The trade of lake Ontario, especially since the opening of the Welland canal, is becoming too great for its outlets. The value of the property transported on the lakes was, in 1851, 161,000,000 tons. The tonnage on the lakes above Niagara Falls was, 153,426 tons. The tonnage of the Welland canal was in the same year 1,464,250 tons. The Ogdensburg road transported during its first year 109,700 tons of freight and the increase for the present year, up to 1st June last, is 65 per cent over that of the corresponding months of the previous year.

The expenditure of capital to reach this trade is also quite remarkable, and may serve to show the importance which belongs to it.

By the northern or Ogdensburgh route we have principally for the benefit of Boston, the following roads, representing a capital of $23,000,000, viz:

	Miles.	Cost.
Fitchburgh railroad	50	$3,525,000
Vermont and Mass. railroad	11	550,000
Cheshire railroad	54	2,725,000
Sullivan railroad	25	1,200,000
Vermont Central railroad	157	10,000,000
Northern railroad	118	5,000,000
From Boston to Ogdensburg, miles	451	$23,000,000

And by the route from Sacket's Harbor we have, from

Boston and Worcester railroad	44	$4,880,000
Western railroad	156	10,000,000
Albany and Schenectady R. R.	17	1,700,000
Utica and Schenectady R. R.	78	4,143,000
Utica and Syracuse railroad	14	700,000
Watertown and Rome railroad	54	864,000
Sacket's H. & Ellisburgh R. R.	18	420,000
From Boston to Sacket's Harbor, miles	381	$22,707,000

Sacket's Harbor, it will be observed, lies some 7½ miles westward of Ogdensburg, to which add the

difference above by railroad, 34 miles, and we have a total difference of distance of *one hundred and nine miles in favor of the Sacket's Harbor route*, besides the advantages of well equipped roads, mostly of double track, with ample means to provide for all the contingencies of the most extended business.

These advantages and the intricacy of the navigation of the St. Lawrence before passing Ogdensburg, induce the direction to hope the Sacket's Harbor route may expect a fair share of the Boston business, and yet leave a flattering prospect for the business of that road.

The population of Canada West is likewise rapidly advancing, and the lines of railway now in progress over that peninsula, from points on Lake Ontario, Kingston, Toronto and Hamilton, to Lakes George and Huron will lead the business of Lakes Huron and Superior over them, avoiding the long and dangerous navigation of Lakes St. Clair and Erie. Of the business soon to be crowded on Lake Ontario, Sacket's Harbor must command a full share.

The road will be between 18 and 19 miles in length, with grades not over 40 feet per mile, except at the harbor, where in crossing the village it may be 50 feet for a distance of about 200 or 300 yards. The road is nearly graded and ready for the rails. The work is done in the most thorough manner; the bridges and masonry are not excelled by any similar structures in the country. The track consists of a heavy T rail, weighing between 57 and 58 lbs. per yard, of the best Ebervale iron. The sleepers are 2½ feet apart from centre to centre, and the road bed is generally of the best gravel, and where necessaty, ballasted with the same material. The iron is now upon the ground, and the track is being laid rapidly, with a view of completing it in the month of November of the present year, (1852)

The road when completed will cost about $240,000, which will be represented by

Stock subscribed	$270,000
1st mortgage bonds, 7 per cent	150,000
	$420,000

The bonds are secured by a first mortgage upon the entire road, property, income and franchises of the company, covering its present property and all hereafter to be acquired.

They are redeemable in 1862 at the Bank of Commerce in the city of New York, with warrants for interest attached, payable on the 1st of March and September in each year. In case of default in the payment of interest for sixty days, the Trustee, John F. A. Sanford, Esq., of New York, has power to sell out the property of the company conveyed in the mortgage given to secure the bonds, and pay them at once. The number is 100 of $1000 each, and 100 of $500. They are convertible into stock of the company at par at any time previous to their maturity.

The splendid steamboats plying on Lake Ontario, and the fact of its being a link in the shortest connection between both New York and Boston and the lake, will secure to it a fair share of the pleasure travel between these cities and the north and west. The local passenger travel will be respectable, as the road runs through the best portion of the populous county of Jefferson. A glance at its position will show its advantages, both in respect of the New York and the Boston line, and if any proof were wanting of its success, it is furnished by the large dividends made by the Watertown and Rome road, of which this is the northern link to Lake Ontario.

Railroad Subscriptions.

A railroad meeting and barbecue was recently held at Dallas, Madison parish, La., and $40,000 subscribed to the Vicksburgh and Shreveport R. R. company.

On the 29th Sept. last, the city of Dubuque voted in favor of loaning the credit of the city to the amount of $100,000 to aid in the construction of the Dubuque and Janesville or Southern Wisconsin railroad. The vote stood 429 in the affirmative and 9 in the negative.

The proposition to appropriate by the town of Clarksville, $100,000 to the Louisville, Clarksville and Nashville railroad, was carried with great unanimity—only fourteen votes being recorded against it.

The people of Hart county, on 18th Sept., voted in favor of subscribing $100,000 stock in the Louisville and Nashville, Ky., R. R., by a majority of 160 votes.

The citizens of Clarke county, Ky., voted on the 25th Sept., a subscription of $200,000 to the Lexington and Big Sandy railroad by a majority of 21 votes. The vote which was to have been taken in Fayette on the same day has been indefinitely postponed.

Kentucky.

Louisville and Covington Railroad.—We learn that efforts are making which promise good success, to place this road under contract. The route adopted, will probably follow the Ohio river. In reference to the question of route, we copy the following from the Louisville Democrat:

The resolutions of the board of directors to adopt the shortest and best route, without regard to individuals, is a first rate one, and we hope they will live up to it to the letter. There is no worse policy for stockholders than to deviate from a straight course to accommodate individual interests, even if it shall for a time appear to be their own interest. We would not give our opinion upon uncertain data in preference of one route over another, but it is not difficult to decide between a straight and a curved road between two such points as Louisville and Cincinnati. The saving of a few miles in such a road, is a very important consideration, and should not be compromised for any ordinary expense. We have before us the reports of two routes, the merits of which have been discussed somewhat. The shorter and straighter one is, of course, to be preferred; but as the location is not yet final, and some improvement in the route may yet be made, we shall recur to this subject again when the surveys are completed. But we hope the board will adhere rigidly to their resolution to adopt the shortest and best route, without regard to individual interest. Do this honestly and fearlessly, and capitalists will have confidence in their action, and their work will not be suspended hereafter by a better one at their expense.

New York.

Buffalo and Olean Railroad.—A large and enthusiastic meeting was held at Buffalo on the 2nd inst., to consider the measures proper to be taken for the building of a railroad to intersect the Pittsburg and Olean road. Hiram Barton, mayor of the city, was called to the chair, and Jas. O. Brayman and S. H. Lathrop, both of Buffalo, were appointed secretaries.

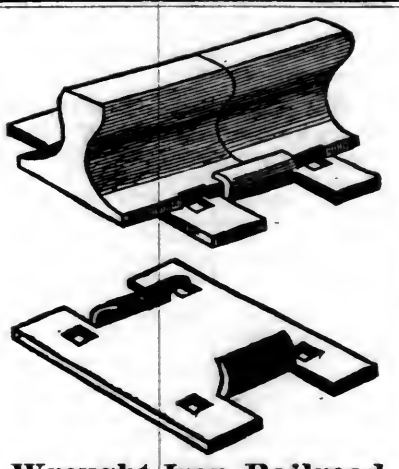
Speeches were made by Orlando Allen, Colonel Cooke, of Springville Hon Geo. R. Babcock, R. B. Heacock, W. W. Mann, and Wm. Wilkinson, and letters were read from the chief engineer of the Pittsburg company, and Wm. Wallace, chief engineer of the Buffalo and Brantford railroad. The speeches were copious and full. Books of subscription were opened for the purpose of organizing the company, and about $57,500 of the stock was taken. A committee of six was appointed to procure subscriptions to be reported at the council chamber on Wednesday evening next at 7 o'clock. E. Allen, E. J. Baldwin, C. J. Hamilton, A. L. Baker, S. V. R. Watson, and Jas. Sheldon, were named said committee.

Utica and Syracuse (Straight Line) Railroad.—The following officers have been elected in this new company:—John T. Clark, President, W. B. Welles, Vice-President; O. B. Matteson, Treasurer.

Boston and Maine Railroad.

The annual meeting of the stockholders of this road was recently held at Exeter, New Hampshire.

The annual report of the directors is printed. From this we learn that the whole cost of the road and equipment, up to the 31st of May last, is $4,100,865. The capital, including $150,000 Mass. loan, is $4,076,074. The net earnings for the year ending Nov. 1851, were $319,268, from which a dividend of 7 per cent was paid, and a surplus of $28,369 left, which, added to the surplus of the previous year, gives a total of $85,032. The net earnings for six months to May 31, were $146,793, from which 7 per cent dividend was paid, and $1,314 reserved. These six months being the least profitable part of the year, the statement shows an increase of earnings over 1851. The relations of the road to the Portland, Portsmouth and Saco road, remain unchanged, and are thought to work well. The working of the south Reading branch, governed by a foreign interest, is thought to be of public benefit.



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:

John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D., X. & B. Railroad, Xenia.
A. Degraffe, Railroad Contractor, } Dayton.
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank. } Dayton.

October 8, 1852.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvemen and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.

Portland, Sept. 21, 1852. tf

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—

DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To Chief Engineers.

A YOUNG MAN is desirous of a situation, either in Field Work, or as Practical Draughtsman. Has just completed an engagement in this country; before which, was engaged for six years with an Engineer in Scotland—part of the time as Draughtsman. Is in possession of all instruments necessary for Surveying, Leveling, etc. Please address J. H. STEWART, Box 70, Post Office, New York.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

Also—

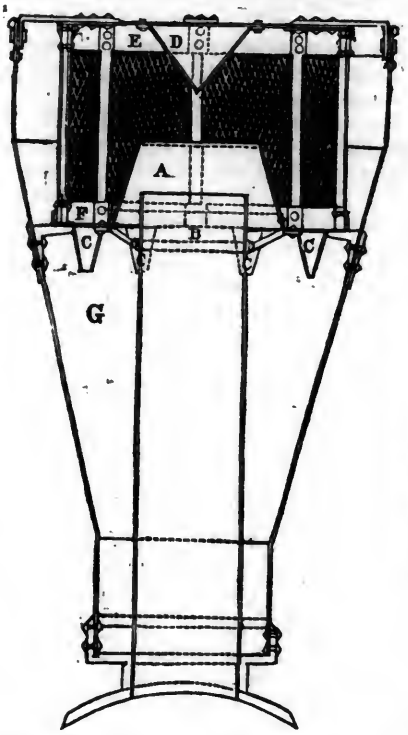
MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.

Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MI. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent - WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,

Importer of Stationary 191 Pearl st., N. Y

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.

July 10, 1851.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent*
SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO, of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

$250.000
San Francisco Water Loan.

Ten per cent. Bonds of $1,000 *each, with Coupons, payable semi-annually, in the City of New York, redeemable on* 1st *November*, 1862.

THE UNDERSIGNED, PRESIDENT OF the Mountain Lake Water Company, of the City of San Francisco, in the State of California, will receive sealed proposals at the office of Messrs. Dias & Thomas, No. 52 Wall street, in the city of New York, until Thursday, the 4th day of November, 1852, at 2 o'clock P. M., for the whole, or any part of the above mentioned Loan, which will bear an interest at the rate of ten per cent. per annum, payable semi-annually in the City of New York, and be redeemable on the 1st day of November, 1862, in the city of New York.

The undersigned will avail himself of the usual privilege of rejecting conditional bids, and of declining such as he may deem not advantageous.

Bids should be directed "Proposals for San Francisco Water Bonds," and sent to the subscriber.

Twenty per cent. and the premium will be payable on the day after opening the bids, and the balance with accrued interest may be paid at the option of the bidder any time before the first day of February next, thus giving Capitalists an opportunity to secure a most reliable and permanent investment, without precipitately disturbing their financial arrangements.

The debt created by the issue of these Bonds, is for the purpose of paying for the necessary pipes, and fixtures, more than sufficient means being already provided for the purpose of building the dams; reservoirs, laying the pipes, and completing the works; the entire capital of the Company ($500,000,) having been subscribed by the citizens of San Francisco; the subscribers embracing many of its most wealthy and respectable Merchants and Bankers. This is the first and only debt of the Company, and the repayment of the same is secured, by the Transfer in Trust, to James B. Bond and William M. Burgoyne, of all the property and franchises of the Company, valued at upwards of One Million of Dollars.

The Company have by law the exclusive right of laying pipes within the city limits, and own by purchase the only source from which water can be introduced into the city.

The Stock of this Company will probably be the best paying stock in the Union.

Copies of the Laws, Reports of Engineer, etc., can be had by calling at the office of Messrs. Dias & Thomas, No. 52 Wall street, second story.

SAMUEL PURDY, President.

New York, October 2, 1852.

To Contractors.

OFFICE OF THE DAYTON AND CINCINNATI (SHORT LINE) RAILROAD COMPANY.—CINCINNATI, Sept. 20th, 1852.—RAILROAD LETTINGS.—Sealed proposals will be received at the office of the Company; situated on the south side of Sixth street, between Main and Walnut, until Wednesday, October 20th, 1852, at 5 o'clock P. M., for the preparation and construction of section No. 1 of the road of said Company ready for the superstructure.

This section is the heaviest on the line, and embraces the excavation of a tunnel measuring some six thousand feet in length, with two thousand feet of arched approaches in addition, and from two to four miles of the road bed. The job of masonry on this section will be heavy, and the whole offers to responsible and energetic contractors, one of the most extensive and compact sections of work ever offered in the West.

The tunnel passes through stratified blue fossil limestone and indurated marl, and will be of a width to accommodate double tracks, walled with stone, and arched with brick. The Company desires that the work shall be commenced as soon as possible after the letting, and completed at the earliest practicable period.

Other portions of the work are in course of preparation for letting, and if adjusted may be offered at the same time.

The plans and specifications will be ready for inspection at this office at least two weeks prior to the letting.

By order of the Board of Directors.

SAMUEL H. GOODIN, President.
JOHN C. THORP, Secretary.

A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,
21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:
Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 38

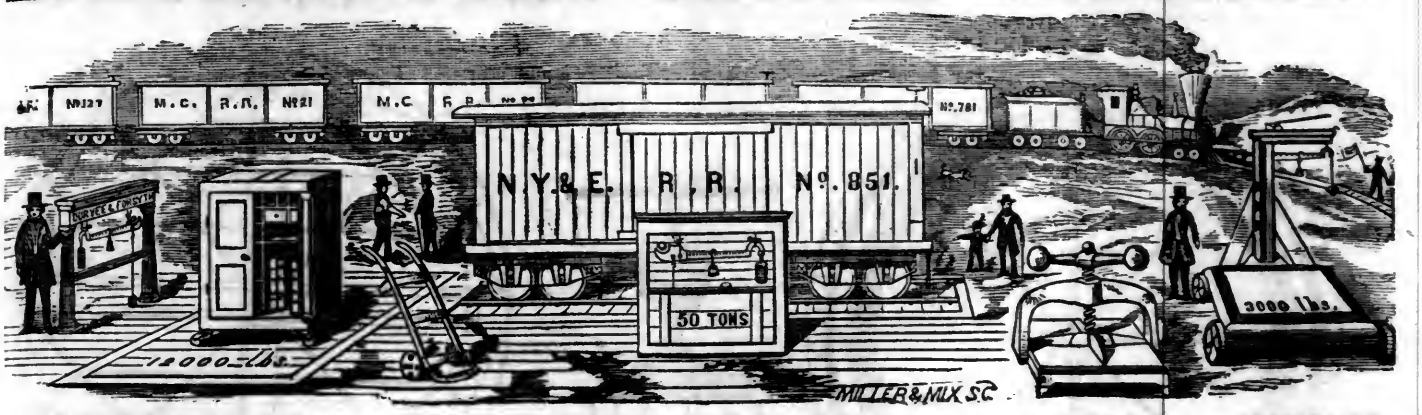
CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.

Oct. 2, 1852. 1y*

PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,
ALSO,
Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.
Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.
CORE BARS FOR FOUNDRY USE.
I on Tubes for Artesian Wells, screwed together flush on either side.
HOMAS PROSSER & SON. Patentees,
28 Platt street, New York.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates;* Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
	Cincinnati, Hamilton and Dayton,
Indianapolis and Bellefontaine,	
	Buffalo and Rochester,
Syracuse and Utica,	Rochester and Syracuse,
Columbus and Xenia,	Louisville and Frankfort,
Lexington and Frankfort,	Chicago and Galena,
Hillsboro' and Cincinnati,	Dayton and Western,
Greenville and Miami,	Central Ohio,
Cayuga and Susquehanna,	Chemung,
Rome and Watertown,	Illinois Coal Company,
Rutland and Washington,	Buffalo and State Line,
Erie and State Line,	Cleveland and Pittsburg,
Rochester, Lockport and Niagara Falls,	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

Messrs. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1849, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

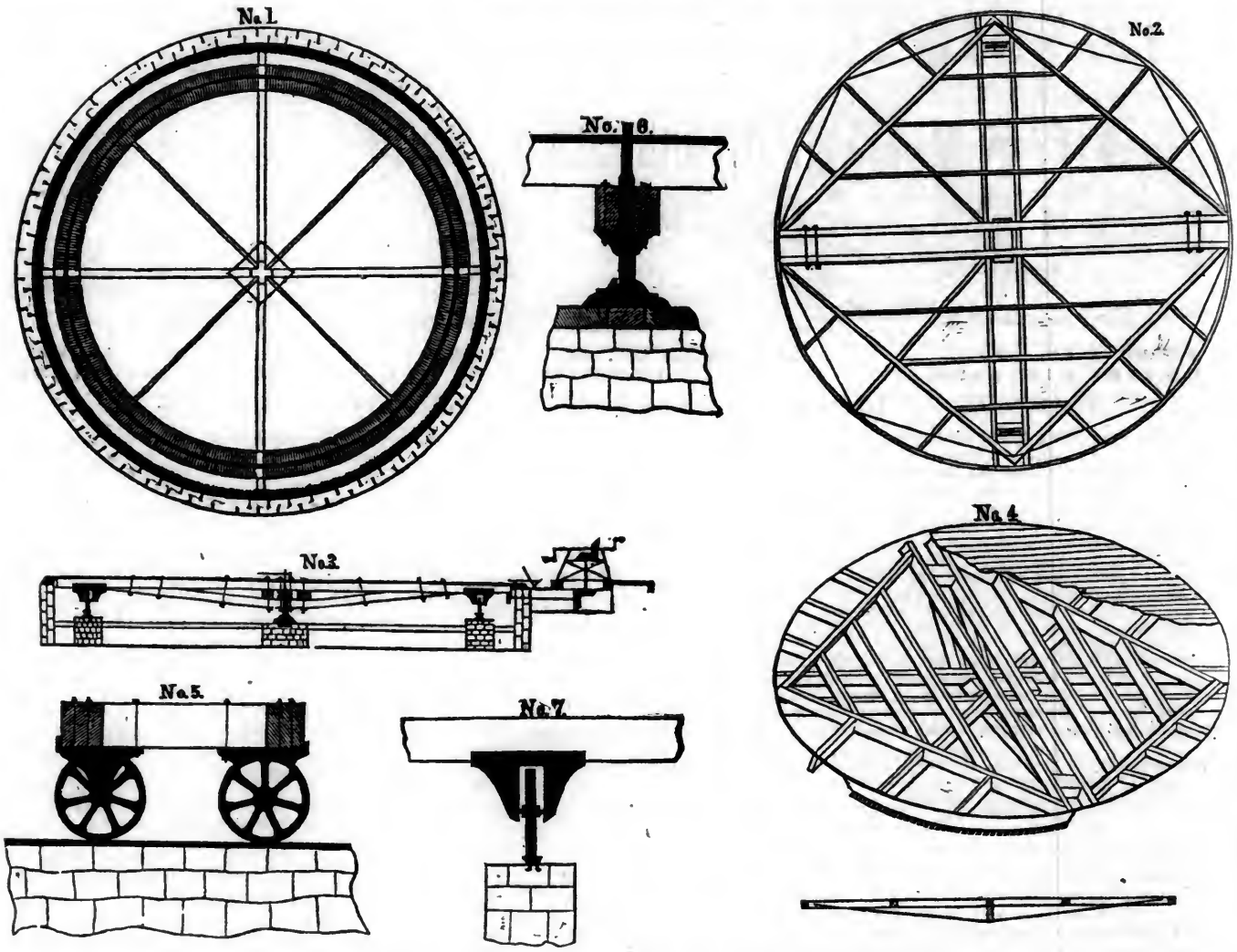
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sheet Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 43] SATURDAY, OCTOBER 23, 1852 [WHOLE No. 862. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Iron.....673
Journal of Railroad Law.....674
Fort Wayne and Chicago Railroad.....674
Chicago and Mississippi Railroad.....683, 675
Railroads in Illinois.....675
Baltimore and Ohio Railroad.....679, 675
New Orleans and Jackson Railroad.....678
Marietta Railroad.....678
Alabama and Tennessee Railroad.....678
Northern (Canada) Railroad.....679
A Great Achievement.....679
Alton and Sangammon Railroad.....679
Memphis and Charleston Railroad.....679
Ohio and Indiana Railroad.....680
Indiana Central Railroad.....680
Railroad from Greenpoint to Flushing.....680
Central Virginia Railroad.....681
Stock and Money Market.....681
Railroads in Southern Ohio.....682
Ohio Central Railroad.....682
Railway Bridge over the River Wye.....682
Mountain Lake Water Co., San Francisco....683

American Railroad Journal.

Saturday, October 23, 1852.

Railroad Iron.

A correspondent, writing from Cincinnati, while approving in general terms the recent article in our paper upon the removal of duty on rails for *first* tracks of roads, asks for our view of the plan proposed for the manufacture of rails suggested by him, in the following familiar letter to a friend residing in the iron making district of Ohio :—

CINCINNATI, Oct. 2, 1851.

Dear Sir :—A thought has struck me—that, at least in the future, we may provide all the railroad iron needed for our country, adding to our prosperity, and saving us from depletion of our currency. I do not know of any point more favorable than your city—having canal and railroads—for carrying iron away. Much is said of disturbance of our financial interests, by large amounts of iron bought of England, which is brought to America, and laid over our own coal and iron. I see nothing suggested, by way of relief. The difficulty will increase, with the increased number of railroads and relaying. Others may suggest something better. Let them do it. I suggest that, so near your city as practicable, a location be selected, affording iron and coal transportation. Let a company be formed composed of none but experienced business men and practical iron manufacturers, with a capital of at least $500,000, and secure a charter next winter, for one purpose only—that of making railroad iron. In addition to which capital, with such men interested in its management and results, let them arrange with various (*responsible only*) railroad companies, to supply them with all the iron they may want, at a stipulated per cent., or duty above the rate of English iron—say present duty of 30 per cent., or at a fixed home price that will afford a certain small and permanent profit—securing from those railroad companies a loan, in the aggregate, of $1,000,000—less or more, as capital may be needed to work with economy and success—the railroad iron company selling those bonds, and thereafter meeting their interest, securing the loan by a mortgage on the Iron Works and the notes of the company. So large an amount of capital will give this Iron Co. a responsibility and credit to negotiate the bonds to good advantage, which they may receive for iron sold new or old companies. This credit is essential. It might be well, as an inducement to secure a loan of the railroads, to allow them a dividend in common with other stockholders, or instead thereof, a certain bonus annually, or iron at lower rates to them than to transient purchasers.

I think some such measure practicable, and it would make a city of itself almost, where works were situated. Think of it among your friends. Some central section in this state should soon adopt it. Let me hear, after you talk of it.

Yours Respectfully, *

To be frank, we think the scheme of our friend objectionable, and impracticable, for many reasons. In the first place, railroad companies should never travel out of the sphere of their legitimate duties. This can never be done, without incurring a loss. Railroad companies are organised for a *specific* object, and those entrusted with the management of their affairs, may have just the qualifications that fit them for their places, while they would make a poor figure in manufacturing iron. The rule is so universal, that railroad companies lose by stepping aside from their legitimate duties, that our best managed companies will not even make their own cars nor locomotives; it being found to be more for their interest to pay a handsome profit to the regular manufacturer than to carry on the business themselves.

In the next place, companies that have their roads *completed*, would not become parties to such a contract, as they would have no inducement to do this. Companies having their roads *in progress*, could not afford to lend money to such a concern; or rather, a manufacturing establishment could not pay the interest that railroad companies pay, and live. Our new projects pay from eight to ten per cent for money, for periods of ten years. A manufacturing company, using their credits, would of course have to pay an equal rate. No establishment making rails can compete with the foreign make, and work upon capital borrowed at such a rate.

Again, the more simple the terms to which contracts are reduced for the purchase of rails, the better for railroad companies. It is much better for them to sell their securities for *cash*, and buy for *cash*, than to effect an exchange in *kind*. It is not the business of the iron maker to negotiate bonds. If he takes them he adds to his price, cost of negotiation, risk of market, etc., etc., which amounts to a much larger sum than the company would have to pay to a regular broker for the negotiation of their bonds.

It is the better plan, after government shall have afforded a reasonable protection, to let every branch of industry take care of itself. There is no lack of capital in this country for every *remunerative* business. We cannot make rails for $25 and $30 per ton in this country, as they do in England, because capital can be more profitably employed in other ways. So with their manufacture in the west. It is the opinion of our best informed iron makers, that the time has not come for the profitable manufacture of rails in the Ohio valley. The higher rates paid for labor and capital there, exceed the cost of transportation from the east. This is the reason why our establishments for making rails are not carried across the mountains. When the western States shall have a surplus population and wealth, they may be able to undersell the east in the article of iron, as they will in other manufactured products.

For reasons above stated, a Massachusetts cotton mill is able, at the present time, to undersell a similar establishment situated in Georgia or South Carolina, in the immediate neighborhood of the latter, although the former has to pay cost of transportation both ways.

Such are some of the reasons for our dissent from the views of our correspondent. But, allowing them to be correct, the remission of duty on rails for new works would not affect his scheme. The demand for rails for roads *in operation* in the west alone, will increase much faster than the capacity to supply them. Neither one, two, nor three rolling mills, will be able to meet this demand. The true way to secure a large and profitable business to our rolling mills, is to encourage railroads,

which increase more than any other enterprises, the consumption of iron.

Journal of Railroad Law.

THE RIGHTS AND LIABILITIES OF RAILROAD COMPANIES IN RESPECT TO LANDS GRANTED TO THEM CONDITIONALLY.

An able opinion of Judge Parker, in relation to this subject, was delivered at the last February General Term of the Supreme Court of the state of New York, at Albany, in the case of *John Nicoll, vs. the New York and Erie Railroad Company;* a case which shows it to be highly important that railroad companies and all corporations, indeed, should fully understand the nature of their land titles, especially in view of the legal consequences resulting from the expiration of limited charters.

The facts of the case, briefly stated, were as follows. A tract of land six rods wide, was originally granted by one Dederer, for a portion of their track to the Hudson and Delaware railroad company, (incorporated to construct a road from Newburgh to the Delaware river), upon condition that their road should be completed before the year 1848.

The condition was not fulfilled, and the road was transferred to the New York and Erie railroad company.

The plaintiff became the owner of Dederer's farm, subject to the rights of the Hudson and Delaware railroad company, and brought an action of ejectment, in order to recover the land in controversy, in consequence of the non-fulfillment of the condition.

But the court held it to be the general rule that conditions in a deed can only be preserved for the benefit of the *grantor and his heirs;* so that in case the land is sold the grantee thereof does not acquire any interest in the condition. From reasons of public justice the law does not favor the assignments of rights of action or rights of entry; consequently a conveyance made by the grantor to a third person either before or after the breach of the condition, upon which the land was originally conveyed, will not carry with it a right to re-enter for condition broken. This rule, however, in the state of New York, does not extend to leases in fee reserving rents, nor to *leases for life or years.*

But although the Hudson and Delaware railroad company was created only for fifty years, and consequently could only enjoy the land granted to it for fifty years; yet as the deed of Dedeer*on its face* conveyed to them a fee, the court considered that they actually purchased from him a fee in the land in dispute and not a mere estate for years.

The portion of the decision relating to this point seems to us well deserving of being cited at large.

"The kind of estate conveyed by a deed cannot be ascertained by a reference to the length of time the grantee has the ability to enjoy it. If so, every estate conveyed to an individual by deed, in terms plainly expressing a fee, would be but a life-estate, because the grantee's term of enjoyment must necessarily be limited to his life.

There can be no doubt of the power of the Hudson and Delaware railroad company to purchase and hold lands in fee. Its charter expressly conferred the power to purchase and hold all the real estate which might be necessary and convenient in accomplishing the objects for which its Act of Incorporation was granted. This did not mean that they should only take an estate for years, but it authorised them to purchase in fee. It is under such provisions that land is purchased by a railroad company on which to make erections for depots and other purposes; and it is under a like provision that banks whose charters are generally of a limited duration, purchase and hold land for the erection of a banking house. Corporations limited in their duration may not only purchase and hold in fee, but they may sell such real estate when they shall find it no longer necessary or convenient. The people, *vs.* Munson, 5 Denio 289, 2 Kent 281.

Corporations have a fee simple for purposes of alienation, but they have only a determinable fee for the purposes of enjoyment. On the dissolution of the corporation the *reversion* of the real estate purchased by them belongs to the original grantor or his heirs; but the corporation may defeat the possibility of a *reversion* by an alienation in fee. 5 Bingham *vs.* Weidermax, (1 Comstock R. 589); Angell and Ames *vs.* Corporations 129. The statute 2 R. S. 509, gives to every corporation the power to hold and to convey such real and personal estate as the purposes of the corporation shall require, not exceeding the amount limited by its charter. This is clearly a power to hold, purchase and convey in fee."

Judgment was ordered for defendant.

The Iron Interests of the U. S.

The Boston Journal, in an article upon this subject, says:

There are few minerals more widely diffused and none of greater value than iron. The ore of this metal is found in almost every State in the Union. Other States, however, contain the ore in less abundance. It has been estimated that in Ohio, 1200 square miles are underlaid with iron, which tract is calculated to contain 1,080,000,000 tons. In Maryland, Tennessee, Missouri, Kentucky, Virginia and other States, the ore is found in abundance. And yet with all the lavish bounty of nature in this respect, we annually import not far from $10,000,000 worth of iron in the pig, or manufactured by rolling.

Great Britain is the greatest iron producing country in the world; her annual production being estimated at 800,000 tons. Five years ago the United States produced the same amount. In 1850, according to the census returns, only 564,752 tons were made. This decline in production is in a great measure attributable to the reduction of the duty under the free trade tariff of 1846. The cheapness of foreign iron in our markets sets at defiance the competition of our own miners and manufacturers. Some idea may be formed of the great loss which has resulted from the abandonment of the policy of protecting our own producers, by the examination of the statistics of the iron manufacture of Pennsylvania. There are 304 blast furnaces and bloomeries in the State, with a capacity of making 550,959 tons. The number of forges and rolling mills in the State is 200, with a capacity of making 224,650 tons per annum. Their total product for 1847 was 202,727 tons. In 1849, the production had fallen off to 136,853 tons. The capital invested in the above mills amounts to not far from twenty millions, and the deterioration must be at least 50 per cent. Probably not half so many laborers are employed now in the manufacture as were employed in 1847. These facts show the extent of the existing depression in the iron business of the country.

It is doubtless a matter of supprise with many, how it is that so heavy, and yet comparatively cheap an article as iron can be produced in Great Britain and sold in this country, after paying duty, freight and commissions, at a less price than it can be afforded from our own mills. The answer is obvious. We have the skill, the fuel, the facilities for reaching a market, and every other requisite for the production of iron which is to be found abroad—except cheap labor. Labor enters largely into the process of iron making, and laborers can be obtained by the iron masters of Scotland at from 24 to 36 cents a day.

In England from 32 to 48 cents a day is paid. In this country the wages of common laborers is from 75 cents to $1 per day; the average being about 80 cents a day. Here is a difference of about 100 per cent in favor of the British manufacturer, enabling him to produce iron at a cost of only about $10 per ton, which cannot be manufactured here for perhaps twice that sum.

It follows that without judicious protection or a great reduction in the wages of the laborer, the iron interest, like many other branches of manufacture, must continue depressed.

Fort Wayne and Chicago Railroad.

We recently published the proceedings of the primary convention held at Warsaw on the 14th ult., composed of delegates from Philadelphia, Pittsburgh, Ohio, Illinois, and all the counties in Indiana through which this road is intended to pass. The directors chosen by the convention convened at Warsaw on the 24th ult., and effected a complete organization of the company, by electing Samuel Hanna, of Fort Wayne, President; J. R. Straughan, Chief Engineer, and A. M. McJunkin, Secretary and Treasurer. A better selection could not have been made. Arrangements were also made for opening books for the subscription of capital stock to said road, along the line thereof. A corps of engineers will be immediately organized, who will proceed at once to survey and locate the whole line of the road, and make estimates of the cost of construction, etc.

It is the intention of this company to adopt measures for the immediate prosecution of this great work, as soon as the preliminary arrangements can be made; and from the well known experience, energy, and perseverance of those gentlemen who have taken it in hand, as well as from the great importance of the work itself, the public may rest assured that it will be pushed forward as vigorously and completed as speedily, as any other work of the same magnitude which has ever been undertaken in the United States.

This is the last link that remains to be provided for in the great chain of direct communication between Philadelphia and Chicago—the great depot of the north-west. That it will be emphatically *the* line between the central seaboard and the north-west—the great *through route*—no one, who will examine the maps of the intervening States, can for a moment, doubt. It must be eminently a *paying* road of itself; but as a continuation of the three great lines of road that already stretch from Philadelphia to Fort Wayne—as the link that connects them with Chicago, and the numerous lines of railroad that centre in that city—it is absolutely indispensable to them. Its completion would double the business of these roads at once, as well as secure to Pittsburgh and Philadelphia the lion's share of the great north-western trade, nearly all of which now goes in other directions. To these roads and cities, the Fort Wayne and Chicago road is of vital importance. They cannot let it *drag* for want of means—self-interest forbids it—and we are assured that if the citizens along the line will put their "shoulders to the wheel," Hercules will not be called on in vain.

We notice, by some of the Philadelphia papers, that that city is apprehensive of a diminution of trade from the roads projected by New York on one side and Baltimore on the other. Let her lend efficient aid to the Fort Wayne and Chicago road; and besides making an investment that will pay a *better* per centage, in connection with the rest of the chain, than that of any other road in the west, if not in the east, she will open a highway that will throw the largest share of the immense trade of the north-west, into her lap—a trade of which she has heretofore enjoyed but little, if any, and which can never be diverted from her by any lines that may be projected by New York or Baltimore. When these lines of road are all completed from Philadelphia to Chicago, the Central and Southern Michigan roads will hardly be felt as competitors. The distance from Chicago to New York, by either of them, will be considerably greater than from Chicago to Philadelphia, by this; besides involving the necessity of several transhipments.

The two western links of this great chain—the Ohio and Indiana road, of 132 miles; and the Fort Wayne and Chicago road, of 180 miles,—will be much nearer straight, and of much lower grades, than any other line of road of equal length in the United States; and the whole is intended to be built

and equipped as a first class road.—*Fort Wayne Times.*

Illinois.

Chicago and Mississippi Railroad.—The managers of this road invited its friends, the leading citizens and the members of the city governments of Alton and St. Louis to a festival and excursion over the road between Alton and Springfield on the 7th inst. An ample collation was provided on the occasion. Benj. Godfrey, Esq., President of the road, presided. We copy the following notice from the St. Louis Intelligencer.

The road from Alton to Springfield, Illinois, is 72 miles in length, and in the absence of official data, we estimate its cost, as at present equipped, at $1,250,000, or a fraction over $18,000 a mile. The country through which it passes is very level—peculiarly adapted to building a road at a small cost.

It runs through the counties of Madison, Macoupin, a portion of Morgan and Sangamon, which is one of the finest agricultural regions of Illinois; and it is designed to extend it to Bloomington in M'Lean county, and thence northeast to connect with Chicago. We assume this connection will be made within two years or less from this date.

To the untiring exertions of Benjamin Godfrey, Esq., the projection and completion of this road may be attributed.

This road is but the *practical* beginning of the great system of railroads projected by our brethren of Illinois, and the completion of which is to develop the resources of a State not excelled in the richness of her soil by any number of consecutive acres on the globe. Talk of mines of gold—*these*, history teaches us can be exhausted by the labor of man, but the *earth* of this magnificent State, cultivated by man, will feed almost countless millions when the treasures of California, like those of Mexico, will only be known by the truth of history.

Illinois has now a population little short of a million, and if she goes on increasing in the same ratio she has the past ten years, in 1860 her population will exceed 1,600,000, and probably by 1870 two and a half millions. With the soil of Illinois and the labor of this population, she can furnish the markets of the world with breadstuffs.

But the Iron road must transport *cheaply* the products of her soil to market, and this will be done when the great chain of railroad now projected, from the centre to the circumference of the State, is completed. We may be deemed extravagant, but we firmly believe, as the result of the wise laws passed by the Legislatures of Illinois within the past two years, that this State will be, in point of population and wealth, second only to one State in the Union in 1870.

The Railroad across the Isthmus of Suez.

The railway works have been greatly advanced within the last few weeks, and eight thousand men are now employed in throwing up the embankments along the shores of lake Mareotis, the coast line of which it traverses for twelve miles, or nearly its entire length. The foundation has proved more secure than was expected, and it is highly probable, from the exertions that are being made, that by the end of 1853, trains will be passing with passengers and merchandise, between the Mediterranean at Alexandria, and the Nile at Kafi-Lais. This surmounts, at all events, the grand difficulty in the transit—the navigation of the canal.

By the 1st of January, 1854, there seem just grounds for hoping that the communication will have reached the capital; and if the Viceroy is prosperous and supported, it is highly probable he will order its continuance thence to the Red sea, at Suez.

There has been great difficulty experienced lately in reaching the terminus recommended by Mr. Stephenson as the line crosses some trifling property of Europeans, and they are taking advantage of the necessity to demand the most exorbitant values. In fact, so much disgusted is the Pacha at their rapacity, that he threatens to cut off that portion altogether, and connect it with the granaries and shunahs by a circuitous tramroad. It is very sad that the first check in the introduction of this first European work is to be received at the hands of those who may, for some time, at least, be the largest gainers from its advantages.

Mr. M. A. Borthwick, the superintending engineer of the works, is very indefatigable in his exertions to further the completion of them; and he is fortunate in having for his assistants a staff of spirited and energetic men. The contractor for the bridges and culverts is soon expected out from England, and we hope his portion of the work will be advanced with equal energy and success.

Illinois.

Sale of the National Railroad.—So much of this road and its materials, as belonged to the state of Illinois, was sold on the 1st inst. to the highest bidder, by the Auditor of State, in pursuance of an act of the last legislature.

The stone of the line of the road was sold to the Terre Haute and Alton railroad Co., for $2,050.

The line of the road between the west line of Putnam county and Terre Haute, was sold to Curtis Gilbert and Ralph Wilson for $225; and the line of the road from Terre Haute to the State line was sold to Curtis Gilbert for $5, making $230 for the whole line—about 27 miles. This closes the connection of the state with all works of internal improvement.

Rock Island and Chicago Railroad.—This road is now completed from Chicago to Joliet, and the first locomotive made a passage over the line on the 9th inst. This is one step forward towards the rising commercial importance of Chicago, and the rich and flourishing state of Illinois.

Central Military Tract Railroad.—The Galesburgh News Letter states that the stock of this railroad has all been taken, and the books closed on the 21st September last. Since, there have been many applications for shares. A short time ago there were over one hundred thousand dollars worth of shares in the market, now there are none to be obtained, except at a premium. An effort is made to increase the amount of the capital stock of the company. If the work *can be done* in that time, the road will be put in running trim by or before the 15th of October, 1853.—The road is to be graded and ready to receive the ties by the 1st of March. The iron is expected to be on hand in May.

Belleville Railroad.—This road was formally opened on the 2nd instant. We learn that there was great rejoicing among the citizens, and that a large crowd was present. The president and others made speeches on the occasion, and among them Edward Wyman, Esq., now a director of the road, made a most capital off-hand address. The location of the whole line of the road has been made from Illinoistown to Belleville, and the depot at the latter place secured. It will be pushed forward with great energy, and doubtless completed before the 1st of August of the coming year.

Belleville may now soon be ranked as *the* great manufacturing town of Illinois. With coal in abundance, within almost her corporate limits, and the terminus of the railroad as her market, she is destined to go-ahead rapidly.—*St. Louis Intelligencer.*

Pennsylvania

Susquehanna Railroad Company.—At a meeting of the stockholders of the York and Cumberland railroad company, held on the 5th inst., at Calvert station, the following named gentlemen were appointed a committee to make arrangements to procure subscriptions to the stock of the Susquehanna railroad company, viz:—Robert M. Magraw, P. H. Sullivan, Michael Herr, Dan. Holt, Henry Tiffany, Alex. Fisher, Enoch Pratt, W. F. Murdoch, Wm. Bose, and Zenos Barnum.

Baltimore and Ohio Railroad.

TWENTY-SIXTH ANNUAL REPORT.

The President and directors of the Baltimore and Ohio railroad company, present to the stockholders their last annual report, prior to the completion of the great work which has been entrusted to their charge. In accordance with the promises heretofore held out, they now have it in their power to announce that on the first of January next, a continuous chain of railway communication, three hundred and eighty miles in extent, will unite the city of Baltimore with Northern Ohio, the Ohio and Mississippi valleys, and the vast and productive region, to which, for twenty-six years past, their attention has been steadily directed—in the prosecution of this stupendous enterprise.

I.—OF THE MAIN STEM.

The operations of the past year have been attended with results far more satisfactory than had been anticipated, from the rivalry of other works, whose completion, or advanced progress, had given them a temporary advantage over this road.

The revenue from all sources during the year, has amounted to $1,325,563 65, showing the small decrease of $23,659 10 as compared with the results of the last fiscal year. Of this amount $314,914 47 have been realized from passengers, $60,740 from mails, and $949,909 18 from merchandize.

The aggregate receipts from both roads show an increase of $15,427 91 over the year ending 30th Sept., 1851.

The expenses of the road have been $710,179 22, which deducted from the gross earnings as above stated, will show the net earnings to have been $615,384 43.

The board have declared a dividend in stock of seven per cent., payable on and after the 25th of November next.

The above exhibit would make the net earnings equivalent to about 8¾ per cent on the original capital of $7,000,000.

The stock of the city of Wheeling will be entitled to a dividend at the same rate, from the time of subscription by said city. This the board have deemed a legitimate charge to the account of construction—the money having been subscribed with a view to the new road west of Cumberland.

It will be perceived by the tables accompanying this report, that the revenue earned during the year, has been derived in the main from the local travel and resources of the road; a fact which cannot fail to give confidence in the results of the work when completed and in operation to its point of destination.

It is worthy of note that since May last, the revenue of this road has been steadily increasing, and the closing month of the fiscal year showed an advance greater than had been realized during any one month of its operations—the revenue being, from the main stem $157,571 55, and from the Washington Branch $34,953 93, an aggregate of $192,625 48, on the main stem and its branch.

In May the increase was $49,505 94; in June $23,008 70; in July $11,973 89; in August $14,543 54; and in September $31,204 16.

It is confidently expected that the revenue will now go on steadily to increase, until the opening of the road to the city of Wheeling.

The suspension of the coal trade, during the past winter, owing to the failure of the Maryland Mining company, operated most disadvantageously to the receipts of the year, in addition to which, reductions in the tariff have been made, in order to meet the rivalry of other works, which have largely curtailed the aggregate of net earnings.

But for these, and other extraordinary contingencies, the net earnings would have shown a handsome increase over the fiscal year ending on the 30th Sept., 1851.

The expenses of the road, on the other hand, have been increased, by losses, occasioned by a fire at the Mount Clare Station, consuming much valuable property, including the patterns of the machinery department, estimated at $13,468 08, after deducting the amount of insurance recovered; and the unprecedented freshet of April last—deranging the track and destroying property to a considerable extent, at different points upon the road.

Liberal expenditures have also been made, in view of the early opening of the road, which are

extraordinary in their character; but which will have gone into the expense account.

That portion of the cost of the work, done on the road west of Cumberland, by the road department, after it had passed from the hands of the Chief Engineer, which was necessary to place the work in safe and permanent condition, such as ballasting, grading, adjusting, etc., etc., has been charged to account of construction.

The present condition of the road is nearly all that the board could desire. The extended line from Baltimore to Cumberland is reported to be not only in a state of good repair—equal on the whole to what it was represented in the last annual report, but may be said to have improved in many essential particulars. The purpose of the company has been, to guard against the extraordinary outlays consequent upon a postponement to the future, of the repairs necessary to prevent deterioration; and this policy has been the more strongly urged, in consequence of the heavy outlays to which they have been subjected, in bringing their road to its present advanced stage of improvement. A road to be kept in repair in perpetuity, must be carefully watched and liberally treated, and the stockholders will find in an average of years, that the course of true economy is, to prevent decay, by a prompt application of the remedy, before a general breaking up renders a more serious effort indispensable to preserve its existence.

The board feel that they are entitled to some indulgence, in the relation which their expenses have heretofore stood to net revenue. They have not only been subject to the direct and ordinary outlay, necessary to ensure the safe transit of passengers and freight, common to all roads; but they have been compelled to incur a much larger expenditure than would have attached to a road in the sound condition of their own at the present time. They have been obliged to substitute a new track of some twenty miles for the old plate rail track, which they found in a state of depreciation, such as to render its repair inexpedient; they have increased their sidings to an extent of more than ten miles; they have renewed their bridges at a cost in some instances almost equal to the original estimate for such structures; and they have been subjected to a heavy outlay for enlargement of water stations, and other necessary appendages, rendered indispensable by the enlarged prospect before them. They have in fact extended the capacity of the road, from the contracted limit in which they found it four years ago, to one capable of meeting with but slight embarrassment the demands of the increased trade which is soon to be developed; and this without a dollar's increase of its original capital, by the issue of new stock, based upon the road *East of Cumberland*, and without encroaching upon a saving dividend to the stockholders.

The board deem it more than just, that this view should be presented, now that the work is about to be completed; notwithstanding they have continued regularly, to make dividends in stock out of their net revenue, after deducting these extraordinary demands upon them; and have never failed, during any year of their operations, to show a favorable exhibit in comparison with other roads, having few, if any, of these obstacles to contend with.

The Station at Mount Clare has gone on steadily to improve. It is now well supplied with work shops, engine houses, and other buildings for a very large trade. Its stationary machinery has also been increased to a considerable extent, in view of the greater activity which must soon attend the operations of the repair department. With those who have known its condition and limited capacity in former times, its present appearance and greatly extended facilities, will not have escaped observation. The number of mechanics and others, now employed at this Station, is upwards of one thousand.

At Martinsburg a large expenditure has been incurred, in the purchase of grounds and the construction of shops, engine houses, and other necessary buildings, required by the prospective wants of the road; and at Cumberland considerable additions have been made to the facilities heretofore afforded at that point.

The results of the transportation department, show no abatement in the skill and promptness with which it has been conducted. It is a remarkable fact, that for four years past, not a fatal accident has occurred to any passenger travelling on this road, and the records of the courts will show a most singular exemption from the litigation usually attendant upon works of such magnitude. It has been the unceasing effort of this company, at all times, to make their road an *accommodation* to the public, and they have spared no pains in bringing into their service, officers of gentlemanly deportment, character, and reliability, who would feel the weight of their responsibility both to this company and the public. The board take pleasure in expressing the belief, that no road in this country presents a more complete or efficient organization.

The present condition of the road is such, as to admit of a rate of speed, much greater than that which the company have adopted. Independently, however, of what is due to safety, the effect of a too rapid motion in the passage of the trains, in the wear and tear of the track, has been to limit the rate of speed both in the tonnage and passenger trains, to about ten miles an hour for the former, and between twenty-five and thirty for the latter.—The regularity with which the business is conducted at these rates, and the exemption of the road from accidents, abundantly attest the wisdom of the policy which has been adopted.

The limited accommodation which it was found convenient to furnish, without interference with the wants of the Machinery Department, at the Mount Clare Station—its remoteness as a place of delivery—and the necessity for maintaining an expensive horse-power, for both the passenger and tonnage operations of the road—warned the board of the importance, at an early day, of a transfer of their business to some more convenient and central location.

This had been rendered the more imperative, in consequence of the utter inability of the company to provide for its present trade, without serious inconvenience.

Accordingly a purchase was made of three entire squares of ground, between Eutaw and Howard streets, bounding on Camden street, north,—Lee street, south, and comprising a length of about 1,100 feet, including Conway and Barre streets, which the company have the privilege of arching, and a width, between Howard and Eutaw streets of 330 feet.

No act of this board, it is believed, has been received with more favor by the entire community, than the location of this noble station—holding out the advantages that it does to the whole city—and comporting so admirably with the vastness of the enterprise, whose accumulated treasures it is destined to receive.

The board might well have hesitated in meeting the expense of so heavy an investment, at a period when they had so many and pressing demands upon them; but when they considered that the results of their own great work would be to place such an acquisition at any future day, after the 1st of January, beyond the limit of their means; and that it involved the immediate abatement of the tax for horse power, which during the fiscal year had reached $47,543 42, and would have been quadrupled on the opening of the road to the Ohio river; they could not hesitate as to their duty in such an emergency.

The cost of the new station, when complete, will fall little short of $500 000, the interest of which will be more than met by the tax on horse-power, upon the limited basis of trade during the past fiscal year.

The board are happy to state that every facility has been afforded by the corporate authorities of the city of Baltimore, in the location and establishment of the new station; and the privilege of locomotive steam power was allowed them, by such approaches as were deemed most convenient and advantageous.

The board would state further in connection with this subject, that they have disposed of their old station on Pratt and Charles streets, for the sum of $80,000, deducting the ground rent to which it was subject.

By the agreement of July, 1847, the city of Wheeling stipulated to furnish, free of charge, with the right of way through her streets, a depot on the north side of Wheeling Creek, comprising not less than two acres. A point immediately at the mouth of the creek was deemed advantageous for this purpose—but a difference of opinion having arisen between the city and the company, as to the proper location, a compromise was made, by which the company, on the privilege being conceded to them of laying down certain tracks, and using a portion of the property belonging to the city, was enabled to secure all that could be conveniently compassed for the accommodation of both their passenger and tonnage business. No other location could have been made which would have been more advantageous to the interest of both the city and the company. The total cost of the depot grounds, including the right of way, will amount to $78,000, of which the city of Wheeling paid $50,000, and it is estimated that the company will realize a large amount of the excess over $50,000 paid by the city of Wheeling, by sales of portions of the property not needed for the purposes of their depot—and which will not be greatly enhanced by the presence of this improvement.

This station is situated immediately on the banks of the river, and will afford the amplest facilities to the entire water front, as well as other business parts of the city.

Early in the month of May last, the subject of the equipment, necessary to accommodate the probable trade of this road, on its completion to the Ohio river, was referred to the committee on Construction and Repairs, with power to make the amplest provision for any contingency that was likely to arise. But one opinion prevailed in this community, as to the necessity for enlarging the former estimates of the chief engineer and general superintendent, in their report upon this subject, to an extent greatly in advance of what the board had deemed to be requisite, at so early a stage of their operations. They did not see, however, that they had any right to run the risk of being found deficient in the means of transportation; and the experience and calculations of business men engaged in the various departments of trade, left no doubt that the course of prudence imperatively required the most liberal policy in the equipment of the road, both for its passenger and tonnage operations.

The special report of the general superintendent, herewith annexed, will shew the basis on which the board have acted in their orders for machinery and cars.

It will be perceived that the estimates of that officer have been based upon a conjectural aggregate from all sources of $4,092,500 of revenue. The provision thus made cannot fail, it is believed, to be ample in any contingency, especially as that officer does not estimate for *night* work, which in cases of pressure and emergency might be resorted to.

The cost of the additional power thus ordered, exclusive of the cars and engines provided for in the company's shops, will amount to $937,800, and the outfit of the company in engines and cars, including the stock heretofore furnished, will be as follows:

		First Class Standard.
1st class	burden engines	86—86
2nd "	" "	5— 3
3rd "	passenger and freight	17— 8½
4th "	freight engines	19— 7½
1st "	stock "	9— 9
1st "	passenger "	3— 3
		139 117

Passenger train cars including baggage, mail and express cars. Total..... 96
Burthen cars of all kinds.....2,567

Total.....2,663

The whole of this additional power is contracted to be delivered upon the road, on or before the first January, or shortly thereafter.

No road in this country has commenced operations with a more ample equipment; and the stockholders might well compromise for far less encouraging results than are here indicated, and for which out of abundant caution, the amplest provision has been made.

The dependence of this road for the present, to a great extent, upon the navigation of the Ohio river, induced some anxiety, at an early period, on the part of the board, in reference to the prompt accom-

modation of the travel destined for Cincinnati, St. Louis, and other points beyond its western terminus. Pittsburg for many years past has had the advantage of a daily line of packets running regularly between that city and Cincinnati. To have opened this road, without facilities, at least equal to those enjoyed by a rival interest, so far as the river navigation is concerned, might have been attended with serious drawbacks, and tended to neutralize the otherwise decided advantages which the Baltimore route will be found to possess, both as to time and distance. In ascending the Ohio river, the passenger is one day nearer to Wheeling, than he is to Pittsburg, and the time consumed in the transit between those cities, would place him in Baltimore in almost the same time he could reach the latter city. The importance then of a line of boats working in connection with this road, and regulated by its time schedule, was deemed of sufficient interest to engage the earnest attention of the board.

The board are happy now to be able to state for the information of the stockholders, that a company has been organized, under a charter passed by the legislature of Virginia, and arrangements made by which this difficulty will be effectually obviated.

A daily line of boats, of a class superior to any that have yet floated upon the western waters, is in rapid progress of construction, and will be ready by the 1st of January, to run in connection with this road.

These boats measure 300 feet in length—combine all the modern improvements—both as to model and machinery, and the appointments necessary to the comfort of passengers; and will be under the management of the most experienced and skilful officers.—They will run daily between Wheeling, Cincinnati and Louisville, and will so regulate their time of arrival and departure, as to fall in with the movements of the cars running over the Baltimore and Ohio railroad, between Wheeling and Baltimore. With these facilities which may be held out by this line, it is not doubted, that the through travel will be greater than that of any other road in this country, at those periods of the year when the river is in a navigable condition.

II.—OF THE COAL TRADE.

The coal trade has not developed during the year with the rapidity that was anticipated at the date of the last annual report. Nothing has occurred, however, to shake the confidence of this board, in the opinions heretofore expressed, not only in reference to the value and superiority of the Cumberland coal, for steam and manufacturing purposes, but the point at which it must concentrate, and which will be found most advantageous for distribution on the seaboard, in its transit to more distant markets. The aggregate transported during the year has been 206,290 tons; of which 25,794 tons have been consumed in the operations of the road. This amount would have been greatly increased, but for the failure in October last of the Maryland Mining Company, and the almost total suspension of the trade from that time to April 20th, owing to the confusion resulting, in the main, from this untoward event. The demand for the article was also greatly interfered with, by the prevalence of high freights, and the existence of the heavy pilotage, which has heretofore operated so disadvantageously to this department of trade.

The board are happy to announce, that these drawbacks have ceased to exist, and the demand for cars on this road has exceeded what it has reached at any former period; and is at this moment limited only by the capacity of the company to provide the means of transportation.

No subject which has heretofore occupied the attention of this board, is of graver interest than that of the coal trade at the present time, and this company have at no period hesitated as to their duty, in forwarding, to the extent of their ability, what they believed to be the true interest of the State, the city and the stockholders, in this connection.

The mineral region of Alleghany belongs to the State of Maryland; and the development of its wealth and resources is a matter which can never be lost sight of by those representing her interest in this road. Apart from the more expanded view which this board feel bound to take, the idea of a concentration of the coal trade at any point beyond the limits of the State, is one which has never been entertained. The city of Baltimore, contributing one half to the taxes of the State, and representing nearly a moiety of the stock in this road, must be the legitimate recipient of whatever incidental benefits this trade may be expected to produce, and the State at large will add to her manufacturing and mechanical pursuits, and the growth of her population and wealth. Those who could look with indifference upon the importance of the coal trade to the city of Baltimore, and its possession by the District cities, may profit by the experience of Philadelphia, and her connection with the public works and mineral region of that State.

The board have reason to believe, from applications now before them, that an amount exceeding 500,000 tons of coal, could be disposed of during the coming fiscal year—and there are parties believed to be reliable, who would be willing to guarantee a steady transit of from 1,600 to 2,000 tons daily. The demand for this coal has been increased, by the reduced rate at which it is furnished, owing to the abatement of 25 cents in the transportation, some 15 cents pilotage upon vessels seeking our harbor, and the destructive effect of anthracite coal upon the machinery of vessels, which have been compelled to use this fuel on account of the difficulty of procuring any other.

In the application now pending for an increase of facilities over this road, it is understood a decided preference is expressed for the Baltimore market; and no attention will be given to other channels of communication, until the inability of this company, to afford the requisite accommodation shall be clearly established.

In view, then, of the importance of this trade, both to the company and the city of Baltimore, the board will find it necessary, at an early day, to deliberate upon the policy proper to be pursued, in order to meet the increasing demands which are likely to arise. The subject will involve considerations looking beyond the mere expenditure for additional cars and machinery. The vast trade of the west will tax, it is believed, to the fullest extent, the capacity of a single track, after its opening on the first of January. Extensive sidings will be indispensable; and it may be, with the announcement of the settled policy of this company, to give encouragement to the coal trade, a twelve month will scarcely elapse, before provision will have to be made for a second track from Baltimore to the mineral region.

The subject is one of sufficient gravity to invite the most liberal interchange with the stockholders, in reference to the course proper to be pursued. With the board there can be no hesitation. The amount of coal which might be transported over this road during the coming fiscal year, if the company were in a situation to invite trade to the fullest extent, would produce a gross revenue of more than $1,000,000—an item which may well illustrate the value and resources of this great work, and its probable results at some not distant day.

In any arrangement, however, which may be made, in reference to an increase of accommodation, the board must keep a steady eye to the *actual wants* of the trade, and guard the company against the possibility of re-action, or a curtailment of the demand, which could in any manner interfere with the full employment of such power as may be provided, and the regularity of their operations, on which the maintenance of the existing low rates of toll must always so mainly depend.

Among the applications now before the company is one from the Cumberland Coal and Iron company, for 1,000 tons per day, to be increased hereafter as the convenience of the company may justify. The Frostburg company have applied for a daily transit of 500 tons. The Bordon company are now transporting 200 tons, and all other companies say 250 tons.

This trade, it is perceived, is wholly independent of the vast coal field, which is about to be penetrated by the George's Creek railroad, now in rapid progress of construction—and which will connect with this road in the vicinity of Piedmont. These operations, so far as the company are enabled to judge, will be placed upon a sound and permanent footing, and will give the most active employment to the machinery and power of this road, at periods of the year when other roads depending upon a mixed traffic, are more or less inactive.

The results of their past operations fully encourage the maintenance of the low rates which have been adopted, and the board feels no desire, at present, to disturb their existing tariff. This road is not dependent upon its coal trade alone—with the power to control a traffic in this single article—almost as extensive as that of the Reading road—they have other sources of revenue upon which to rely for their profits; and in the multiplicity and vastness of their resources, coupled with the mere nominal rates at which fuel may be procured, at almost every station upon their line, they do not hesitate to express the conviction, that the expenses of transportation will always compare favorably with any other road in this country.

Connected with this subject of the coal trade, the stockholders were apprised in the last annual report, of a plan then in contemplation, to organize a line of boats to ply between this city and New York, at regular stated intervals. The board are happy to announce, that this plan is about to be carried into effect by the Cumberland Coal and Iron company; and may be expected to add greatly to the facilities of the Baltimore market. in its connection with the coal trade, as well as the westward transportation which will be carried on by means of this line.

The board feel encouraged at the reasonable prospect of securing to the state of Maryland and the city of Baltimore, the benefits of this important trade.—They have found in it their most certain and reliable resource, at times when they have felt most severely the rivalry of works, whose advanced progress had given them a temporary advantage. But apart from the direct interest which they have felt in the possession of so important a trade, they could not, without a struggle, at any time, witness its establishment beyond the limits of the state of Maryland, to which it belongs, or her great commercial centre, whose wealth and prosperity and the activity of whose industrial classes, it must so largely contribute to advance.*

III.—OF THE WASHINGTON BRANCH.

The operations of the Washington Branch have been conducted with their usual results.

The receipts from passengers, mails and merchandise, have been $348,622 76, showing the handsome increase of $39,087 01, over last year. The expenses have been $132,385 31, a decrease of $14,295 85 in this item.

The net revenue is thus shown to be $216,237 45, out of which the board have declared a dividend of four per cent. for the half year ending 30th Sept., payable on and after the 15th inst. This added to the dividend in April last, will make 8 per cent. for the fiscal year.

The bonus of the State during the half year amounted to $31,842 32, and for the whole year, to the large sum of $59,826 69—an interest at 6 per cent. upon a capital of $1,000,000. Her receipts from this road, during the fiscal year, have been more than 18½ per cent. upon her investment of $550,000!!

The new station at Washington is now entirely completed—and compares favorably with any in the Union, for comfort and convenience of arrangement. The company have been subjected to much additional expense, owing to the roughness of the location, and the necessity for excavation and grading, as well as a heavy tax for improving the streets and avenues communicating with the city.

The passenger trains have been moving with increased speed, and an uncommon exemption from accident, considering the number of miles run.—The steady increase of Southern travel, in the face of the temptation held out by other routes, coupled with its improving local business, show the value and importance of this branch; and its activity will

* Since that part of the annual report relating to the coal trade was prepared, a contract has been agreed upon with the Cumberland Coal and Iron company, by which that company stipulate to furnish capital for an increase of their present coal power to 100 cars per day, say 300,000 tons per annum, and to establish a line of propellers and barges between this city and New York, at a cost not to fall below $100,000, but which may be increased to $300,000, or more.

be greatly augmented on the completion of the main stem to the Ohio river.

Indeed it is now evident that the Washington Branch must always rank among the best paying roads in this country, notwithstanding the heavy bonus to which it is subjected by the State, and which must operate as a serious obstacle to the accommodation and fostering of the travel, by the adoption of low rates of fare.

To be continued.

American Navigation.

We copy from the Boston Post the following summary of American Navigation at three important periods.

In 1789, at the end of the period of the confederation, American Navigation was in a very depressed state. Its amount of tonnage was as follows:

Engaged in foreign trade	127,329 tons.
" Coasting trade	68,607 "
" Fisheries	9,062 "

After the adoption of the Constitution, one of the earliest measures of the new government was the imposition of discriminating duties on foreign bottoms and goods imported in foreign vessels. This policy, and the great conflicts between the maritime powers of Europe, stimulated greatly the navigation of the United States, and threw a large share of the carrying trade of the world into the hands of the Americans. In twenty years our tonnage had increased astonishingly. In 1807, it was as follows:

Engaged in foreign trade	1,116,241
" Coasting trade	285,090
" Fisheries	95,744
Total	1,477,075

At this period began the aggressions of the Berlin and Milan decrees, and the British orders in Council leading to the embargo and non intercourse acts and finally to the War of 1812.

A few contrasts will indicate our immense maritime progress. We set up now more tonnage yearly than the total amount of American tonnage in 1789, for then the total tonnage afloat was 200,000, and last year the total tonnage built was 298,203.

But another contrast will show this progress still more marked—the contrast of the American marine with that of Great Britain. In its seventy years existence as a peaceful nation, the United States has run up its tonnage to within 300,000 tons of the most powerful of modern nations, whose flag has waved a thousand years; for the tonnage of the British empire in Dec., 1851, was only 4,332,085 tons; while it is a fact that the United States, for several years past, is going ahead of Great Britain in the quantity of tonnage annually set up. Here is a table showing the tonnage of the new vessels built the three last years in the two countries:—

Year.	Great Britain. Tonnage.	United States Tonnage.
1849	245,130	256,577
1850	262,483	272,218
1851	275,139	298,203

To show the contrast between the tonnage of 1789, which we have quoted, and that of to-day, take the statistics of the last five years; giving the total tonnage and putting together all the tonnage engaged in the fisheries.

Years.	Total tonnage.	Fisheries.	Coasting Trade.
1847	2,839,045	295,486	1,452,623
1848	3,154,041	318,388	1,620,988
1849	3,334,015	297,009	1,730,410
1850	3,585,454	289,773	1,755,796
1851	3,772,439	319,658	1,854,317

Such is the splendid commercial marine of a country of which it may be said, as it is expressed in Burke's eulogy on its infancy, that it is but yet in the gristle, and has not attained the manhood of its power.

Mississippi.

New Orleans and Jackson Railroad.—The work of grading, clearing, embanking and otherwise preparing eight miles of this road for the reception of the cross timbers and iron rails, was commenced yesterday, under the superintendence of the contractors, Messrs. Coleman and O'Shaughnessy, at a point three miles above the city, on the continuation of the Metairie Ridge. There are some hundred laborers at work, we learn, and the contractors have erected buildings large enough to accommodate 1,500 men.

On the 11th of this month twenty-five more miles of the road will be ready for proposals to clear and grade.

The commencement of this great work, so immensely important to the southwest and to New Orleans, will be hailed by all our readers as the opening of a new era of prosperity and life for this vast section of country. It has taken many years of arduous labor to bring about even this slight opening step, and though no ceremonials of rejoicing accompanied it, a thrill of gratification will touch the heart of every true friend of NewOrleans when he learns that yesterday the first spadefull of earth was turned up on the New Orleans, Jackson and Great Northern railroad.—*N. O. Picayune, 5th inst.*

Philadelphia and the Southwest.

Aid to the Marietta Road.—We stated frequently, (says the Philadelphia Commercial Register), the last few months, the necessity of Philadelphia embarking in the railroad schemes of the South-west, if she desired the benefits of the greater portion of the trade of that region, and keep a rival city from getting control of certain roads in Ohio; and we know it to be a fact, that New York is now moving boldly in view of that purpose, so that we are in danger from her, as well as Baltimore. We are pleased to announce as an offset to this, that the board of directors of the Pennsylvania railroad, by resolution, have determined to send their chief engineer, E. Miller, Esq., to examine the route of the Cincinnati and Marietta railroad, which will, if aided from this quarter, be extended up the Ohio to Wheeling. It is understood to be the intention of the Pennsylvania railroad Co., to extend pecuniary aid by a liberal subscription to such lines of railroad running south-west from Wheeling as may be best calculated to promote the facilities of railroad communication between this city and its south-west market in Ohio valley and points beyond.

Silesian Iron.

The most extensive display of iron, in all the stages of its manufacture, is sent from the numerous forges or *Hutten* of Count Renard, who alone occupies a large portion of the basement of the building. The quality of the metal produced at his works has secured it a local reputation, though other establishments, as the Laura Works, at Beuthen, produce iron in bar and the larger forms in greater quantity. The Renard Works are unrivalled in the finer sorts, and of hoop iron, nail-rods, wire, cast iron for cooking vessels, steel in many varieties, especially forged steel of the finest quality, there is a most abundant supply. Sheet iron is exhibited from these works of such a degree of tenuity that the leaves can be used for paper. A bookbinder of Breslau has made an album of nothing else, the pages of which turn as flexibly as the finest fabric of linen rags. As yet no extensive application for this form of the metal has been found, but the manager says the material must precede the use for it; perhaps books may hereafter be printed for the tropics on these metallic leaves, and defy the destructive power of ants of any color or strength of forceps. We have only to invent a white ink, and the thing is done. Of the finest sort the machinery rolls 7040 square feet of what may be called leaf iron from a cwt. of metal. In point of price, however, the Silesian iron cannot compete with English; much is still smelted with wood, and the coal and iron districts lie at great distances from each, so that much capital is consumed by the conveyance of fuel to the works.—*London Mechanic's Magazine.*

The Great New Orleans and Nashville R. R.

On yesterday Messrs. Hazlehurst and Dayes of the corps of engineers, on the part of the road from Florence to Aberdeen, arrived in our city, accompanied by our President, Chancellor S. Cocke, and Mr. G. W. Hardy. They have made a reconnoisance of the entire way from Florence to Aberdeen, a distance of about ninety miles, and in which are included the hills of the Bear creeks, and the dividing country between the waters of the Tennessee and Tombigby rivers, where were known to exist the only embarrassing difficulties, to the success of the road between New Orleans and Nashville.—They report the ascertainment of a route through that region as entirely practicable for a first class railroad, and at a less grade than 50 feet to the mile, and which can be made at a reasonable cost. They report sixty miles of this part of the road to go through a beautiful level country; and that but a very small portion of the residue involves the necessity for summit cuts to but a very limited extent. The route designated is in four miles of a straight line, and taken as a whole, the road from Florence to Aberdeen can be readily made, so as to be a cheap road.

The route from New Orleans to Jackson has been surveyed, and a portion of it is now under contract. The different corps of survey, from Jackson to Aberdeen, from Nashville to Florence, and from Florence to Aberdeen, are now in the field; and the survey of the entire route, from New Orleans to Nashville, will be completed before the first of December next; the prediction of Mr. President Robb that he would be able to put the entire road from New Orleans to Nashville, under contract of construction by the first of January next, will be more than realized.

We will remind our readers, that this is a part of the great railroad way, from the Northern cities, by the Lakes, to the Gulf of Mexico at Mobile and New Orleans.

We regard it as the most important establishment of the age, and we confidently look to its entire completion within the next three years.

We congratulate ourselves and the country on the prospects before us.—*Aberdeen Independent.*

Alabama and Tennessee River Railroad.

The Selma Republican announces the speedy completion of this enterprise. In a short time, every foot will be placed under contract. Two years have not yet elapsed, and there are now nearly ninety miles of the grading completed and the cars running some thirty-odd miles and by January next they will be in sight of Montevallo, fifty-five and a half miles. At that point the road will be doing a very handsome business. The success of other roads now throughout the South and West, satisfy us upon this point, and we congratulate the stockholders upon the near approach of the rewards of their enterprise. Never before, in the South, was there so good a country subscription as in the case of this road.

Pennsylvania.

Philadelphia, Easton and Delaware Water Gap Railroad.—A meeting was held on the 9th inst., at Sansom street Hall, Philadelphia, in favor of constructing a railroad from that city to the Delaware Water Gap. We learn from the Commercial Register that the *elite* of the mercantile and business men of Philadelphia participated in the meeting. Remarks were made on the importance and necessity of the construction of this railroad by John M. Reed, Esq., of Philadelphia; Hon. J. Madison Porter, of Easton, and John M. Kennedy, Esq.

Resolutions were unanimously adopted, declaring it to be the duty of Philadelphia, in view of the vast trade of the north-eastern counties, and the efforts of a powerful rival, to at once take measures to construct at an early day the Easton and Water Gap railroad.

A committee was appointed to procure subscriptions in that city for building the proposed road.

Baltimore and Ohio Railroad West.

The unremitting vigor characteristic of all the operations of the Baltimore and Ohio railroad company has so far advanced the work of laying their route west of Fairmont, Va., that by the 20th of November, as we are informed, *only fifteen miles* of road will be to finish. That fifteen miles will be the distance immediately east of the mouth of Grave Creek, lying between it and Loudenslager's Mill. Thus on the 20th proximo, the time between Baltimore and Wheeling will be reduced to twenty-three hours, and the price of travel correspondingly lowered.

We learn that on Pettibone's tunnel, on the line between Fairmont and Wheeling, the before unheard of engineering exploit achieved over Kingwood's tunnel, in Preston county, has been surpassed, and that locomotive engines are daily employed in surmounting the ridge through which Pettibone's tunnel passes at a rise of *six hundred feet to the mile*, or one foot in about every eight feet ten inches! Undoubtedly such a feat has been neither performed nor attempted elsewhere in the world.

On the Parkersburg branch from Three Forks, the surveys have all been made, and at some spots the contractors are already at work.

Saut Ste Marie Canal.

The Lake Superior Journal states that Captain Canfield, of the U. S. Topographical engineers, and Judge William A. Burt, arrived by the London on Monday last, and are now engaged in the location and survey of the ship canal around the Ste. Marie Falls. Gov. McClelland has acted with promptness in this matter. Having been over the ground recently, as well as through the mineral region, no one better understands the importance of carrying forward this great work with the utmost energy; and we have no doubt that, with this survey and all the estimates that have been made and those that are now in preparation, he will recommend such a plan for its construction as will most speedily build the canal.

This survey is made under the authority given to the Governor of this state by the Act recently passed by congress, making an appropriation of 750,000 acres of land for the construction of the canal. By this wise provision of the law the exact location, survey and estimate can be made and presented to the next legislature.—This is all that can be done until the legislature meets in January next, when the whole matter in the wisdom of our legislators, will, we trust, be disposed of. It will then be seen whether the canal is to be completed in two or ten years, or not at all by this land appropriation.

Canada.

Northern Railroad.—The directors of this road recently visited the work attended by their engineer. An inspection was made of the Garrison culvert, the Dundas bridge, the Hogs Back culvert, the depot grounds at the Devonport road, and other points of interest along the line, where the party alighted to examine the works and consult upon future operations. Although the track had been severely tried by the storm of the previous evening, and although this was not intended as a trial trip of speed, part of the line was traversed at a rate exceeding 35 miles per hour, and the whole distance (12 miles) was performed in creditable time, both going and returning. The directors on leaving, expressed to the chief engineer their approbation of the general appearance of the road, and issued instructions that every possible effort should be made to open a portion of it for public use at the earliest possible moment. Messrs. Fleming and Gibbard are now engaged in the survey of a new line. The arrival of Mr. Cumberland, the chief engineer, is daily looked for.

A Great Achievement.

There are a few points of especial interest in all great enterprises. In railroad construction, one was the movement upon the track of the first locomotive. Another, was the connection of our great depots of trade and commerce on the Atlantic coast. A third, was the extension of railroads from tide water to the great lakes. A fourth, and perhaps the crowning achievement, will be the connection, by railroad, of the systems of the Atlantic and of the western States, by the opening of the Lake Shore line, which is to be completed in a few weeks more. The crossing of the Alleghenies has required an effort too great, as yet, for our strength. Both divisions of the country have been busily at work expounding and perfecting their own systems, without being able to effect their union into *one*. Ohio has already become, in the extent and importance of her works, by far in advance of any State in the Union, with the exception of New York; and it is now reserved to these two great States first to unite in their respective lines the great divisions of the country.

As soon as the Lake Shore road shall be completed, the area of our railroads will be incredibly enlarged. In the east it is now bounded by the lake and the Allegheny range of mountains. But upon the completion of the Lake Shore road, a traveller may book himself in New York, not only for every important eastern city, but for Cleveland, Sandusky, Toledo, Columbus, Cincinnati, Indianapolis, Louisville, Lafayette, Terre Haute and Chicago, in the west. All these points will be accessible from New York by railroad by the first of December next. In a year more the Mississippi river, which but a short time since was regarded as the *ultima thule* of railroad enterprise, will be reached, and its right bank become the theatre of equally active exertions that we now witness on the left.

We can by no means appreciate the influence that the above connections will exert upon the commerce and travel of the country, and upon the business and revenues of our railroads. Up to the present time our roads have been comparatively *unconnected* links, each dependent for its revenues upon its local traffic. For the future, however, they will all belong to one harmonious system, and all will contribute to the business and revenues of each. We have, therefore, a right to anticipate a very large increase in the receipts upon all our works, which will add in an equal ratio to the value of railroad property, and strengthen the confidence felt in such investments.

The commerce and general interests of the country will be benefitted in an equal degree. The movement of property, which has heretofore been confined to a few channels, from *necessity* not *convenience*, will be liberated from this necessity, and move in the exact direction of the *demand*. Railroads are not only to become the channels of the existing commerce of the country, but they will develop a ten-fold greater one. We have now reached a point in their history, in which the extent of their influence is beginning to be clearly seen and appreciated, in which the *reality* is to far exceed the most sanguine anticipations, and which is fully to redeem all the pledges given by their friends of the triumphal success of these enterprises. At home they are the great agent of our prosperity. They are equally the means by which we are attracting universal attention, and which are to elevate us to the position which we shall soon hold as the most potent people on the earth.

We repeat, therefore, that the union of the railroads of the two great divisions of the country is an event of the highest importance, both in the history of railroads and of this country; and we hope to see the opening of the Lake Shore railroad, which is to accomplish this union, celebrated in a manner worthy the occasion.

Illinois.

Alton and Sangamon Railroad.—From the officers of the Alton and Sangamon railroad, we understand that the travel and traffic which already pass over it, far exceed their most sanguine expectations. The number of passengers has thus far averaged one hundred and ten per day, and the up freight trains have been as heavy as the locomotives could draw. The receipts for the present month are estimated to be over fourteen thousand dollars.

A saloon car, for the convenience of ladies and children, is now in process of erection at the shops of the company, and will be ready in the course of a few days. Also, a *lounging* and smoking car, for gentlemen.

A large number of cattle cars have been received, and will be put together as speedily as possible.—The company are making arrangements for extensive hog and cattle pens, just beyond the limits of the city, and will shortly have ample accommodations for all kinds of live stock.

We are informed the passenger locomotive E. Keating will be up and ready for the road by the first of next week.

The steamer Cornelia will commence her regular trips, in connection with the cars, on Monday.

The prospects of the company are of the most flattering character, and under the energetic and efficient direction of Mr. Keating, Superintendent, the road cannot fail to be popular and well sustained.—*Alton Telegraph.*

Memphis and Charleston Railroad.

George P. Beirne, Esq., resigned the presidency of this road at the meeting held in Memphis on the 13th September, 1852. His place was filled by the election of A. E. Mills, Esq. The following resolution was passed at the same time by the board and directed to be published:

That, should the people of Mississippi desire to construct a railway through the counties of Marshall, Tippah and Tishamingo, under the authority of the legislature of Mississippi, this board will furnish to them every facility for uniting with the Memphis and Charleston railroad at any point, and will interpose no objection to a direct and independent line from the north boundary of the state of Mississippi to Memphis.

Gold and Silver.

The scarcity of silver since gold has been so abundant, is seen in the following statement, showing the comparative amounts of gold and silver bullion in the bank of England at several periods:

	Gold.	Silver.
Sept. 4, 1847	£7,373,815	1,023,035
" 2, 1848	12,167,567	705,938
" 8, 1849	13,641,173	277 077
" 2, 1850	15,883,857	219,958
" 5, 1851	13,674,190	32,375
" 4, 1852	21,334,921	19,154

The amount in general circulation in England, has been much reduced recently by the emigrants to Australia, who have taken out silver in preference to gold. Silver in the colonies is received as a legal tender for all payments, while in England it is only a legal tender for payments of 40s. and under. To lessen this out-going of silver coin to Australia, it is proposed to make the laws in the colonies conform to the parent country. The British government were about to order a large issue of new silver coin. The price of silver, and the alloyed rate of the coinage, pays the government well

for supplying the public with a sufficient amount for circulation. At the last accounts, the market pricefor dollars was 4s. 10¼d. and for silver 6s. 0¼d. while the rate at which silver is coined at the mint into English silver is 5s. 2d.

American Railroad Journal.

Saturday, October 23, 1852.

Ohio and Indiana Railroad.

This road is fast beginning to assume a prominent position among our leading wesrern projects. Both as a connecting link between other important lines and systems of roads, and as a work promising a lucrative local traffic, there are few of the more recent western projects that can lay more claim to the attention and confidence of capitalists and the public. Commencing at the junction of the Ohio and Pennsylvania, and Cleveland and Columbus roads, the former, the extension westward of the great Philadelphia, and the latter of the New York system of railroads, it is the legitimate extension of these lines still further west, to Fort Wayne and Chicago. For Central Ohio, it must be the most convenient route to the great city of the lakes. This fact sufficiently establishes the importance of its through business. Chicago is to be the grand converging point of the railroads of the north west, and bids fair to become the most important interior city of the United States. It must always maintain an extensive trade with, and become a leading point of attraction for, all the western States.

As far as its local traffic is concerned, the road will have no immediate rival, at least for such traffic. It must form the outlet for a very extensive and remarkably fertile section of country. It is undoubtedly the cheapest line of equal extent ever undertaken in the west, and is probably not exceeded by any in the favorable character of its grades and curves. It forms very nearly a level and straight line. For its whole distance it occupies the table lands, and in no instances descends into valleys depressed much below the general surface of the country. The route is most favorable for a low cost road, and the project merits, though we have spoken in high terms of it, all said in its favor.

The entire length of road will be about 131 miles. The total cost is estimated at $1,640,000, or about $12,520 per mile. These estimates are based upon contracts for construction, entered into with a wealthy and most respectable company of western gentlemen, who are able to bring a large amount of means to the work. The fact, that those best acquainted with the character of the project are willing to invest their means in it, furnishes the right kind of evidence in its favor. Fort Wayne, the western terminus of the road, is the leading town of Northeastern Indiana, as well as one of the most considerable in the State. It is already the centre of a large trade, and is soon to be the junction of important lines of railroad. The most important of these will be the continuation of the Ohio and Indiana line to Chicago, and the great Wabash Valley line. These will cross each other at right angles at this point. The only avenue by which it has heretofore been reached, has been by the Wabash canal, which is closed for at least one third of the year. The contruction of the above lines of road will give entire freedom of movement in all directions, and at all seasons of the year, and will consequently add vastly to the growth and importance of Fort Wayne and the surrounding country.

Of the estimated cost of the road, $830,000 is already secured by stock subscriptions, and the balance is to be provided by the issue of the company's bonds. At the above cost, the net earnings of the road will have to be only $876 net, to pay seven per cent upon the above amount, and only about $450 to pay the accruing interest on the issue of bonds. When we consider that the net earnings of western roads average from $2,000 to $3,000 per mile per annum, and that the earnings of the above road must at least come up to the minimum sum, we cannot doubt that both the stock and bonds in the above road must be sufficiently productive to satisfy the cupidity of the most avaricious.

Western projects are, very properly, engrossing more and more of public attention. People now begin to see that the *stocks* in these roads are the best securities offering. Those who purchased in the outset, with the greatest distrust, and at a low figure, the bonds of the Michigan Southern and Cleveland and Columbus roads, are now eagerly inquiring for their *stocks*, at from 125 to 136. What is true of the above will be true of other western projects. The stocks named sell high, not because they are so much better than similar projects, only because they are better known; and those who make judicious selections of stocks and bonds, in good western projects, at the present low figures, will in a very short time find themselves in the fortunate condition of the *original* and *present* holders of the Cleveland and Columbus, and Michigan, railroads.

Alabama and Tennessee Railroad.

We learn that this road is making most satisfactory progress, and will soon be completed to *Montevallo*, a distance of nearly sixty miles. The receipts of the portion already opened are beyond all anticipation, and give every indication that when the above point is reached, there will be more than sufficient to pay the interest on the entire mortgage debt, upon the whole line of 160 miles. This division traverses a remarkably fertile, productive, and well settled portion of the South, for which the above road furnishes the only suitable outlet.

No new project has come into this market, making a better show of means, than the Alabama and Tennessee road. Though its cost is up to the average of new southern and western roads, it only seeks to borrow at the rate of $5000 per mile for the whole line. The necessary balance is furnished principally by the rich planters upon the route. In no portion of the South is this class more independent and able to carry forward railroad enterprises, than in Alabama, and none is more thoroughly aroused to a conviction of their importance.

The value of the security offered by this company will be readily inferred from the statement that to pay the interest will only require net earnings to the amount of $350 per mile! There cannot be a doubt that they will more than *quintuple* this sum. The division of the road already completed, or rather for which all the materials are provided, will cost more than the whole mortgage debt, and, will alone, should not another mile be constructed, yield a sum more than sufficient to meet the accruing interest. The whole line is, however, under contract, and some portions of the second division are advanced; and the work is being urged forward with increased energy and vigor under the encouragement which the recent very favorable negotiation of the company's bonds gave, of complete and early success.

We see by our southern exchanges, that the people upon the various routes which are proposed as the extension of the above line to the East Tennessee and Georgia railroad, are actively engaged in making surveys, raising the necessary means, and in organizing for active operations. Two or three routes are proposed, and as all traverse very fertile and well settled sections, we think it probable that two of them at least will be built. At any rate there seems to be no doubt that, a road to connect the Alabama and Tennessee road with the Great Central line, running through eastern Tennessee and Western Virginia, will be completed by the time that the former will be opened, so as to form simultaneously teh lower portion of the great line, from which a most lucrative *through* business is anticipated for all the connecting links, and especially the Alabama portion, which forms the southern trunk of the whole.

Indiana Central Railroad.

This road has recently been consoiidated with the Dayton and Western, to the mutual advantage, we believe, of both parties. The line of the two companies makes a little over 100 miles, just about the proper length for economical working.

The Dayton and Western road is just completed. The work on the Central is progressing most satisfactorily, and will be completed early next season. Sufficient means are prepared for the construction, and the rails and equipment are already provided, and nothing is wanting but *time* to render this road a fixed fact.

This road from the first has occupied a conspicuous place in popular estimation. The public were familiar with the route of this road, which is identical with the great natinoal road line, long before the railroad was suggested. When this was proposed, it required no effort to convince the public that a proper line for a road had been selected.—The best settled part of Indiana is upon the national road line, from the facilities that this greater work afforded for travel and transportation, over any similar work in the West. To the above causes is to be attributed the high estimation in which the bonds of this company have always been held in this market, and which are now selling at a trifle below par.

The affairs of the company are in good hands, and we have every reason to believe that every precaution will be taken to secure to the stock and bondholders prudent and economical investment of their money.

Long Island.

Railroad from Greenpoint to Flushing.—We understand there is every probability that this project, which is to supply railroad accommodations to an important portion of Long Island, will soon be carried out. It commences at Greenpoint, nearly opposite 15th street in this city, and extends to Flushing, a distance of about seven miles or nine from the lower part of New York. Its estimated cost, including right of way, is only about $220,000, a very small sum when the locality is considered. Flushing is well known to be one of the most beautiful and attractive points in the Island, and there can be no doubt that the proposed road will immediately secure to it a large population from our already overflowing city. Upon the completion of the above road the passage can be made from Flushing to Fulton Ferry in about forty minutes; at the present time it requires from an hour to an hour and a half to make the trip by water, and this route cannot always be relied upon. For six or

eight weeks each year, Flushing bay is closed by ice. The project is not only a very feasible, but promises to be a very profitable one, in addition to proving a great convenience to the people of this city.

Virginia.

Central Railroad.—We learn from Virginia, that the Blue Ridge Tunnel upon the Central road is progressing favorably. The workmen have penetrated the mountain about 1100 feet from the western base, and about 800 feet from the eastern side—making 1900 feet. They are arching at each end with brick and stone. It is the intention of the company, however, not to arch the whole tunnel—only about 520 feet at each end will be arched.

The grading on the road from Waynesboro' to Staunton, 12 miles, is nearly completed—$1,000 worth of work will be sufficient to prepare everything for the laying of the rail. In two months time all can be ready. The cost of these twelve miles, railing and all, is about $20,000 per mile. The progress on the 20 miles under contract west of Staunton, is almost unparalleled in Virginia road making. The grading is already about one-third done, and it is believed that if the stockholders determine to put locomotives upon the road west of the Blue Ridge before the completion of the tunnel, that the steam engine may be heard within fifteen months from this time, at a point 20 miles west of Staunton. The cost of the sections under contract west of Staunton, including, as they do, by far the most costly portions of the road to Covington, will be about $21,000 per mile.

Missouri.

North Missouri Railroad.—A convention of the friends of this projected road is to be held at St. Charles, Missouri, on the 10th November next.—The call for the convention urges prompt action, and states that: "the proposed road will extend from the city of St. Louis to the rich, extensive and populous valley of the Desmoines in Iowa. It will pass through one of the most thickly settled, rich and fertile portions of our State—over a country every way favorable for its construction. And there can be no doubt that the stock will be a profitable investment to men of capital, and it is confidently believed that it will yield a better profit than any other road in the State."

Mississippi Valley Railroad—A meeting was held at St. Louis on the 9th inst., at which Hon. L. M. Kennett, the Mayor of the city presided, and Henry Cobb and A. S. Mitchel acted as secretaries. The preamble and resolutions speak of the large and increasing population west of the Mississippi, and the mineral and agricultural wealth of the States of the valley as requiring new channels to develop the resources of that vast extent of country; and that the best way of doing so is by building a railroad from the Falls of St. Anthony to the Gulf of Mexico.

The people of the States interested in the road are invited to meet at St. Louis in convention on the 15th November next.

Ohio.

Indianapolis and Bellefontaine Railroad.—This work is now finished as far as Winchester, Randolph county, Indiana. 74 miles from Indianapolis and leaving only 9¼ miles to lay to Union which will be completed by the last of November next.—The company have recently contracted tor ample rolling stock of the first clase, with all the modern improvements, to do the anticipated heavy business of the road, when it shall be opened as a link in the through line East, from Indianapolis. to Sandusky, Cleveland, Pittsburgh, Wheeling, Columbus, and Cincinnati.

Stock and Money Market.

There is an improved feeling both in the stock and money market over last week. The temporary pressure which we then noted has entirely subsided, and loans both on business paper and on railroad bonds can be effected at as favorable rates as at any previous period during the season. Many of the fancy stocks have advanced materially, and the market is buoyant.

The most important public sale of securities within the week have been $200,000 of New York and New Haven 7 per cent. road bonds, sold by Messrs. Ketchum, Rogers & Bement. The amo't bid was $712,000. The loan was apportioned as follows:

C. H. Marshall	$5,000 *a* 105	
P. Speyer & Co	6,000 *a* 103 5-100	
P. Speyer & Co	7,000 *a* 102 51-100	
P. Speyer & Co	7,000 *a* 102 7-100.	
Winslow, Lanier & Co.	10,000 *a* 102½	
D. S. Kennedy	50,000 *a* 104⅝	Includ'g int.
D. S. Kennedy	50,000 *a* 104½	do.
D. S. Kennedy	15,000 *a* 103⅞	do.
D. S. Kennedy	25,000 *a* 103½	do.
A. Seton	25,000 *a* 103⅞	

There is an active demand for good railroad securities both in the home and foreign market, and we see no reason to doubt it will remain so for some months to come. The constantly increasing receipts of our roads are daily strengthening the market for this species of property.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 23, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	109
U. S. 6's, 1862	116½
U. S. 6's, 1862—coupon	115½
U. S. 6's, 1867	118½
U. S. 6's, 1868	119½
U. S. 6's, 1868—coupon	119½
Indiana 5's	97½
Indiana 2½	53½
" Canal loan 6's	95½
" Canal preferred 5's	42
Alabama 5's	97
Illinois 6's, 1847	82½
Illinois 6's—interest	54
Kentucky 6's, 1871	109
Massachusetts sterling 5's	——
Massachusetts 5's, 1859	——
Maine 6's, 1855	——
Maryland 6's	107½
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	115
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	123
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	110
New York 5's, 1854-'55	107
New York 5's, 1858-'60-'62	102½
New York 5's, 1866	107
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	100½
New York 7's, 1857	110
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	104
New York 5's, 1890	106½
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	96½
Hudson River 1st mort., 7's, 1869	106½
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	89½
Reading mortgage, 6's, 1860	94½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	104½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Oct. 14.	Oct. 21.
Albany and Schenectady	106	105
Boston and Maine	106½	107
Boston and Lowell	—	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	89	98½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	97½	98
Erie	84½	85½
Fall River	—	—
Fitchburgh	103½	104
Georgia	—	—
Georgia Central	—	—
Harlem	71½	70½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	73½	74
Little Miami	—	—
Long Island	27½	25½
Mad River	—	99
Madison and Indianapolis	107	116½
Michigan Central	110½	111
Michigan Southern	123½	126½
New York and New Haven	113	113
New Jersey	134	128
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	50½	50
Ogdensburgh	26½	25½
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	34½	35
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	97½
Rochester and Syracuse	121	121½
Stonington	58	58
South Carolina	—	122½
Syracuse and Utica	130	130
Taunton Branch	115	115
Utica and Schenectady	139	138
Vermont Central	17½	17½
Vermont and Massachusetts	22	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

Railroads in Southern Ohio

There appears to be a good degree of probability that two lines of railroad will be constructed, running east to west, through Southern Ohio; each representing corresponding lines in progress west from the cities of Philadelphia and Baltimore. As the two roads will be parallel lines for a considerable distance, and will approach each other at a number of points, we have formerly regretted a difference of opinion between the friends of the two projects, which prevented their union into *one* line. Upon a further consideration, we are convinced that the construction of *two* lines is not only inevitable, but that it is better on the whole, that there should be two, instead of one. There is a strong rivalry between the city of Baltimore and Philadelphia in their efforts to secure the trade of the interior, and there is no reason to believe that they could act harmoniously in the joint management of the same project; nor even that one road would have sufficient capacity to accommodate the business of both trunk lines. The two Ohio lines, therefore, are representatives of entirely distinct interests, as far as their through traffic is concerned. Although parallel lines, they are sufficiently removed from each other, as to leave to each, a large *local* trade, quite sufficient, in our opinion, to afford a reasonable support to both. Such being the fact, we believe it to be much the best course to agree to *differ* in the outset, and to construct two distinct lines, than to be driven to this course, after the feelings of both parties shall have become exasperated from an unsuccessful effort, to unite in one common interest. Both interests, therefore, are pursuing the wisest policy on the whole, and both the Hillsboro' and Chillicothe lines will be built. The Baltimore interests have given the most positive assurances of assistance to the former, and we learn that the Philadelphians have dispatched the Chief Engineer of their great line, for the purpose of making a personal examination into the Chillicothe projects, as a basis of some definite action on their part. To bring this last line to Wheeling, for the purpose of forming a junction with their road, is made the condition of a subscription of $750,000 on their part, to the stock of the former. That Philadelphia will extend this aid, we have no doubt. She will be forced into this step, whether willingly or not, by the rival works which New York is constructing on the one hand, and Baltimore on the other. But instead of holding back, the required aid will be *proffered* and not grudgingly yielded. A city of the magnitude of Philadelphia, cannot expect to maintain her position, without adopting, in self defence, the same course that her rivals are pursuing to wrest her trade from her. So potent are the influences that modern science has brought to bear in changing the routes of our established commerce and in developing new, that the city which neglects to avail herself of them, must retrograde, instead of advancing. The sacrifices that every community is compelled to make, to sustain its position is one of the penalties for living in this age of improvement. Our friends in the Chillicothe projects need be under no apprehension of any refusal to assist them on the part of Philadelphia.

The portion of this last named road for which aid is sought in Philadelphia, is that from Marietta to Wheeling, a distance of about 75 miles.—This is an important line of road, in connecting as it will, the road of the two extreme portions of the State. The money expended upon this cannot fail to yield a good return, as a matter of investment, and Philadelphia capital cannot be better employed for its owners even, than in its construction. In every point of view the inducement that the Philadelphians have to construct this link does not bear a doubt as to the result.

Again, it is necessary that Philadelphia should begin to manifest some interest in Western improvements, if for nothing more than to retain the good will, and consequently the trade, of her old patrons and customers. The great want in the West is felt to be railroads. They are what the whole western population are struggling for. New York is as yet the only city that has fully responded to the great want. She has become the patron of the railroad interest throughout the country, is furnishing, with a most liberal hand, the means for their construction. The result is that she is introducing herself to the trade, and securing the good of our people in whatever part of the United States. She has become the centre of negotiation for all the railroads in progress in the country. As our railroad stocks and bonds are now becoming favorite securities with European capitalists, vast sums are being weekly, and almost daily received from across the water, for investment in our railroads. All this money comes to New York, and all the negotiations are carried on through New York houses. All dividends, and the interest on the securities, are paid *here*. The result is that these numerous transactions, collect, and keep in deposit, in our banks, vast sums of money, which to a certain extent, become the basis of Bank accommodations; and hence the uniform abundance of money in this city, while it is scarce in all others. All these advantages, and the rapid progress that the trade of New York is making in every part of the country, is directly attributable to the superior enterprize of our people in the West, ideatifyIng themselves with the progress of our railroad enterprizes. The railroad capital of the United States which now represents a sum of over $400,000,000, is fast centering in New York, and unless the city of Philadelphia checks this tendency to centralization, by pursuing a similar policy, she will be completely overshadowed by the vast wealth of the former. Let her think of these things before it shall be too late to avert the threatened dangers.

Ohio Central Railroad.

This road is now nearly completed from Columbus to Zanesville, a distance of about sixty miles. That portion from Zanesville to Newark has been in operation some time past and has been doing a very profitable business. At Newark it forms a junction with the Newark and Sandusky, and thro' this with the Cleveland and Columbus lines. The road, from Columbus to Zanesville, traverses one of the best portions of Ohio, and which will afford a very large amount of freight and travel.

The eastern division of the above road is also under contract to the Ohio river, a distance of about 80 miles. At Wheeling it will form a junction with the Baltimore and Ohio, and the Hempfield extension of the Pennsylvania line of road. For these the above will form their appropriate extension to Central Ohio. The Central company have already provided sufficient means to make the completion of this division secure. The work is to be pushed with the energy and vigor that the nature of the case requires. As soon as the Baltimore and Philadelphia lines are completed to Wheeling, they will accumulate a mass of business at that point, that must supply a most lucrative traffic to any road that is to be the avenue of this trade east and west.

Railway Bridge over the River Wye.

The crossing of large rivers or arms of the sea by bridges of great span, and able to sustain the weight and jar of a heavy train passing at a considerable velocity, is a problem of the utmost importance. The different solutions by men of the highest engineering talent in England and this country, are worthy an attentive study and comparison. We are already familiar with the Britannia tubular bridge over the Menai, and the description of the railroad bridge across the Niagara, proposed by Mr. Roebling, has been published in full from the report of the Engineer himself.

Another work of this character is the railway bridge over the river Wye, on the line of the South Wales railway, the construction of which is due to the inventive genius of Mr. Brunel. The Wye is a rapid and navigable stream, and to prevent obstructions to its navigation the Admiralty required that the structure over the mid channel should be not less than 300 feet in span, and with a clear headway of 50 feet over the highest known tides.—The plan of Mr. Brunel shows his peculiarly original and bold conception, accompanied by extraordinary economy, by arranging his materials in the form of a large suspended truss, and attaching the roadway to suspension chains kept in a state of rigidity by vertical trusses or struts inserted between the chains and a circular wrought iron tube spaning the river.

The bridge is 600 feet long: there are three spans over the land of 100 feet each, which are supported upon cast iron cylinders, 6 feet in diameter and 1¼ inch thick. These cylinders were sunk to an average depth of 48 feet, through numerous beds of clay, quicksand, marl, etc., to the solid limestone rock, which was found to dip at an angle of 45 degrees; it had, therefore, to be carefully levelled horizontally, and the cylinders bedded level. These cylinders were sunk by excavating within them, and pressing them down by heavy weights; in doing which very great difficulties were overcome—immense volumes of fresh water were tapped, requiring a 30 horse engine to pump them out. The quantity very much increased during high water, which rises 44 feet, and in many of the cylinders work had to be suspended until the tide receded.—Although the Wye is a tidal river, and therefore salt, no salt water was found in these sinkings.—Again, dangers arose from sudden and extensive irruptions of soft river silt, often bursting in with such rapidity that the men had hardly time to escape. Some of the strata were found covered with immense conglomerate boulders, indicating a former river bed. These having been overcome, the cylinders were filled with concrete, composed of Portland cement, sand and gravel, which set in a few days as hard as rock. The concrete is filled up to the level of the roadway, so that, should a cylinder decay, it might be taken out and replaced in sections in safety.

There are six cylinders at the west end of the main span; upon those, a standard or tower of cast iron plates, fifty feet high, is erected. A similar tower of masonry is built at the east end, upon the edge of the rocky precipice of the Wye.

Openings are left in the standard through which the trains pass. On the west standard is a cross girder of wrought iron above the roadways, on which the wrought iron tubes rest. These tubes serve to keep apart and steady the towers, and to their ends are attached the suspending chains.

Now, in an ordinary suspension bridge, the chains hang in a festoon, and are free to move, according

to the limited weights passing under them; but this flexibility would be inadmissible in a railway bridge, and the continuity of the rail would be destroyed if a very small deflexion took place when passed over by a heavy locomotive. With a view to give this necessary rigidity, Mr. Brunel has introduced at every third part of the tube a stiff wrought iron girder, connecting firmly the tube to the roadway girders; and, with the aid of adjusting screws, the suspension chains are pulled or stretched as nearly straight as desirable. Other diagonal chains connect these points, so that at whatever part of the bridge an engine may be passing its weight is distributed all over the tube and chains by these arrangements.

The tube is laid upon the iron standards, but is free to move upon rollers at the top of the masonry standard. The expansion on the hottest day yet experienced has not exceeded one inch.

The tube is strengthened within by the introduction of diaphragms or discs at every 30 feet, which renders it both light and stiff.

The roadway girders are formed of a deep thin plate of iron stiffened at intervals at the top, it has a strong triangular cell to resist compression, and at the bottom a double plate of rivetted iron to resist extension. Small cross girders are rivetted to these side girders diagonally. On these 4 inch creosoted planks are fastened crossing them in the opposite diagonal direction. Eighteen inches of gravel are laid over this floor, and on this bed the ordinary permanent way on longitudinal sleepers. One roadway was opened for travel on the 19th of July last, the tube and other portions of the second part are ready to be put up.

Annexed is a summary of the cast and wrought iron used in the bridge:—

	Tons.	cwts.	qrs.
Wrought iron, in three spans of 100 feet each, double line	277	0	0
Wrought iron in the girders, floor-bearers, and other work of the main span of 300 feet, double line	278	6	1
Two wrought iron tubes, each 312 feet long	302	11	0
Wrought iron beam on the standard to support the tubes	20	5	0
Vertical trusses	37	0	1
Tie girders to connect the caps of columns	1	10	0
Suspending links in main chains and diagonals	256	5	2
Saddles at points of suspension rollers	41	10	1
Adjusting screws	2	10	0
Rollers of main tube	7	17	3
Rollers of girders	2	11	3
Bolts	3	15	0
Total wrought iron	1231	2	2

	Tons.	cwts.	qrs.
Cast-iron bed plates for trusses	24	6	1
" standard	128	6	0
" caps for columns and parapets	21	0	0
" cylinders in the supporting piers	830	0	0
Total cast iron	1003	12	1

Wrought iron	1231	2	3	2234	14	4
Cast iron	1003	12	1			

Masonry in abutment and pier, 3240 cubic yards.

Total estimated cost of the bridge when entirely completed, £65,420.

A number of ingenious arrangements are connected with the bridge to ensure elements of strength and rigidity in the structure. Among these may be mentioned the cast iron ring or circle attached to the ends of the tube to prevent collapse; to the wedges introduced under the vertical trusses to adjust the exact tension upon the chains; to the curve given to the tubes themselves, increasing their strength; and to the roller-boxes under the vertical trusses, by which means the road girders are maintained in a position to expand or contract independently of the movements of the main tube.

The Mountain Lake Water Company of San Francisco.

New York and Boston boast the engineering skill and costly works that have supplied them with that most important acquisition for city salubrity, pure water; and San Francisco will, we hope, soon be able to point to the abundant streams derived from her mountain springs and lakes. Indeed we may entertain the hope that this will be a precursor to other works of internal improvement in our El Dorado State, and that the valley of the Sacramento and San Joaquin may be traversed by railroads even before California is connected with the two iron arms that now are reaching forth to bind her, on the one hand with the Gulf of Mexico, and on the other hand with the Great Lakes and the St. Lawrence.

The Mountain Lake company was organized on the 14th August, 1851, under the general corporation act of California, and a grant of the city of San Francisco to lay down pipes in the streets of that city for 20 years, and an exclusive privilege for the term of 5 years from the 1st January, 1853, on condition that the corporate authorities of San Francisco shall use the water for extinguishing fires and also that after the completion of the works, the supply shall not fall below one million of gallons daily.

We learn from the report of the Engineer, Henry S. Dexter, Esq., that the Lake is on the line of Pacific St. San Francisco, produced, and 3 miles and 225 rods distant from the corner of that street and Kearney street. On the 1st of December, after two dry seasons, the surface of the lake was 123 76-100 feet above Pacific wharf, and its area 7¼ acres.—The average depth was 16. When full, the Lake has an available depth of 24 feet, and an area of 10¼ acres. It is situated in a basin surrounded by hills, some rising 300 feet above it, and receives the drainage of a considerable extent of country.—There is no visible outlet, there being about 300 yards from the head of the ravine through which the brook flows, which discharges the percollating waters of the lake. This ravine is ¼ of a mile long, and has an average width of 100 yards. The hills skirting it are higher than the Lake, and the ridge separating the lake from the ravine is 18 feet above the surface of the lake. Of course to render the water available for the supply of the city, it is necessary to intercept the flow of the water through the ravine, it is proposed to effect this by running a puddle wall and ditch across the ravine, and carry it as high as the surface of the water. The wall is to be carried down to the hard pan or other strata impervious to water, and in its centre a row of sheet piling composed of 3 inch red wood planks sawed for the purpose and battened with inch red wood boards is to be inserted. At the lake two powerful steam engines are to be erected, forcing the water from the lake to a distributing reservoir on Cannon Hill, in the neighborhood of the city. The pipe connecting this reservoir and the pumps is to be 16 inch bore. 1¼ inches thick for the first 2,100 feet, and decreasing in thickness towards the summit.—The bottom of the reservoir on Cannon Hill will be 360 feet above Pacific wharf, and 236 above the lake surface, the distance of Cannon Hill from the lake is about 1¼ miles, and 2¼ miles from the corner of Pacific and Kearney streets. The cost of pipes, engines, reservoirs, etc., by this plan, is estimated at $459,453. Another plan dispenses with pumps, and conducts the water from the lake to a distributing reservoir, at a level of 107 feet above Pacific wharf, on the slope of a hill at the North Beach. The estimated cost of this line is $392,971.

The estimated gross income for the year 1852, is set down at $10 a month, for 3,000 houses $360,000, and for 1853, for 5,000 houses $600,000.

The lake forms a species of natural reservoir, and is fed by springs—the main body of its waters are supplied by the lower strata passing through the adjoining hills, and extending to the high range on the opposite side of the entrance to the harbor.—The present outlet forms a rapid brook, the discharge of which is estimated at from 8 to 10 million gallons daily. A similar lake in the vicinity called the *Laguna Honda* and 200 feet above the Mountain lake, can be added to it in case the supply is not sufficient. This, it is estimated, will furnish 4 to 5 million of gallons daily.

Thus at an expenditure of less than $500,000 the city of San Francisco will be supplied with pure and wholesome water. An almost equally important consideration is the protection of the city, and the merchandize of which it is the depot from destruction by fire. The numerous destructive conflagrations that have swept over that city destroying millions of property, show the necessity of an abundant supply of water. Its exposure to strong winds springing up daily, has hitherto rendered the most solidly constructed stores and warehouses insecure, and it is only by the introduction of unfailing and copious streams of water that exemption can be hoped for. The works which are destined to secure this end must prove as profitable as they are indispensable to that capital of the gold region, and probable centre of the future mighty commerce of the Pacific basin.

Mississippi and Chicago Railroad.

We learn, says the Chicago Tribune, that the party of Engineers, appointed to survey a line for the Mississippi and Chicago railroad, have reached the Summit, about twelve miles from the city, on their way to this point. We are informed that the surveys show a much more favorable grade than was expected. The survey is through Lockport, to touch which requires scarcely any divergence from a direct line.

It is rumored that the parties interested are trying to make arrangements for the sale of that portion of the Rock Island and Chicago road, lying between this city and Joliet, to the Mississippi and Chicago company, and that the latter will, next year, construct a *cut off* track from Joliet to La Porte.

Hoole, Staniforth & Co.,
MINERVA WORKS,
SHEFFIELD,
Steel Converters and Refiners;
Manufacturers of Improved Cast Steel Engineering and Machine Files;
Locomotive Engine, Railway Carriage and Wagon Springs.
Saws of every description, Engineers, Hammers, etc., etc., etc.
An assortment of Steel from the above Works constantly on hand by RICHARD MAKIN,
Agent for the Manufacturers,
43tf 65 Broad street.

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.
Portland, Sept. 21, 1852. tf

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.
September 9, 1852. 2m

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Locomotives and Machinists' Tools.

THE LOWELL MACHINE SHOP

IS prepared to execute orders for Freight and Passenger LOCOMOTIVES of different classes, with outside or inside Cylinders of approved design and faithful workmanship.

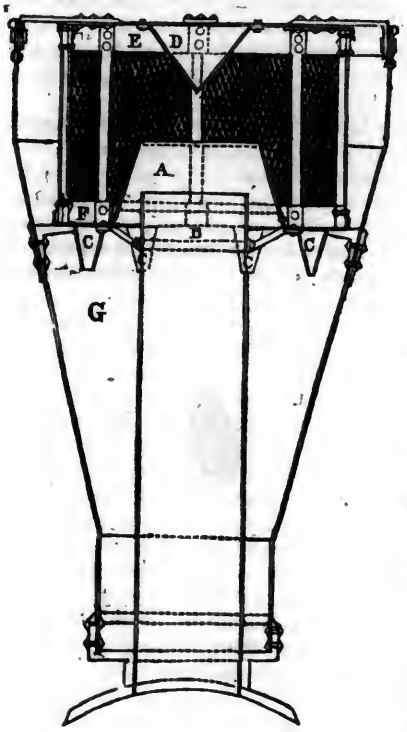
Also—

MACHINISTS' TOOLS,

with the latest improvements—consisting in part of Hand and Engine LATHES; VERTICAL DRILLING MACHINES; PLANERS; COMPOUND PLANERS; SHAPING MACHINES; SLOTTING MACHINES; BOLT CUTTERS; Machines for boring Crank Pin holes; Trip Hammers, etc., etc.

WILLIAM A. BURKE,
Superintendent.
Lowell Mass., August 23, 1852.

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours. very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state,that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcasde Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—5m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Patent Metallic Measuring Tapes.

A New Article, made from Vegetable and Mineral substances combined, entirely free from the objections made to all other tapes, arising from contraction and elongation in consequence of atmospheric changes. Fine wires, of a material not affected by dampness or dryness, are woven into the warp of the Patent Tape, rendering it not subject to variations in length, like all other tapes heretofore manufactured.—Instead of being merely painted, it is immersed in a peculiar solution of gums, and the fibres being solidly compacted together, it acquires substance and strength presented by no other article. They are enclosed in patent cases, superior to all others in lightness, strength and durability.

Imported and for sale only—together with every description of Drawing and Profile Paper, Tracing Paper in rolls, Vellum or Tracing Cloth, Field Books Mouth Glue, and a general assortment of Engineer materials—by WILLARD FELT,

Importer of Stationary 191 Pearl st., N. Y

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.

Oct. 2, 1852. 1y*

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent.*
SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO, of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

$250.000
San Francisco Water Loan.

Ten per cent. Bonds of $1,000 *each, with Coupons, payable semi-annually, in the City of New York, redeemable on 1st November,* 1862.

THE UNDERSIGNED, PRESIDENT OF the Mountain Lake Water Company, of the City of San Francisco, in the State of California, will receive sealed proposals at the office of Messrs. Dias & Thomas, No. 52 Wall street, in the city of New York, until Thursday, the 4th day of November, 1852, at 2 o'clock P. M., for the whole, or any part of the above mentioned Loan, which will bear an interest at the rate of ten per cent. per annum, payable semi-annually in the City of New York, and be redeemable on the 1st day of November, 1862, in the city of New York.

The undersigned will avail himself of the usual privilege of rejecting conditional bids, and of declining such as he may deem not advantageous.

Bids should be directed "Proposals for San Francisco Water Bonds," and sent to the subscriber.

Twenty per cent. and the premium will be payable on the day after opening the bids, and the balance with accrued interest may be paid at the option of the bidder any time before the first day of February next, thus giving Capitalists an opportunity to secure a most reliable and permanent investment, without precipitately disturbing their financial arrangements.

The debt created by the issue of these Bonds, is for the purpose of paying for the necessary pipes, and fixtures, more than sufficient means being already provided for the purpose of building the dams; reservoirs, laying the pipes, and completing the works; the entire capital of the Company ($500,000,) having been subscribed by the citizens of San Francisco; the subscribers embracing many of its most wealthy and respectable Merchants and Bankers. This is the first and only debt of the Company, and the repayment of the same is secured, by the Transfer in Trust, to James B. Bond and William M. Burgoyne, of all the property and franchises of the Company, valued at upwards of One Million of Dollars.

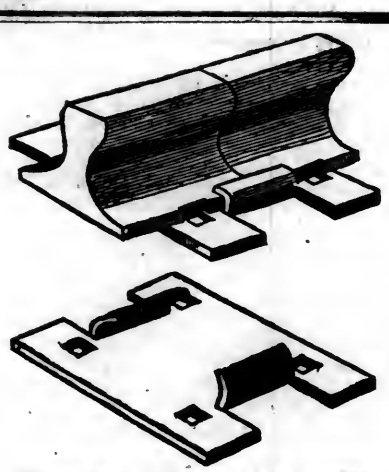
The Company have by law the exclusive right of laying pipes within the city limits, and own by purchase the only source from which water can be introduced into the city.

The Stock of this Company will probably be the best paying stock in the Union.

Copies of the Laws, Reports of Engineer, etc., can be had by calling at the office of Messrs. Dias & Thomas, No. 52 Wall street, second story.

SAMUEL PURDY, President.

New York, October 2, 1852.



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired. Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:

John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D.. X. & B. Railroad, Xenia.
A. Degraffe, Railroad Contractor, } Dayton.
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank. } Dayton.

October 8, 1852.

A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,
21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 38

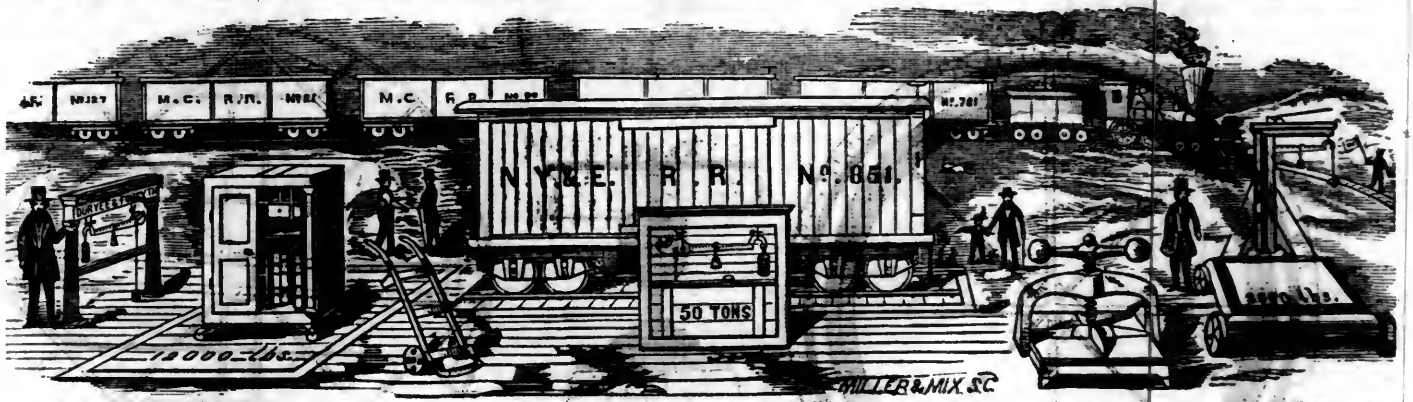
PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,
ALSO,
Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.
Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.
CORE BARS FOR FOUNDRY USE.
I on Tubes for Artesian Wells, screwed together flush on either side.
HOMAS PROSSER & SON, Patentees,
28 Platt street, New York.

Oxford Furnace, N. J.
ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. | TRACK SCALE, 100,000 LBS. | RAILROAD MANIFEST PRESS. | IRON SCALE, 1 1-2 TONS.

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co., " Chicago, Ill.
Crawford & Reynolds, " Cleveland, Ohio.
Joseph E. Elder, " St. Louis, Mo.
Byram, Millier & Shreve, " Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,
New York and Harlem,
New York and N. Haven,
Sandusky, Mansfield and Newark,
Indianapolis and Bellefontaine,
Syracuse and Utica,
Columbus and Xenia,
Lexington and Frankfort,
Hillsboro' and Cincinnati,
Greenville and Miami,
Cayuga and Susquehanna,
Rome and Watertown,
Rutland and Washington,
Erie and State Line,
Rochester, Lockport and Niagara Falls,
Cleveland and Columbus,
Michigan Central,
Mad River and Lake Erie,
Paterson and Hudson R.,
Cincinnati, Hamilton and Dayton,
Buffalo and Rochester,
Rochester and Syracuse,
Louisville and Frankfort,
Chicago and Galena,
Dayton and Western,
Central Ohio,
Chemung,
Illinois Coal Company,
Buffalo and State Line,
Cleveland and Pittsburg,
Michigan Southern,
American Express Co.,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS at the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

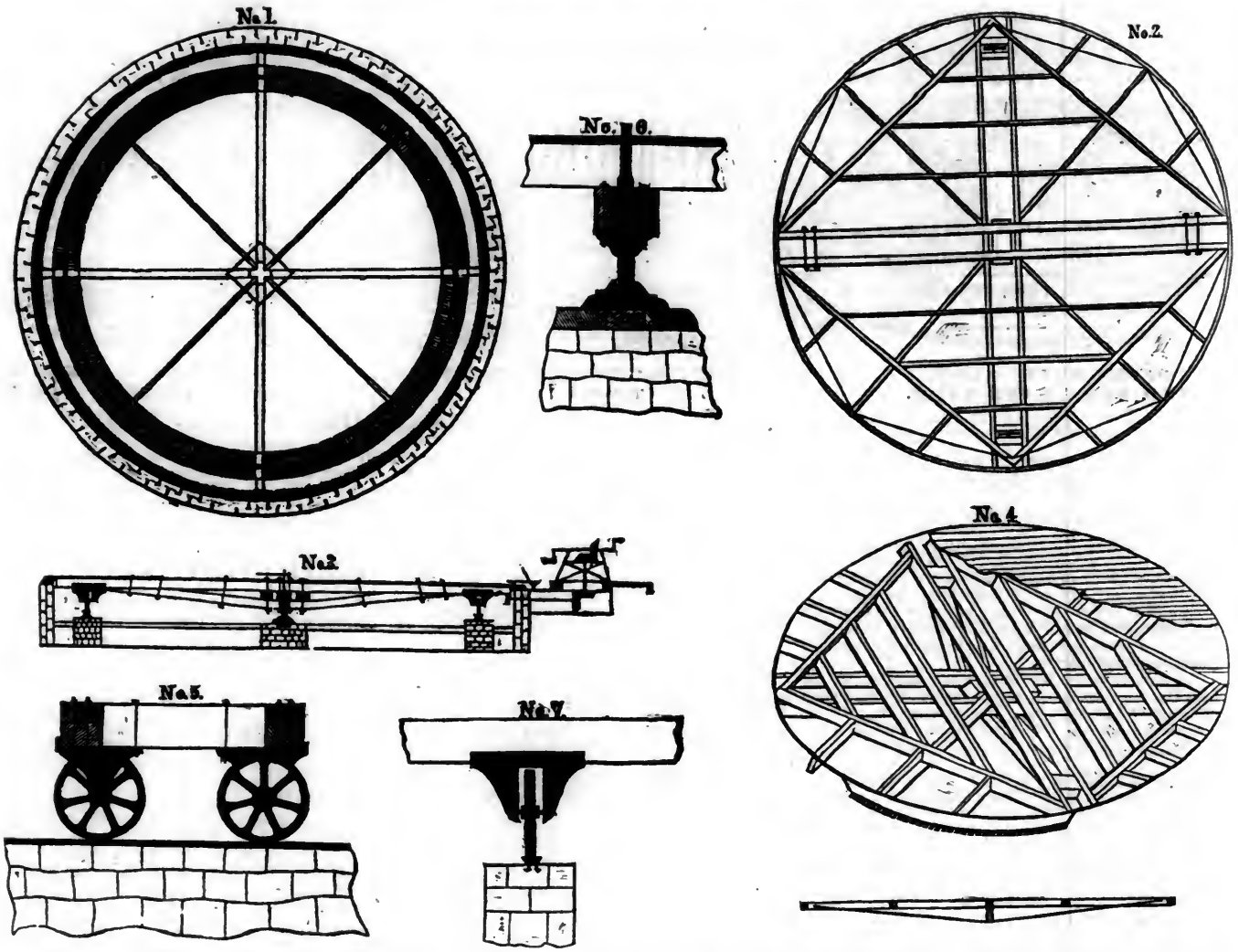
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the Iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sheet Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 44] SATURDAY, OCTOBER 30 1852 [WHOLE No. 863 VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Investments in Railroads in the U. S.....689
Baltimore and Ohio Railroad.....690
Sault Ste. Marie Canal.....693
Railroads in Texas.....693
National Debt of Great Britain.....694
Statistics of Boston and Maine Railroad.....694
Hudson River Railroad.....694
Railroad Items.....695
Columbus, Piqua and Indiana Railroad.....696
Terre Haute and St. Louis Railroad.....696
National Railroad Convention.....696
Bangor and Lincoln Railroad.....696
Journal of Railroad Law.....696
Quartz Mining Company.....697
Nashville and Florence Railroad.....697
Hanover Branch Railroad.....697
Stock and Money Market.....697
Comparative Receipts upon Short and Long Lines of Railroad.....698
Vermont Central Railroad.....698
Susquehanna Railroad.....698
Cincinnati and Dayton Railroad.....699

American Railroad Journal.

Saturday, October 30, 1852.

Investments in Railroads.

As the railroads in progress in this country require an annual outlay of at least $75,000,000, it is natural that works absorbing so much money should attract great attention, and that capitalists should feel some concern, lest we should push their construction beyond the immediate wants of the country, or undertake a more extended system than we have capital to carry out, and one beyond the capacity of the business of the country to supply with a lucrative traffic. The present period differs so much from all preceding both in kind and degree, that many are not certain that we are not going wrong, from no other reason than the *magnitude* of our enterprises.

We have often stated our reasons for believing the great railroad interest of the country to be in a sound and healthy condition. But as the circle of our readers, as well as of persons inquiring into the subject of our railroads, is daily and rapidly increasing, we still think we cannot discuss a subject more interesting and useful, than the probable results of railroad investments in the United States.

In endeavoring to form a correct idea of the necessities, uses and prospective traffic, upon our railroads, we must first understand thoroughly the physical character of the country, its extent and productiveness, the general absence of that diversity of pursuits which in other countries supplies to each section a market for its own surplus products, and the wide distance which separates our manufacturing and commercial, from the agricultural interest. Our railroad system being expressly adapted to the wants and the peculiar condition of this country; a thorough appreciation of its conditions necessarily precedes a correct view of our public works.

In the first place, the *domestic* markets of the country are confined to a narrow belt of territory in the eastern States, lying upon, or within a short distance of the sea coast, and embracing an area of only a few thousand square miles. The area of production (we speak of agriculture) embraces more than one million, while the area of consumption (occupied by the manufacturing and commercial classes) will not equal one-twentieth of the former. The latter district, too, constitutes the very verge of that portion of the country furthest removed from the great seats of production. The corn, tobacco and hemp of the States of Kentucky and Missouri for instance, have to be transported from 1,000 to 1,500 miles before they can even reach our domestic markets. Without an avenue to them, the surplus products of these States, and consequently the industry of their people, are utterly worthless in a commercial point of view. A farmer with 10,000 bushels of corn is no better off than with 1,000, if he have no market for either quantity. The fertility of his soil is no source of profit, after the first wants of his nature are satisfied. As he cannot sell, he is without the ability to purchase, and it is the same to the eastern manufacturer or merchant, whether a farmer residing in the interior of the above States lives in a desert or in the midst of fertility, so long as he has no means of reaching a market.

What is true of our domestic, is equally true of foreign markets, as the former must be reached through the latter.

Now the hypothetical case we have put, represents to a very great extent the actual condition of a large part of the population of the United States. To a certain extent it is true of all. In large districts of country many of the most important articles of agriculture are not worth the cost of sending to market. As they cannot be consumed on the spot they are nearly worthless. The articles of oats, hay and potatoes, (the two latter ranking among our most valuable crops), will bear the cost of transportation only a few miles. As we go into the western States, the same becomes true of indian corn and wheat even. All of these have to be moved at a distance from the place of production to find consumers, and the return to the producer is reduced just in proportion to the cost of transportation. The case supposed, it will be seen, is not only absolutely true, applied to certain sections of country, but is universally true, in a certain degree, of all.

The general uses of railroads, and their necessity as a means of developing our resources, are we think sufficiently and closely made out. They are adapted to our condition and wants. The only question, therefore, which is really for consideration is, what is the proper limit to their construction?

As the greater part of our works in progress are in newly settled portions of the country, it is important that we consider the ability of their people to supply them with a lucrative traffic. Now it is undeniably true, singular as it may seem, that a given number of people in the new, supply a much larger traffic to railroads than an equal number in the older States. The reason of this is obvious. In the former the people devote themselves entirely to agriculture, and the labor of one man will produce three times the quantity of wheat and corn in Ohio, as in Massachusetts or Connecticut. One year is sufficient to prepare the soil for crops, and as they may be renewed for years, without rotation in dressing, the capacity of one acre of land in the Mississippi valley, compared with an equal area in the eastern States, is immeasurably greater.

From the want of a diversity of employment in the west, all surplus beyond the immediate wants of the farmer has to be exported. The surplus of all his neighbors is the same in kind. He must go to the eastern cities, to New England, and to Europe even, to find consumers for his grains. But as articles of food constitute only a small portion of his wants, he is compelled to import everything that his farm does not supply. Upon western and southern railroads, therefore, are thrown not only all the surplus products of the district they accommodate, but a return freight equal in bulk or value,

as the case may be. In these sections of country there are no variety of pursuits, that consume all produced within a given circle. In the older States the different interests must be so nicely balanced, as mutually to supply to each other all the articles that go into consumption. In such cases railroads are not needed to aid in distribution.

As a striking illustration of the correctness of the general statements we have been making, we may take the case of the State of Mississippi. The great production of this state is *cotton*. All this cotton has to be exported beyond its boundaries; none of it is manufactured upon the soil where it is raised. All of it goes to New England, Great Britain, France, etc. In return for this cotton, is imported nearly everything the people eat or wear. As already stated, the total value or bulk of this cotton comes back to the people by the same channel through which it was forwarded.

For these reasons, which must be perfectly obvious to every one, there cannot be a doubt that one thousand people in Mississippi would supply three times as much business to a railroad, as an equal number living in New Jersey, or Connecticut. The less the diversity of pursuits, or what may amount to the same, the more recently settled a district of country, the greater the amount of transportation. Of course the longer a country is settled, the better organised and directed does labor become, and the greater amount produced by a given number of hands.

It is a great mistake, therefore, to suppose that because a country is new it cannot contribute a remunerative traffic. Both in the southern and western states, a fertile and inexhaustible soil is spread out before the farmer and planter, into which he has only to cast his seed to reap an abundant harvest. In the eastern states an equal amount of labor would not produce one-half the same result. In the United States, where ever we find a well peopled district we shall find all the material of an existing traffic for a railroad, which will often be the greater the more recently settled.

This branch of the argments being disposed of, the next for consideration is, how large an area is required to support a railroad? The answer to this of course, depends upon the character of the country and the cost of the work. The Vermont Central road has proved unproductive, for the reason that it traversed a country affording but a small traffic and has proved a very expensive work, costing something over $60,000 per mile. On the other hand, the Cleveland and Columbus has proved a profitable investment, its wants being greater than the Vermont Central, while its cost has been only about one-fourth as much. The former was thro' a much older and as densely settled country though one in which labor is more subdivided but less productive.

We do not of course mean to imply that manufacturing establishments do not supply a large business to railroad companies. Far from it. We only mean to say that where agriculture is the *appropriate* occupation of a people, the less the diversity of labor, the greater the surplus production thrown upon railroads.

In looking at the eastern states, it is difficult to establish any rule as a limit to the extent to which railroad construction may with safety be carried from the want of homogeneousness in the soil, productiveness and topographicalcharacter of the country. Portions of New York and Pennsylvania, for instance, are not adapted to such works. In the western states, we find greater uniformity in the above characteristics, and can form a more correct opinion in reference to the subject under consideration. Take the state of Ohio for an illustration of the western states. Every portion of this is well adapted to railroad construction and is nearly uniformly fertile, the less productive portions having more than an equivalent in their great mineral resources. Now, there can be no doubt in our own minds that, parallel lines of railroad traversing the state, both from north to south and from east to west, within twenty miles of each other, and which would give a belt of country to each, twenty miles in width will be supplied from such belt with a lucrative traffic. Let us analyze this calculation a little and see what will be the result.

The above estimate would give to the state of Ohio 3800 miles of railroad, or one mile to about every 10¼ miles. The cost of these roads we will estimate at $20,000 per mile. The interest on this amount will be $1,400 annually, which must be met by the net earnings of the roads, to make them safe investments for capital.

Every mile of railroad by the above hypothesis, would secure the freight supplied by 6720 acres of land, and the passenger traffic of 525 people, estimating the population of the state at only 2,000,000, which is much below the actual number. Nor we will suppose one tenth of the land to be under cultivation, and that the annual produce is equivalent to 40 bushels of corn and wheat to the acre, which is not below the actual produce.

This would give an aggregate product of 268,800 bushels, and deducting one-half for domestic consumption would leave 134,400 for export, which at 4 cents per bushel, allowing an average transportation of 50 miles, would yield a revenue of $537 60. Estimating the receipts from the transportation of other agricultural products, live stock, etc., etc., to yield an equal amount; and that received on imports to equal one-half the amount received on exports, and we have $1612 80 as the sum that 10¼ square miles of territory will supply to one mile of railroad.

The gross receipts from passengers upon the Massachusetts railroads for the year 1851 averaged over $3,50 to each inhabitant in the state. Estimating the receipts of the Ohio road to equal the above amount with the present population only, and we have $1837 75 as the gross receipts of 10¼ square miles. The total income from this area will then be as follows:

Receipts for freight	$1612 80
" " passengers	1837 75
Per mile of road	$3450 55

Estimating expenses at 40 per cent of the gross receipts, and we have a net income of $2070.33 per mile, or over 10 per cent on a cost of $20,000 per mile.

To shew that we have not over estimated the amount of production in the state, we would state that the yield in 1849 of the articles of wheat and corn alone, equalled 72,000,000 bushels. Apply the above estimated product per acre to the whole number of acres supposed to be cultivated; and we should have a gross production for the whole state of 100,000,000, which cannot be much above the amount now annually raised. But it will be borne in mind that every new railroad stimulates production to an extraordinary degree, and that long before the number of miles of road estimated for the state shall come into use, the production will be far beyond our calculation. The population will go from 2,000,000 to 2,750,000, or 3,000,000, and in addition to agricultural, vast manufacturing and mineral interests, will be brought into existence. As railroads progress the people will become more accustomed to travel, so that the receipts for capital upon the roads of Ohio will continue to exceed those upon the Massachusetts lines at the present time.

We have taken Ohio as an illustration for all the new States. Long before the *others* can secure the number of miles of railroad which we have assigned to Ohio, they will come up to the amount of her production and population. They have, perhaps, equal capabilities, and will in time sustain an equally extensive system of public works.

Ohio has an area of 40,000 square miles. The whole area of the territory within which we are building railroads, will equal 1,000,000. It will require, therefore, over 100,000 miles of road to meet the wants of this extent of territory, allowing the same ratio per mile, that we have to Ohio.—However extravagant this estimate may appear, we shall continue their construction till even this enormous extent is reached. We are still building new roads even in those States best supplied with those works, and every year is the area of their construction being enlarged. In the United States the railroad is destined to become the ordinary highway, and they can be built at a cost that will bring them within convenient distance of every farmer and planter in the country.

Baltimore and Ohio Railroad.

TWENTY-SIXTH ANNUAL REPORT.

Continued from page 678.

IV.—OF THE EXTENSION TO THE OHIO RIVER.

The report of the Chief Engineer, herewith annexed, will show the operations of that department during the year.

It is with feelings of unmingled pride, the Board have it in their power to announce, that this great work is now within a period of little more than sixty days of its final completion.

The track has advanced steadily under the direction of the able and energetic officer in the charge of the Engineer department of the service. On the 22d day of June last, the road was formally opened to the Monongahela river, since which time the trains have been running to that point, with a regularity scarcely surpassed on any part of the old road, between Baltimore and Cumberland. No assistant power has as yet been resorted to, and the high grades are worked with entire satisfaction, and at rates of speed, both ascending and descending, which compare favorably with the operations of the general line.

There now remain to be constructed about forty miles, between the "Pettibone Tunnel" and the city of Wheeling. Soon after the first of October, the track was expected to move eastwardly, from the Wheeling terminus, and to meet the track advancing westwardly, at some intermediate point, about the period announced for the opening of the road. The work at the "Pettibone Tunnel" has not progressed with the rapidity that could have been desired, owing to causes beyond the control of the engineer; but in case of any delay at that point, a graded road over the mountain—which may be made entirely available—will furnish a connection, which will answer a temporary purpose, until the tunnel can be placed in a state of readiness for the track. The delay at this point cannot, however, be great; and will present no serious obstruction, in the opinion of the Engineer, to the general business, which it is proposed to commence, as soon after the first of January, as the trains can be organized.

The location of this road—through the boldest mountain region which has yet been traversed by any work of internal improvement in this country, is well calculated to excite a feeling of surprise even among professional men. For a distance of more than seventy miles, it has grappled with a succession of mountain ranges—relieved only by occasional valleys of limited extent. The road has

been placed, however, upon safe and permanent ground, and will be as little liable to the contingencies, to which new roads are exposed, as other works with which nature has dealt more liberally, in the facilities which she has held out in the original construction.

The part of the finished road which is now being used, is already firmly bedded, and is in the best condition for a heavy business.

By the 1st of December, if not earlier, the cars may be run over the extended line, with the exception of about fifteen miles of staging, between Grave Creek and the "Wheeling tunnel," and with the co-operation of the city of Wheeling, in relaxing the restrictions of the charter, requiring all parts of the road from the Monongahela to be opened at the same time, both passengers and mails may be placed upon a footing as favorable as that of any other road connecting with the seaboard.

V.—OF THE FINANCES.

The last annual report presented a detailed exhibit of the company's finances up to that period. The Treasurer had then in hand the balance arising from the sale of 5 per cent sterling bonds of the State of Maryland, amounting in all to $861,466,—$60,750 of money loaned, and a balance of $760,000, rated at par, of the $1,128,500 of coupon bonds, estimated in the President's report of Oct., 1849, as necessary to complete the road.

Against this amount, the expenditures were averaged at $1,286,000, between October and May, exclusive of the large amount falling due for interest of debt, etc. During the single month of October, the disbursements on construction account largely exceeds $250,000.

The position of the company at this critical juncture, made it important that no timid or temporizing policy should mark the proceedings of the Board, in the endeavor to place themselves in a position to meet any contingency which was likely to arise. After a period of unprecedented ease and abundance, the board found themselves almost without warning, in the midst of a financial crisis, with a family of more than 5,000 laborers and 1000 horses to be provided for, their treasury rapidly growing weaker, and their monthly averages largely exceeding two hundred thousand dollars. They had undertaken a work of no common magnitude. The commercial existence of the city of Baltimore, it was well known, depended on its prompt and successful prosecution; and to have faltered at this critical juncture, at any hazard, however remote, of endangering the great interests entrusted to their charge, would have been to have deliberately invited the just censure of those to whom they held themselves accountable.

With these views the Board could not for a moment hesitate as to the proper policy to be pursued. After repeated efforts to bring their bonds to the favorable notice of capitalists at home and abroad, they finally succeeded in negotiating a sale of the whole amount applicable to the construction, at a limit of 80 per cent.

In reviewing the financial policy of this company, there is no measure which, it is believed, has contributed more to its substantial and lasting benefit than the sale of the coupon bonds, at the time and under the circumstances which attended this transaction.

The securities of this company, sound as the board believed them to be, could not claim, in the then unfinished state of the road, to stand upon a better footing than those of other works of a similar character; and it is a source of pride rather than regret, that this company should have been called to account in any quarter, for supplying their wants upon terms, at least as advantageous as any other similar work in this country, and more so than a majority of those whose prospects were such as to give to their securities the character of safe and permanent investments.

One of the consequences anticipated by the board, from the arrangement for the sale of the six per cent. coupon bonds, was its effect upon any future negotiation in which the company might find it convenient to engage. Accordingly, on the 24th of March last, proposals were issued for a sale of the remaining $700,000 of the bonds, which had been estimated by the President in his report of October, for stocking the road. The aggregate amount bid for under this call, was more than $3,300,000, at rates ranging from 80 to 90 per cent. These bonds were subsequently awarded to the successful applicants, at an average of about 87 per cent.

Considering the state of the money market, in the relation which it bore to the period of the former sale, it will be seen that the first transaction compared most favorably with the latter, and that both exhibited results in the highest degree encouraging to the credit of the company, and their ability to bring their great work to a successful termination.

In the accomplishment of an enterprise of such fearful magnitude, it has been the policy of this board to reduce their money wants, whenever favorable opportunities occurred, without regard to fractional losses. The discount to which they might be exposed, in the sale of five hundred thousand or a million of bonds, was believed to represent but faintly the more ruinous sacrifices to which they would have been subjected, by a delay of a single month, in the opening of their road—to say nothing of the risk of a financial crisis, a total suspension of their work, and a general withdrawal of the public confidence, consequent upon the postponement of the prospect, which for so long a period has sustained this board and the community, in their untiring efforts to open a communication with the resources of the Great West.

The treasurer's exhibit will show that there has been expended, up to the close of the fiscal year, in the construction of the road west of Cumberland, including interest on capital, $7,271,732 51, every dollar of which, with the exception of $275,416 88, of notes outstanding, has been provided during the progress of the work.

When it is recollected that the present administration entered upon its duties with a debt of more than two hundred and fifty thousand dollars, such a result is certainly not without encouragement, and furnishes the best comment upon the policy which has been adopted and steadily persevered in unto this time.

In his address of October, 1849, the President stated the total cost of the road, upon the contract prices, and the estimates of the Engineer, at $6,210,000.

In the last annual report, that officer still reiterated his belief that this result would not vary materially, and the committee have gone on to base their financial arrangements upon this estimate of cost.

Neither the President nor the board can hold themselves responsible for any variation which may take place in this exhibit, and the stockholders are referred to the report of the Chief Engineer, herewith appended, for an explanation of the probable excess over and above this estimate, which it will be necessary to provide after the road is opened to meet the demands of the Engineer department.

While, however, the board would refer to the report of the Chief Eugineer, in explanation of the causes which have led to the increased cost of the road, over and above the original exhibit, they would be doing injustice to that officer, to withhold the expression of their satisfaction, that a result so favorable should have attended the winding up of so stupendous a work—a work which has been pressed forward under every disadvantage, and within a period unprecedented in the history of any similar enterprise. When it is recollected that the Erie road, during the last year of its construction, showed an excess of more than $3,000,000 over the estimates of its officers—and that almost every work of any magnitude in this country has claimed a far more liberal margin for contingencies, it is certainly not a subject of surprise that this, the greatest of all, in its engineering features, and the difficulties with which it has had to contend, should reach its destination with so small a variation from its supposed cost, and the price at which it was originally let.

In comparing the cost of this road, as will be seen by the Engineer's report, with that of others which have been brought to a successful termination in different parts of the country, it will be found that a large margin still remains to justify a more ample expenditure than that which has been provided, for placing it in complete condition for any contingency that will be likely to occur. That its wants will be large cannot be doubted, if we are to be governed by the experience of similar works; but with a trade such as we have reason to anticipate, the means will not be wanting to make such improvements as may be found indispensable, without encroaching on the dividends of the stockholders.

But the stockholders will observe, by reference to the statement of the President to the board in the sale of the last bonds of the company, that this excess in the cost of the work will not much exceed the financial exhibit which has been heretofore submitted by him, and published by order of the Board.

The total liabilities of the company, with their road in operation at the Ohio river, were assumed as follows:

$3,200,000	Sterling 5's.
1,000,000	1867.
566,666	Iron Bonds.
1,128,500	Coupon Bonds of 1875.
700,000	do. do. 1880.
$6,595,166	
500,000	Contingencies.
$7,095,166	

To this amount was added $1,000,000, for additional machinery and cars.

It will be perceived then, that a margin almost equal to that claimed by the Engineer in his accompanying report, had been anticipated by the President, in his exhibit in June last, and included by him in the aggregate liabilities of the company, on the opening of their road to the Ohio river.

Assuming the original estimate of the entire cost of the work, say	$6,210,000
And the amount expended up to this time, exclusive of interest, machinery, and about $95,000 of notes outstanding applicable to construction	$6,045,000
The balance to be provided would have been	$166,000
And the company had in hand at the close of the fiscal year, after deducting interest on Maryland Sterling and Iron Bonds, to the 1st of January, inclusive, say	$109,000

Showing that the Board would have been fully sustained in their provision for the completion of the road, had there been no deviation from the original contract prices, and the amount of capital upon which they were authorized to base their financial arrangements.

With a view to provide for the excess in the cost of the work, the committee of Finance deemed it advisable to resort to the temporary obligations of the company, at short dates, with a view to fund the same, at the earliest practicable day after the completion of the road, by a sale of the company's bonds to that extent.

When an application was made in May last, for an increase in the power of the company, the policy adopted by the board, in reference to the means necessary to be provided, was based upon the inexpediency of a farther issue of bonds, *at that time*, in view of the margin which might be required by the engineer, and the necessity for promptly funding whatever excess might occur on the completion of the road.

The wisdom of this policy, although at first objected to by some, cannot now be questioned. Had the company thrown their bonds into the market, to the extent of a million of dollars, and followed this issue by the amount then anticipated, and now shown to be necessary, to meet the excess in the cost of the work, it could not have been otherwise than attended with an unfavorable effect, upon the limits at which these bonds would have sold. By awaiting the completion of the road, the securities of the company have now reached a limit, at which they may be made available without serious loss.

Under the arrangement adopted by the board, when the excess in the cost of the work shall have been funded, the road will then commence its operations with about $1,000,000 of floating debt, contracted for engines and cars, and distributed over a period of three years from the 1st of January next, the period at which the road is expected to be opened to the Ohio river.

The board have never entertained the idea, by the proposed arrangement, of using the dividends

of the stockholders to meet these obligations as they fall due, without a full representative in the stock of the company, which the future may prove to be more valuable than money. If the revenue of the road should be only $3,000,000, instead of the $4,000,000 provided for by the general Superintendent in his report before alluded to, the amount appropriated from year to year, towards the payment of the obligations thus incurred would be worth more in the *stock* of the company at par, than a dividend in *cash*, at the same time that it would greatly benefit the credit of the road, by preventing a further increase of its permanent debt.

The board have abundant reason to rely upon a vastly increased trade on the completion of their work. Their effort has been to avoid unnecessary pressure upon the limited capital and resources of this community, and to draw upon the results of a certain and overwhelming trade, for the equipment necessary for its liberal and ample accommodation.

Sufficient is now indicated to show that the annual interest for which this road will be liable, including its large equipment and depot accommodation, will not exceed $550,000 per annum.

Of the amount estimated as debt, nearly one half—that is to say, $3,200,000—in a perpetual loan to the company, not redeemable until 1880, and then by the State of Maryland, to whom this company will be responsible for the interest; so that in fact the amount of debt for which provision is to be made by a sinking fund or otherwise, is about $4,000,000, exclusive of excess in cost of road, viz:—$566,666 67, payable in 1, 2, 3, 4, and 5 years, from the 1st of January, 1855, and the balance in 1867, 1875 and 1880.

It is confidently expected that the transportation of the mail, at the maximum charge of $300 per mile—equivalent to $114,000 per annum, and the revenue arising from express cars, running in connection with the passenger trains, will pay the interest upon the $3,200,000 Sterling bonds of the State of Maryland.

The million loan for the Washington Branch which has not been brought into the above exhibit, is now reduced to $762,416 57, as an offset against which the company own in that branch 10,326 shares of its capital stock, which for two years past has produced an interest of 8 per cent. These bonds, say $762,416 57 fall due in 1854, and it is not doubted that the larger portion of this amount may be extended, if desired by the company, upon terms that will be satisfactory. The company may be said to represent an unencumbered interest in the Washington Branch of $237,583 43, this being the amount of bonds heretofore cancelled and carried to the account of the sinking fund.

Upon the whole the board see no reason to doubt, from the high credit the company enjoys, and the extreme caution which has always governed their financial policy, that with the realization of the results confidently anticipated on the completion of the work, they will be able to meet all their expectations. What has been done from time to time, was always, in connexion with the matured plan, which they now have it in their power to present for the judgment of the stockholders; and if they have occasionally provoked censure, in the absence of explanations which it would have been inexpedient to make, they may hope now to reap the full measure of justice, to which they may be entitled. When the balance which will be outstanding on the completion of the road shall have been funded, the total amount, including say $250,000 paid before the road was placed under contract, which has been provided and disbursed, will largely exceed $7,000,000, and the company have emerged from this gigantic effort with renewed strength and credit. Her stock has advanced from 28 to 95 per cent, and her bonds, which were unsaleable to any large amount, when the road was placed under contract, are now in request at a fraction below their full par value.

VI.—WESTERN CONNECTIONS—NORTH-WESTERN BRANCH.

The Board have continued to watch with great interest the progress of the works already projected and now going forward west of the Ohio river.

The Central Ohio road is already under contract throughout its entire length, and is expected to be in operation at the earliest practicable day. The importance of this line, and its early completion to the city of Baltimore, cannot be too highly estimated. The most friendly relations continue to exist between the two companies, and it will be the interest of both hereafter to conduct their operations in such a manner as to afford the strongest temptation both to passengers and tonnage. With this line complete the city of Baltimore will be within 26 hours of Cincinnati, at rates of speed far below the maximum which has been adopted on other routes, and the road cannot fail, under proper legislation, to command a large share of patronage.

From Cincinnati there are two lines projected and looking to a junction with the Ohio river, at or near Parkersburg. Since the date of the last annual report, the effort then making to divert one of these lines from its original destination at Belpre, the terminus of the Northwestern road, by a subscription conditioned upon a change of its corporate name, has been successful.

A glance at the map will show that while the abandonment of the original plan to intersect the Ohio river at Belpre, as a leading and paramount object, has accomplished comparatively nothing as to distance, in the approach to Marietta—the newly adopted terminus—the chasm which it may leave to be filled to secure a connexion with the Northwestern road, must operate injuriously as to any immediate results which may be expected to flow from its early completion. A temptation of $350,000—less, it is understood, than the cost of the road from the nearest point of bifurcation on the direct line to Belpre, has established Marietta as the main terminus of this line on the Ohio river—leaving the company with their branch to Belpre yet to be provided for, and their road terminating at a point where there is no line to meet them, and the prospect of a connexion with Philadelphia, to say the least of it remote. If the Cincinnati and Marietta road should advance with the rapidity we are led to believe, the necessity for a *branch* to Belpre, to connect with a market one hundred miles nearer than that which they are endeavoring to force, will become so urgent that it will be difficult to retard it, even until the completion of the main stem to Marietta.

This company must continue to regret the existence of a state of things which they have had no power to control. The desire of the city of Baltimore has heretofore been to connect herself with all roads; she has labored assiduously to secure the charter which now holds out such decided advantages to the Southern parts of Ohio, including Marietta, over their more northern rivals; and she can never cease, in common with this company, to view with surprise the plans which have been heretofore announced by the Cincinnati and Marietta company—plans which would seem to treat as *secondary* a connexion with the most direct line of road that can ever be projected, between the Ohio river and the Atlantic seaboard, with no other ostensible purpose than to foster connexions, not even fortified by the results of instrumental surveys, and yet among the uncertainties of the future; and in the face of the well-established fact that the Northwestern road gives them access to the Northern market of which they are in pursuit, and with which Cincinnati is already connected by shorter lines—by a continuous chain of existing railway, (with the Northwestern road complete,) as advantageous in all respects as the proposed line from Marietta to Wheeling; which, in order to meet the wants of the company, must rise like an exhalation from the beautiful river whose margin it is designed to skirt, and with whose cheaper transportation it must be fully prepared to contend.

In illustration of this view, the board would point to the well known fact, that Cincinnati is nearer to Wheeling and Philadelphia, by the Circleville and Central Ohio railroad, by about eighteen miles, than she would be via Marietta, the river line and the Hempfield road; and Chillicothe, Athens, and all other points upon the projected line of the Marietta road, are nearer to the Baltimore market by at least ninety miles than to Philadelphia by the Hempfield road. Marietta herself, in fact, can approach Philadelphia, supposing this to be her preferred market *through* the city of Baltimore, (with the Northwestern road complete,) by a finished line of railway, in about the same distance as by the projected line with which she is endeavoring to fraternize. With the Circleville and Central Ohio road on the one side, commanding the *through* travel as against the Marietta and Wheeling road, and the Northwestern road on the other, holding out a temptation of more than eighty miles in favor of Baltimore, for articles of heavy tonnage within the attractions of Marietta, to say nothing of the almost nominal rates at which the river navigation would come into competition with any road which might be located along its borders, it needs no penetration to see that the project of a road to connect the southern portion of the State of Ohio with the city of Philadelphia by the Hempfield road, would be utterly fruitless.

The adoption of the plans above indicated, and their untoward effect upon Cincinnati and the whole of southern Ohio has led to more recent examinations and surveys, which cannot fail to attract the most lively interest both East and West of the Ohio river.

The surveys of Mr. Morris, Chief Engineer of the Cincinnati and Hillsboro' company, lately published by authority of that company, have established beyond controversy, that by far the shortest and best connexion between Cincinnati and the Northwestern road, is that which his explorations comprise.

The great line indicated by him, beginning at Cincinnati, runs through Hamilton county, along the borders of Clermont, Warren and Clinton, centrally through Highland, Pike and Jackson, across the lower township of Vinton, and diagonally across Meigs, and through the south-eastern corner of Athens, and the Southwestern corner of Washington.

From Hillsboro' east it connects at the town of Bainbridge, in a distance of 22¼ miles with Paint Valley.

Near Piketon it intersects the great Scioto Valley, and connects with the Ohio State canal.

At Jackson, 56 miles from Hillsboro', and 111 from Cincinnati, it joins with the great Scioto and Hocking Valley railroad, which when continued to Newark, and connected with the system of railroads in operation beyond that point, will give to the city of Baltimore a direct connexion with the most prominent roads of northern Ohio. It will also give a connexion with Sandusky city in a distance of 530 miles.

"This extreme southern sweep across the State of Ohio," says Mr. Morris, "enables this line effectually to cut off all trade or travel coming from the South, and having either an Eastern or Western direction, for in both directions it furnishes the shortest possible route, and therefore (all other things being equal) ought unquestionably to secure the business. It is through this line that Baltimore, Philadelphia and New York will find their shortest and best route for commercial intercourse with Kentucky, Tennessee and the Great West."

The character of Mr. Morris as an engineer entitles his opinions to the most entire confidence, independently of the full endorsement which they have received from the Chief Engineer of this company, with which they go forth to the pubtic.

While, then, the city of Baltimore and the Baltimore and Ohio and Northwestern companies cannot view with indifference any movement towards a connexion with the great line in which all are so deeply concerned, whether for primary or secondary objects of trade, and will be prepared at all times to extend the hand of welcome to the Cincinnati and Marietta company, for whatever they may be disposed to concede to Baltimore, in their seeming effort to patronize a market one hundred miles more distant, these great interests including the city of Cincinnati, can never disregard the importance of a line which, rising above all local influences, has been located with a single eye to the shortest connexion between Cincinnati and the Atlantic coast, and which, if carried out, as it will be, must inevitably become a link in the important combination which is designed to carry the through travel between St. Louis and the cities of the seaboard, *through the city of Baltimore*, as the nearest and most advantageous approach to any more Northern market.

It will be for the great interests so deeply involved, when the proper time shall have arrived, to deliberate gravely upon the steps proper to be taken,

to secure to Cincinnati and Baltimore, and the States whose commercial centres they are, the advantages which are likely to accrue from the great National highway, which this company for more than twelve years past, have been endeavoring to establish.

In the meantime, this company have the reliable assurance that should the Cincinnati and Marietta company desire, for the present, to unite with the Cincinnati and Hillsboro' company, on terms which may be deemed just and equitable, and which may not impair the chartered rights of either, but afford an unbroken chain of road from Cincinnati to a junction with the Northwestern road at Parkersburg, the one devoting their resources East and the other West, so as to give to their stockholders the earliest and largest return for their investment, an arrangement can be matured which may be mutually advantageous, not only to the stockholders but the public at large.*

The board are happy to announce that the Northwestern road is now in the hands of contractors, and will be pressed to completion in the shortest practicable time. It is believed that no road has commenced its career with more encouraging prospects. The individual stock which is now nearly subscribed amounts to an aggregate of $500,000. The city of Baltimore has extended her aid to an amount of $1,500,000, and the Baltimore and Ohio railroad company are expected to contribute not less than $1.000,000, making an aggregate of $3,-000,000 of available funds. The company will also endeavor to reduce their money wants by the purchase of their iron on time, and a reservation of one-fifth of the contract prices for graduation, masonry and bridging, until one year after the opening of the road for general business.

The steady perseverance with which the corporate authorities of the city of Baltimore have sustained this great charter, and contributed to the prosperous condition in which it has now been placed with the aid and co-operation of some of our public spirited citizens, gives earnest of the important results which are certain to flow from its completion.

It is believed that no step has been heretofore taken in connection with the internal improvement system of the State of Maryland, which has excited more interest both east and west of the Ohio river, or created more alarm among rival and conflicting interests. It places the city of Baltimore in a position from which she may look with indifference, upon all future efforts to retard her growth and prosperity. With her great arms stretching to the north and south, she will have done all that the enterprise of her citizens could suggest, to appropriate to herself the trade of the vast region to which her attention has been so long and anxiously directed.

In concluding this report, the board would invite attention to one other subject.

In the annual report of October, 1850, the attention of the stockholders was called to the fact, that a large amount of capital had been added to the stock of this road, by the appropriation of its earnings from time to time, through a long series of years, for which there had been no corresponding increase in the number of shares represented. To have divided this capital, in the shape of an extra dividend at any period during the progress of the work, or indeed before the revenue justified such an increase of capital, would have been eminently unwise, and must have resulted in the ultimate depreciation of the market value of the stock. The steady maintenance of its dividends was essential not only to the credit of the company, at a time when that credit was most needed, but was not less important to all the great interests connected with the road.

The period is now approaching when these reasons may no longer apply, and it will be the duty of the board at an early day, to ascertain to what extent the net earnings have been so applied since the commencement of the work, according to the standard adopted on all other roads; and to give instructions to the "Finance Committee," that as soon as the increased dividends of the road shall, in their judgment, justify such action, to distribute among the stockholders an extra dividend, to the full extent of the net earnings which have been thus appropriated from time to time. The board feel satisfied that to have acted upon any other basis than that here indicated, would have been attended with injurious effects to the market value of the stock, as well as the general credit of the company among capitalists and business men.

It is now 26 years since the Baltimore and Ohio railroad company made their first annual report to the enterprising stockholders by whose capital and public spirit this board was called into being. Of those who stood prominent in its early organisation, few have survived the delay which has attended the progress of this road, or will be present to rejoice with us in the work of final completion. In the animating prospects of the future, it becomes us, however, not to forget what is due to those who have borne a part in the conception of the grand idea which it embodies. History will do justice to the past as well as the present.

After years of delay, surrounded by embarrassments, and staggering under the vastness of the undertaking—with a credit almost exhausted—its few remaining friends scattered and disheartened—a community over-taxed—and an opposition rendered formidable by the honesty of the convictions under which they acted—this great work entered upon its extension from Cumberland to the city of Wheeling, a distance of more than 200 miles. Through every vicissitude of climate, obstructed by interminable rocks, or opposed by a succession of mountain barriers, altogether without a parallel in the progress of similar enterprises, by day and by night, it has pressed forward in such a march as human labor is seldom called to encounter, sustained only by that determined spirit which so strongly marks the character of the age in which we live; until it is now within reach of the goal for which it has been so long striving.

To this noble city what a prospect it discloses! In the midst of a rivalry stimulated by the importance and magnitude of the results at issue, her mighty destiny is already proclaimed. The rich prize is within her grasp. The union of the Ohio and the Chesapeake, by the favorite highway which nature has indicated, is no longer among the probabilities of the future; and the city of Baltimore, so long retarded in her progress, may yet realize the glowing anticipations of that illustrious man—the first to foreshadow the results of so grand an undertaking—whose imposing column, as it towers in her midst, when it reflects the parting sun as it goes down upon the empire of western commerce, will look with renewed pride upon the enterprize and public spirit of a people whose indomitable courage has achieved the lasting glory of binding together these remote extremes of the union.

By order of the Board, THOMAS SWANN, President.

* The President has received official information since the above was prepared, that a branch of the Cincinnati and Marietta road has lately been put under contract to Belpre, where it will connect with the Northwestern road.

Sault Ste. Marie Canal.

The Lake Superior Journal states that the engineers, Capt. Canfield and Judge Burt, completed their surveys on the location of this work last week, and returned to Detroit, where the plans of the survey will be made out for the use of the general government and the state, in accordance with the provisions of the Act for the construction of the canal. The ground has been found quite as favorable for the easy and speedy construction of this work as was expected. In order to present the precise situation of the shores above and below the rapids, and the intermediate ground, several routes have been surveyed, which will enable the legislature, and parties proposing to interest themselves in its construction, to have a perfect understanding of the whole subject.

The length of canal on the longest line of survey, from the outer extremity of piers, above and below will be about thirty feet less than a mile; the shortest line would be considerably less. The longest route is considered as offering the greatest advantages, for while the additional expense would be but a trifle, and will not in the least delay the work, the longest route would carry the canal "at the head" into much stiller water in the bay above the rapids, affording an easier and more safe entrance for vessels, and at the same time it would be more protected from the heavy currents of ice that sweep down in spring against the docks and shore at the termination of the shortest route.

Railroads in Texas.

The spirit of our neighbors of the young giant of the Southwest is fairly aroused upon the great question of the age—RAILROADS—the prime and indispensable agency of improvements of every kind—without the encouragement of which, no country, whatever may be its natural advantages, can expect to advance, but, on the contrary, must inevitably retrograde. The people of Texas, fully appreciating her natural advantages, are so well satisfied that her immense resources must lie dormant, useless, and profitless, unless developed by means of railroads, that they have aroused themselves to a realizing sense of their condition, and seem determined to put to practical use the gifts that nature has so lavishly bestowed upon them. They are acting like common sense, practical, business people. They have the benefits of experience and observation to influence and direct them, by which they may take warning and profit. By extending the range of vision, and not to any great extent beyond their own borders, they can have a striking illustration of the effects of self-confidence and a fatuous dependence upon local and adventitious position and advantages. Though late in the field, they are not the last in the emulous race of progress, and a cheeringly bright and propitious future is opened to them, if they persist in that great attribute of free agency—helping themselves.

This move on the part of Texas, seems to be a consentaneous and general one, and hence indicative of their determination to persist, and ultimately succeed. It is one in which the people of New Orleans are intimately interested, and should serve as an incentive to provoke them to renewed and continued exertions to strive to appropriate to themselves the trade of that immense and inexhaustible country lying west of the Mississippi, and which at such an easy price, can be secured, if we only enter the field in due time, and with the determination to persevere until the great and glorious object is fully accomplished.

A large meeting was recently held in Palestine, Texas, in which some twenty counties were represented; the proceedings were deeply interesting, and the convention continued their session three days.

Another large railroad convention was held at Houston on the 4th inst., for the avowed purpose of taking into consideration the subject of building railroads to lead from the waters of Galveston Bay into the interior of the state. As we had before stated, a convention was held some time since at Galveston, with the view of adopting a railroad system, the ultimate object of which is to connect by railroads the interior of Texas with the Gulf coast. It seems that the plan recommended by the Galveston convention was approved and endorsed by the Houston convention, and preliminary steps taken to give it effect.

Among the resolutions reported and adopted, we notice one approving of the plan submitted by the Galveston convention, and advising a general convention of the state, for the purpose of consulting on a system of improvements by the state, to be recommended to the legislature for its adoption, and that the question of the Internal Improvement policy of Texas be submitted to the people, with a view to the permanent settlement of that policy by the people themselves. The convention also adopted a resolution to the effect that it is wise and expedient for the state of Texas, to engage vigorously in the construction of a system of railroads for the state.

It further recommended that the legislature should give to the respective counties the privilege of imposing a special tax for objects of internal improvement.

Our people will thus see at once that our neighbors are in council, and have put their hands to the work with a will and determination to carry it through. The prize is in our hands if we will only exert ourselves to secure it. Now is the accepted time to prosecute with vigor and untiring zeal our great road which is to penetrate northern and western Texas and obtain the exclusive enjoyment

of the richest trade in the world.—*N. O. Com. Bulletin.*

National Debt of Great Britain.

The London Times compiles the following particulars from a parliamentary return of the variations of the Public Debt of Great Britain during the last thirty years, both as regards the amount of principal and the annual cost for the payment of interest. It will be seen that the reduction in the principal effected during that period has been only £50,000,000 or 6 per ct., but that as regards the annual charge for interest it has been £3,326,424 or nearly 11 per cent. The lowest point at which the National Debt ever stood of late years was in 1834, when it had declined to $772,196,849. or to ten millions below the amount at which it now stands, the Emancipation loan in 1835, and the Irish Famine loan in 1847 having far more than counterbalanced all subsequent reductions. It is to be remarked, however, that owing to the conversion of the three-and-a-half per cents., and the low rates paid upon the unfunded debt, etc., the actual cost of these obligations is now smaller than at that period. During the next seven or eight years this charge will experience a further diminution of £3,207,500, of which £600,000 will take place by the-three-and-a-quarter per cents. becoming three per cents. in October, 1854, while the cessation of the remainder will occur through the expiry of the Long Annuities in January, 1860, for £1,293,500, and of other annuities amounting to £1,314.000, during the intervening time. The annuity held by the bank for £585,700 does not terminate till 1867. The unfunded debt, which is included in the subjoined totals, was less in 1851 than in any other year of the series, its amount being £17,742,800. In 1822 it was as high as £36,281,150.

	TOTAL DEBT.	
Year.	Amount.	Cost.
1822	£832,811,295	£31,334,551
1823	826,443,364	29,478,454
1824	813,521,672	30,166,421
1825	806,122,467	29,197,187
1826	808,357,590	29,228,967
1827	805,023,742	29,417 543
1828	799,979,540	29,309,052
1829	796,742,482	29,156,611
1830	783,096,646	29,118,859
1831	781,095,234	28,341,416
1832	779,796,540	28,323,752
1833	779,565,783	28,522,507
1834	772,196,849	28,504,096
1835	787,525,466	28,514,610
1836	788,398,570	29,243,599
1837	786,3.9,738	29,489,571
1838	851,373,740	29,260,238
1839	786,512.734	29,454,032
1840	787,448,075	29,381,718
1841	790,874,608	29,450,145
1242	791,250,440	22,428,120
1843	799,576,392	29,269,160
1844	787,568,145	30,495,451
1845	785,053,022	28,253,871
1846	782,918,984	28,077,097
1847	790,349 361	26,144,537
1848	791,809,338	28,563,517
1849	790,927,017	38,323,960
1850	787,020.162	28,091,599
1851	782,889,382	28,017,127

Artesian Wells.

The Galena and Chicago Union railroad company, are now making the great experiment of procuring an ever flowing fountain, at their work-shop and Round house. The contractor of the work, Mr. Hoaer, feels assured that good success will ultimately crown his efforts. After boring through several strata and sub-strata he struck a vein of ore which was reported over the city to be of *lead*, but which a more caretul analysis proves to be Sulphuret of iron. Now, at the depth of 190 feet, they are boring through a solid rock of marble. This admits of a very good polish, though most probably it is a side piece and consequently much coarser than the centre.

The well is now constantly full of soft good water. But the design of the company will not be satisfied without a good fonntain. For this purpose they will bore to a depth of at least 600 feet. Many in our city are looking anxiously for the success of this experiment, and among others, we shall rejoice in its accomplishment.—*Chicago Tribune.*

Massachusetts Railroad Statistics.

Boston and Maine Railroad.—Incorporated in 1833. Incorporated, originally, as the Andover and Wilmington Railroad. In 1837, the road was extended to Haverhill, and in 1839 to New Hampshire State line. In 1841 it was united with the Boston and Maine railroad, in New Hampshire, and the whole line was then called—"The Boston and Maine railroad." Opened (through) in 1843.—Length, (including branches) 83 miles. Length of double track, 29 miles. Cost, January 1, 1852, $4,099,400.

The following table exhibits the operations of the road, during the last ten years; its cost, and the market price of the stock, at the beginning of each year. The item of "interest" is not included in the expenses:—*Boston Courier.*

Year.	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
1842	$	$79 per sh.	$155,880	$79,279	$76,601	6 per cent.
1843	1,960,300	83	178,745	91,755	86,990	6 "
1844	1,384,000	103	223,101	127,621	105,480	6½ "
1845	1,495,500	109	287,063	139,335	147,728	7 "
1846	1,935,100	111	349,137	165,520	183,617	7 "
1847	2,696,700	112	511,505	205,026	306,479	9 "
1848	3,021,200	112	511,628	256,534	255,094	8½ "
1849	3,571,800	109	522,335	258,495	263,810	5½ "
1850	3,930,000	103	594,963	289,478	305,485	5 "
1851	4,021,600	106	633,095	305,068	328,027	7 "
			$3,977,452	$1,918,111	2,059,341	Av. 6¼ p. ct.

Remarkable Feat of an Engine Man.

A Paris correspondent of the Washington Republic relates the following occurrence having taken place on the French Northern railroad. It is an example of the advantage that sometimes arises from meeting opposition with a bold front:

The passengers upon the Northern railroad narrowly escaped destruction some days ago. A large cart, laden down by the weight of an enormous block of stone, had become fastened in among the rails, and the efforts of the three horses to disengage it were perfectly unavailing. The whistle of the express train was heard in the distance. The wagoner, determined to save his horses at least, cut the reins and the harness and made off. The engineer saw the obstacle. reversed the steam, and gave the signal for the brakes. But the engine, which was a Crampton refused to obey, and the machinist saw the utter impossibility of stopping it in time, so he put on the steam again, and drove the train with full force upon the terrinle obstacle. The wagon was snivered to atoms, and the stone sent flying in splinters for rods in all directions. The train was not thrown off the track, and the passengers were unaware of any shock. They did not hear of the danger they had run till they stopped at the next station. The engine was battered, but its vitality was not decreased. The engineer whose coolness and decision saved the passengers is a Pole, and will be the object of some tribute of gratitude from the company.

Hudson River Railroad.

The Albany Argus has the following article relative to the improvements of the depots of the Hudson River railroad, at East Albany, and on the line of the road:

In anticipation of a large and increasing business, both in the passenger and freight departments, the company are erecting additional buildings for the accommodation of both. Upon the site of the old temporary passenger house in East Albany, a new one is being constructed, and south of it, and nearer the river, the foundations of a capacious freight house are already laid. The building is designed to be some 200 feet long by 75 wide. The foundation walls of stone are about 3½ feet thick, and the superstructure is to be of brick.

The bed of the river in front of the freight house and near the shore is being excavated, and the dock extended some 150 or 200 feet south of its present termination. These additional facilities for the accommodation and comfort of the passengers, and the storing of freight, as well as the accommodation that will be afforded for shipping freight from vessels to the store-house, by the deepening of the channel and the completion of the new dock, are demanded both by the experience of the past year, and the well founded expectations of a large increase of business during the present fall and winter.

The receipts of the past year, ending the 1st of October, it appears, have exceeded the estimate by $50,000, the receipts being over $1,034,000. Properly conducted, there is nothing to prevent a continuous and steady increase in its business and resources. An immense amount of labor has been performed during the year along the entire road.—Way station houses have been built and others completed at almost every stopping place. Another track of rail has been put down along portions of the line, and is now brought into nse at several points where the trains pass. The entire double track will have been laid before the close of another year; and then with the guards or flagmen stationed every mile along the line, as now, the danger of accident will be diminished, and the trains run with more regularity and greater speed.

The work going forward at East Albany gives the entire ground in the vicinity of the railroad depot the appearance of the opening of a new settlement—and employment is given to a very large number of men.

Great Straight Line from Baltimore to St. Louis.

We learn from the Cincinnati Commercial that the operations on the Cincinnati and St. Louis railroad—the western link of the great straight line railroad that is to connect Baltimore with St. Louis—are advancing with steady rapidity; more than one thousand hands, with teams of horses, oxen, carts, barrows, etc., being now at work on the line, and the contractors and the company equally gratified with the progress making. These exertions it is designed shall not be relaxed until the entire work is completed. Of the financial condition of the company the Commercial makes a most favorable exhibit. The heavy county and private subscriptions in Indiana, have all been secured by the commencement of the work within the designated time and at the points conditioned for. All the subscriptions are of the best character, and the loan of $600,000 of bonds from the city of Cincinnati is now at a premium. An arrangement has also been made with a banking establishment at Cincinnati, by which all the city bonds are to be taken at a premium when delivered, and all the county bonds are to be received on hypothecation at 90 per cent. At St. Louis financial arrangements have been made of no less value. Within sixty days it is thought, the entire subscriptions for the western end of the road will be secured. These statements, the Commercial says, are in no way exaggerated, but represent truly the prosperous condition of the company and the energy and promptitude with which its management are pushing forward the enterprise. We hope to see this energy emulated by ourselves, and shortly to record similar progress

making in the construction of our link—that from the Three Forks to the Ohio river at Parkersburg—being the most direct, shortest and best route by which the west can be connected with Baltimore, and *through her*, with the other cities of the Atlantic seaboard.—*Balt. American.*

Railroad Items.

The Corning Journal states that the track of the railroad from that village to Blossburg has been relaid with rails of the same weight, and the gauge made to conform with that of the New York and Erie railroad.

The citizens of Elk county, Pa., have confirmed by a large majority, the subscription of one hundred thousand dollars, made by the county commissioners to the stock of the Sunbury and Erie railroad.

The work on the Canandaigua and Niagara Falls railroad is being pushed with great vigor by the contractors, Messrs King, Stencliffe and company. The grading is nearly finished between Canandaigua and Batavia, and some of the iron is being laid.

The earnings of the Watertown and Rome railroad for September were:

From passengers	$17,605 45
From freight	13,740 59
Mail and express	961 19
Total	$32,307 23

The Watertown Jeffersonian says: The receipts for October promise to be even larger than September. The large quantities of bonded flour from Canada arriving at Cape Vincent, together with the heavy local produce business, must fully tax the conveying capacity of the road. These earnings are in excess upon the cost of the road, per mile, of several railroads in this and the Western states, whose stocks command high premiums; which circumstance cannot but be gratifying to stockholders in the Watertown and Rome road and the public in general.

The Poughkeepsie Eagle says of the Hudson River railroad:

"The work of laying down a double track, to extend ultimately throughout the whole length of the road, has been commenced and is vigorously prosecuted on three different sections; the first from east Albany, south; the second from Tivoli to Hudson, and the third from Fishkill Landing to this place. On the northern section it is nearly finished as far down as Castleton; between Tivoli and East Camp, it will soon be ready for the rails, and also from Fishkill Landing to New Hamburg. The directors have decided to have it all completed from this place to Peekskill, to make a continuous double track to New York, as soon as possible. The different sections of double track will be brought into use as fast as completed."

We learn that the Belvidere railroad, from Trenton to opposite Easton, will be finished by the 17th of July next. The object of this improvement is to open a direct communication between Philadelphia and Easton. The road is already completed as far as Lambertville, sixteen miles above Trenton. One purpose of the line is to divert the traffic which now goes over the Central railroad from Easton to New York—so as to bring it via the Trenton railroad to Philadelphia.

The construction of the Wilmington and Manchester railroad has progressed rapidly. Some 76 miles are in operation; 46 at the western end, and 30 at the eastern end of the line. The whole length of the road, when complete, will be 162 miles, and the whole will be completed in 1853. The road is one of the most important links in the great chain of railways between New York and New Orleans.

The annual meeting of the Stonington railroad company was held on the 28th September, at which the old board of directors was re-elected, viz: Chas. P. Williams, Stonington, Conn.; Thos. Tileston, Wm. S. Wetmore, Matthew Morgan, Richard M. Blatchford, Samuel Jaudon, James Foster, Jr., Nelson Robinson, New York city; Nathan F. Dixon, Westerly, R. I. Charles P. Williams, president; Francis Amy, treasurer; James Rutherford, clerk.

The New Haven (Ct.) Journal says, that the route for the Providence and Fishkill railroad from Bristol to Waterbury, is located, and the contract made, under which it is to strike the Naugatuck road at Waterville, and then follow it to Waterbury.

The Chicago and Rock Island railroad is completed from Chicago to Joliet, and commenced operations on the 18th. At Joliet the cars connect with the morning and evening line of packets to La Salle and Peru, also with various lines of stages to Dixon, Peoria, Rock Island, etc., etc., and with the river boats at St. Louis. By the 1st of January the road will be open to La Salle, the head of navigation on the Illinois river, and to Rock Island by the 1st of July. Should this be accomplished, it will be one of the greatest achievements in railroad construction on record—180 miles in 18 months. Mr. Addison R. Gilmore, the former efficient agent of the New Haven road, and who was connected with it from the commencement is now the superintendent of the Chicago road.

The New London Chronicle says the cars of the New London, Worcester and Palmer railroad, came down to the joint depot on Monday, thus connecting with the New Haven and New London road. There is now, therefore, uninterrupted railroad communication from New York to Norwich, and as soon as the very short track is laid down in the latter city—a quarter of a mile being all that is wanted to complete the connection of the two southern roads with the Norwich and Worcester—the line will be continuous from New York to Boston.

At a recent meeting of the stockholders of the York and Cumberland road, the president of the Susquehanna project stated that there were subscribed to the latter $200,000 by the county of Northumberland, Penn., and in case the road was continued to Williamsport, the county of Union was under obligation to subscribe $250,000. Besides these subscriptions there were others by individuals in the counties of Dauphin and Northumberland, amounting to nearly $75,000, thus making the subscriptions, in case the road was only continued far as Sunburry, amount to $275,000; and if continued as far as Williamsport to between $500,000 and $600,000. He had no doubt the individual subscriptions could be largely increased in those counties, but the inhabitants there were awaiting the final expression from the York and Cumberland company in relation to the negotiations now pending between them and the Susquehanna company, respecting the contemplated loan of $500,000 made by the York and Cumberland company, and guarantied by the city council of Baltimore, nor would they subscribe until the result of this negotiation was known. The expense of constructing the road from Bridgeport to Sunbury would be about $1,100,000. $20,000 per mile, the distance being 55 miles. To complete the work to Williamsport, an additional distance of 42 miles, would require an expenditure of about $2,000,000.

The Sodus Bay and Southern railroad has been placed under contract. There was a great celebration at Sodus Point on Thursday, 28th Sept., to commemmorate in an appropriate manner, the commencement of the event.

The Jeffersonville and Columbus (Indiana) road says the Louisville Courier, is entirely completed and well stocked with locomotives, cars, etc.

The Lake Shore road is now in operation from Cleveland to Springfield, within 20 miles of Erie. Ten more miles are nearly ready for the cars, and the short gap will be closed before fall navigation is over. Passengers leaving Buffalo in the evening by railroad now reach Cleveland the next morning.

Regular passenger trains are to commence running upon the Androscoggin R. R. between its junction with the A. & K. road, and Livermore Falls on the 1st of November. Its rolling stock is being received in as fast as it can be conveniently brought over the Boston and Maine road.

The engineers are progressing rapidly with the survey of the Janesville and Dubuque railroad. The company design to have the road under contract next spring, and finished, if possible, in two years. This railroad settles the fate of Dubuque.

It is stated that the Brunswick and Florida railroad company, of Georgia, have contracted in England, for the iron necessary to lay the track from the port of Brunswick, 130 miles, to Thomasville. The contract is a favorable one, having been concluded before the recent advance in iron. The rails are delivered in Brunswick and payment is to be made partly in cash and part in the 10 year bonds of the company at par.

It is in contemplation to build a railroad from Yorktown to Richmond, Va. A convention is to be held at Yorktown on the 19th of October, and the citizens of the surrounding counties have been invited to attend, for the purpose of advancing the proposed scheme.

We learn that the Gov. of Tennessee has issued under the general Internal Improvement law of that state, $240,000 in state bonds to the Memphis road nearly complete. It will soon be entitled to more for the additional miles to Lagrange. Tennessee is a state, with public spirited men in its counsels. Col. Mills, the president of the road, has gone to New York with the bonds to sell them. They are worth 7 to 9 per cent premium.

The Iron Mountain and Lake Superior railroad, under the direction of Henry B. Ely, Esq., who is well known to the public as a man of enterprise, is steadily advancing. The road is already surveyed and located, from the lake to the Jackson Iron Mountain. About half the route is grubbed and cleared and the grading has been commenced. Next season will see the road completed and in use sooner in fact than our Sault canal, with the best exertion which may be used, can be constructed.

Few persons are aware of the enormous resources in iron, which will be poured forth from this source, when the channel is once opened. No portion of the United States can furnish a greater quantity, a purer and better article, or one which will be more accessible to market.—*Lake Superior Journal.*

Mr. F. G. Fowler, one of the conductors upon the Charlotte railroad, has adopted a plan for driving cattle off the track, which we think a capital arrangement and should be adopted by conductors on the various roads generally. It is to station a man with a gun, well charged with small shot, on the front of the engine, who when the cars approach cattle, on the track, is to shoot them in the flank or rump, which will not injure them, but serves more effectually than any thing else that has yet been tried, to keep them at a distance afterwards.

We understand from Mr. Fowler that cattle which have already been stung in that way, invariably make tracks on the approach of a car, as they seem not to like being shot at.—*Winsboro' Register.*

At this present writing, Oct. 8th, the rails of the Toledo, Nowalk and Cleveland railroad are laid a mile or more beyond us, and are progressing rapidly. The locomotive now passes our village daily, and we seem to realize that we shall be put in railroad connection with the Eastern and Western world.

At the close of this week we estimate that one-half of the entire length of our track will be laid, embracing about 35 miles on the western division, and ten on the eastern.—*Oberlin Evangelist.*

From information at our disposal, we doubt not that the extension of the South-Western railroad to Americus in Sumpter county, will be completed in all the year 1853. The same may be said of the Columbus and Opeleika railroad. The connection from Fort Valley on the South-Western to Columbus will be completed by March or April next, and the connection with Augusta (via Waynesboro) will be secured on or before the 1st August next.—*Sav. Republican.*

The receipts of the Central Ohio railroad for September amount to $5,373 83, and for the two weeks ending 19th October, $3,016 89. The number of passengers in September was 5,764, and in the two weeks of October, 2,927.

This road is finished about forty-eight miles westward from Zanesville, or within ten miles of Columbus, its western terminus and its present leading connection is with the Mansfield and Sandusky road running to Lake Erie. By the 1st of December the remaining ten miles will be constructed

—when it will be at once in connection with the great lines running west, south-west, and north-west, having their eastern termini at Columbus. This will then form its main connection, and its receipts will be greatly multiplied. The eastern portion of the Central Ohio road, Zanesville to Wheeling, is now under contract.

American Railroad Journal.

Saturday, October 30, 1852.

Columbus, Piqua and Indiana Railroad.

We learn that this project is making very satisfactory progress, both in the department of construction and in raising the means necessary for this proposed end. We have it from good authority that the company has recently made a very satisfactory sale of its bonds in this market, which places them in possession of ample means for the completion of the road, which is being urged forward with dispatch.

The line of the above road extends from Columbus, the capital of the State, to the Indiana State line at Union, 102 miles, where it will form a junction with the Indianapolis and Bellefontaine railroad, now on the eve of completion. On the East, it is to connect with the Steubenville and Indiana railroad now in progress, and extending from Steubenville to Columbus, a distance of 149 miles. The above roads therefore will constitute the complements of one great line, of 251 miles, traversing the entire State centrally from East to West, taking Columbus, its capital, in its course.

The above road will not only form a great line *through* Ohio, but also a part of a great line extending in a very direct course, from the sea coast to the Mississippi river. The friends of this line claim it to be the shortest line yet proposed between New York and Philadelphia and Indianapolis. By the tables annexed to a map recently published by the Columbus, Piqua and Indiana company, the distance from Philadelphia to Indianapolis is stated to be only 891 miles, as follows:

From Philadelphia to Pittsburgh	355	miles.
" Pittsburgh to Steubenville	40	"
" Steubenville to Columbus	149	"
" Columbus to Union	102	"
" Union to Indianapolis	83	"
Total	891	miles.

Whatever may be its merits as a short line, compared with other routes, in itself, it is certainly a strong one, and cannot fail to strike the public eye in a very favorable light. From Philadelphia, and in fact from New York, the whole line will have an uniform guage to the Mississippi, which is true of no other yet proposed. This fact will tend, with other things, to give to the whole of the above the aspect of one great homogeneous interest, and will undoubtedly secure that harmony and concert of action calculated to promote in the highest degree, the advantage of all the members to it.

The route of the Columbus, Piqua and Indiana road traverses one of the most fertile, productive and well settled portions of Ohio, filled with large and flourishing villages, composed of an active and thriving population. It will have a heavy local in addition to its through traffic; and we cannot doubt that the project will prove an excellent investment, even for an Ohio road. Its affairs, from the outset, have been conducted with marked ability, and the project has made a very favorable impression upon the minds of capitalists in this city, although no effort has been made to give it public notoriety.

Terre Haute and St. Louis Railroad.

We understand that the President of this road, Mr. Brough, is in this city, for the purpose of making arrangement for the immediate commencement of work upon this proposed road. We learn it is the opinion of the best lawyers in New York, that the company, having secured the right of way upon the whole line, is competent to construct the road, without any further legislation on the part of the State of Illinois. The present general railroad law of the State of Illinois provides, that so soon as a stock subscription shall be made, at the rate of $1,000 per mile, for the whole line, and ten per cent of this amount, paid in cash, a company may organize by choice of officers, and may survey and locate their line, which location shall be subject to the approval or rejection of the Legislature, by a subsequent act. The company having obtained the right of way upon the whole line, will not be compelled to resort to courts of law for condemnation of lands. It is claimed, that in such case, the necessity of obtaining further sanction from the Legislature is obviated.

We also learn that there will be no difficulty in obtaining a stock subscription in this city necessary to build the road. The project is looked upon by our most intelligent men, as presenting one of the best opportunities for investment ever afforded in this market, and we should not be surprised to see the stock go up to a handsome premium, as soon as the subscription shall be completed. It will be taken we have no doubt, under such expectations.

It seems, therefore, that the State of Illinois is about to have a very important line of road built, and a very large sum of money expended within her limits, in the face of the most vigorous opposition to prevent such calamities. It is the first case of the kind on record in this country, we believe.—We presume that in time the people will become reconciled to such a flagrant violation of their rights, even though it should build up their legitimate markets, and create an increased demand for their products.

The right to build the above road is, as already stated, denied by the people of Illinois, and the first overt act of construction, will be made the subject of legal action, by which the rights of the parties in the premises will be determined. Should it be in the affirmative, then the company will have nothing to do but go ahead. On the contrary, should it be adverse to the right to proceed, such a decision will undoubtedly be had before any large expenditures are made. The legal questions in this case can be made with very little liability of loss, and we are glad to learn that an opportunity is forthwith to be presented.

Great Railroad Convention.

The Syracuse Journal says: "There is a movement on foot for the holding of a national railroad convention somewhere in the great West, at a time to be named hereafter.—The railroad interest of the country is becoming extensive; reaching from the rock-bound shores of New England, far toward the Rocky Mountains. The states of Indiana, Illinois, Missouri and Iowa are alive to this means of intercommunication, and links and extending lines of railroads are in contemplation and under contract, which will soon send the iron horse in every direction throughout these new, but fertile and flourishing states. The object of the projected convention is to bring the people of the east, west, north and south together, for the purpose of consultation and the requisition of necessary intelligence relating to the interests of the country. Mr. William M. Hall, who was somewhat instrumental in getting up the great River and Harbor conventions at Chicago, in 1847, is now engaged in this enterprise, and is on a trip to the northern and eastern states to awaken an interest upon the subject.—Great good must accrue to the railroad interest by holding the proposed convention.

Maine.

Oldtown and Lincoln Railroad.—At a meeting of the directors of the Oldtown and Lincoln railroad company, holden a few days since, Samuel Veazie was chosen President of the corporation; Charles Stetson, Treasurer; and John A. Peters, Clerk.—Measures are to be taken to push the building of the road, and secure its early completion.

Journal of Railroad Law.

CONSTRUCTION OF A RAILROAD GRANT.

The principles upon which grants restrictive of legislative authority are construed by the courts, is illustrated by a portion of the decision of the Supreme court of Massachusetts, in the case of the *Boston and Lowell railroad corporation vs. the Boston and Maine Railroad Co.*, reported in 5 Cushing, p. 385.

"It was argued on behalf of the plaintiffs that, the defendants have connected themselves with the Boston and Maine extension railroad, and through that connexion are diverting travel from plaintiffs' road. The connexion is admitted, and the question is presented, whether this use of that road is a violation of plaintiffs' charter. Their charter provides "that no other railroad shall within thirty years be authorised to be made leading from Boston, Charleston or Cambridge to Lowell, or from Boston, Charleston or Cambridge to any place within *five miles of the northern termination* of the Lowell railroad"

The *plaintiffs* contend that this clause for the exclusion of other roads goes to the extent of excluding defendants from having another road within the limits, which would be included between the limits of two diverging straight lines drawn from Boston, or the termination in that direction, to such points that each would be five miles distant from the northern termination of the Lowell railroad.

We do not coincide in this view of the construction of the clause in question. Such a limitation might have been provided in the charter of the plaintiffs, and, if so, it ought certainly to be enforced. Public grants are to be construed with some degree of strictness, and especially when they are in the nature of limitations upon the future exercise of legislative power.

It seems to us that the provision under examination, is no more than a restriction, that no other railroad should within thirty years be established under a legislative grant, leading from Boston, or the other towns named, to Lowell; nor one leading in the same general direction and terminating within five miles of the northern termination of the Boston and Lowell railroad. It left *free* the construction of other roads from Boston and the adjacent towns, leading in other directions; and by the limitation as to the five miles, it was intended to prevent any fraudulent evasion of the restriction by means of another road not actually terminating in Lowell; yet so near it that it would be a rival road to Lowell. To secure this object, five miles on each of the terminations of the road at Lowell was taken as the actual exclusion of other roads; leaving such roads however, to be established, passing

more than five miles distant from the northern termination of the Boston and Lowell road. The defendants are not liable to plaintiffs for participation in the construction and use of the Boston and Maine extension.

Quartz Mining in California.

We beg leave to refer our readers to the advertisement of the *Volcano Quartz Mining Company*, to be found in another column. Connected with it they will recognize an old friend, the former proprietor of the Journal. This company certainly offer some of the best inducements to take stock in the above project, in the shape of some specimens of gold bearing quartz, the most splendid, we will venture to say, ever exhibited in this city. A company has been formed for the working of the vein from which the vein was taken, in which are embraced some of our most highly respected citizens. We have the prospectus of this company, which embraces a vast amount of valuable information in reference to the whole subject of Quartz mining in California, to which we shall refer on a future occasion.

Our readers will notice that the books of subscription to the capital stock of this company are to be opened in this city on the 30th inst.

Alabama.

Nashville and Florence Railroad.—The Florence (Ala.) Gazette of Saturday last says: "We have the most encouraging accounts of the prospects of the Nashville and Florence railroad. The route from here to Nashville is being thoroughly examined, and we learn that the company will arrive at Florence in a few days. Mr. Hazlehurst, one of the most talented, efficient and popular engineers, has been in Florence during the past week, and leaves for Aberdeen for the purpose of commencing operations on that part of the line. The road from here to Nashville will soon be located, and contracts will be let out some time between this and Christmas. Indeed everything is working well.

To Contractors.

Contractors will find in our paper of to-day, a notice of some important lettings upon the great New Orleans and Jackson railroad.

Pennsylvania.

Hanover Branch Railroad.—The completion of this road to Hanover, will be celebrated in that borough on Friday next, by a grand jubilee. The cars will make frequent trips over the road, and will carry *gratuitously* all who wish to ride. In the afternoon the guests will be provided with dinner on the commons or in the freight house. Several distinguished gentlemen are invited; and it is intended that the celebration will be worthy the occasion. Military companies from York and Baltimore, with fine bands of music will be present.

The Hanover Spectator in announcing the completion of the road, says:

In announcing this gratifying event to our readers, we cannot refrain from alluding to the extraordinary encouragement which the road is receiving. It has been in operation only a little over two months, and for the greater part of this time laboring under great disadvantages, having no facilities for the loading and unloading of freight, and presenting but few inducements to the traveling public, yet its receipts it is believed, will fall little short of paying all expenses and a handsome dividend on the stock. We have not now the means of ascertaining the exact amount of freight carried over the road, but the judgment of others and our own observation, would place it as not less than one hundred tons per day. This business is constantly increasing, and for many months to come it will be limited only by the rapidity with which the freight can be sent; and the amount of travel shows a uniform steady increase, although, thus far, no special efforts have been made to divert it from other routes.

In fact, the directors have devoted their whole energies to the most desirable object: the completion of the road. This done, we may look for such modifications of existing arrangements as will seem demanded by the public and the interests of the stockholders.

Stock and Money Market.

There is an improved feeling in the stock market which has extended to every variety of securities, and prices are considerably in advance of the past week. Money continues abundant, and there is an active demand for first class stocks and bonds. In bonds, recent sales of Erie first mortgage have been made at $115; Incomes, 98¼; Convertibles 1862, 98¼; 1871, 97¼; Hudson 2d mortgage, 103; Michigan Southern, 102; Northern Indiana, 98½; Government and State stocks are firmly held.

A sale of $10,000 Georgia 6's was made at 109, and $10,000 California 7's at 94. The stock market is also buoyant and active. Late sales of Pennsylvania Coal company have been made at 115, Dauphin 65¼, Delaware 130¼, Michigan Southern at 128, a further advance of 1 per cent.; Madison went to 109¼, an improvement of 1¼ per cent on the last sale; Albany and Schenectady 106¼; Rochester and Syracuse 121; Panama Scrip 135, which is an advance, 8 per cent., on the last sale.

For securities of new works the demand is fair, and companies entitled to credit, find no difficulty in supplying their wants at favorable rates.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, OCTOBER 30, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	109
U. S. 6's, 186z	116
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	118¼
U. S. 6's, 1868	119¼
U. S. 6's, 1868—coupon	119¼
Indiana 5's	98¼
Indiana 2½	54½
" Canal loan 6's	95¼
" Canal preferred 5's	42
Alabama 5's	97
Illinois 6's, 1847	83
Illinois 6's—interest	55
Kentucky 6's, 1871	110
Massachusetts sterling 5's	—
Massachusetts 5's, 1859	—
Maine 6's, 1855	—
Maryland 6's	107¼
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	123
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	112
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96¾
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107¾
Virginia 6's, 1886	111½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	100¾
New York 7's, 1857	108
New York 5's, 1858-'60	102
New York 5's, 1870-'75	104
New York 5's, 1890	106¾
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	105½
Baltimore 1870-'90	106½
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115
Erie 2d mortgage, 7's, 1859	104
Erie income 7's, 1855	98
Erie convertible bonds, 7's, 1871	97¾
Hudson River 1st mort., 7's, 1869	106¼
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	102
Reading mortgage, 6's, 1860	94¾
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	102
Cleveland, Col. and Cin. 7's, 1859	114
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	104½
Ohio Central 7's, 1861	96

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Oct. 28.	Oct. 21.
Albany and Schenectady	106	105
Boston and Maine	107	107
Boston and Lowell	109	109½
Boston and Worcester	105	105
Boston and Providence	89¾	99¾
Baltimore and Ohio	89	98¾
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	97¾	98
Erie	87	85½
Fall River	—	—
Fitchburgh	103¾	104
Georgia	—	—
Georgia Central	—	—
Harlem	71½	70½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	75	74
Little Miami	—	—
Long Island	28	25½
Mad River	—	99
Madison and Indianapolis	107	106½
Michigan Central	110½	111
Michigan Southern	126	126½
New York and New Haven	113	113
New Jersey	134	128
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	51	50
Ogdensburgh	26	25¾
Pennsylvania	46¾	46¾
Philadelphia, Wilm'gton & Balt.	35¾	35
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	97½
Rochester and Syracuse	121	121½
Stonington	58	58
South Carolina	—	122¾
Syracuse and Utica	130	130
Taunton Branch	115	115
Utica and Schenectady	141	138
Vermont Central	17½	17½
Vermont and Massachusetts	22	22¾
Virginia Central	—	40
Western	104¾	104¾
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

For the American Railroad Journal.

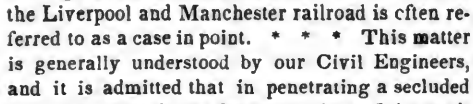
Short and Long Lines of Railroad.

H. V. Poor, Esq:

Your remarks in one of your late numbers, as to the extension of the railway system—particularly in the Western and Eastern States—and of the increased profits, as the several links are brought together on *thoroughfares*, has led me to look upon the following extract of "Facts and Suggestions," which was prepared as early as 1833, to advance the construction of a railway to Albany.

"It is often said that those railways only can be profitable which are of moderate extent, and which unite great cities or thoroughfares; and the case of the Liverpool and Manchester railroad is often referred to as a case in point. * * * This matter is generally understood by our Civil Engineers, and it is admitted that in penetrating a secluded country, although the distant portions of the work may, if separately considered, fail to remunerate for their construction, yet the increased mileage of the remote trade, on the more frequented portions of the work will more than compensate for the deficiency.

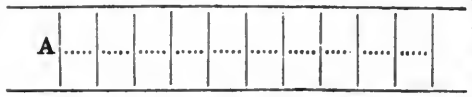
In order to give a correct illustration, we will suppose ten separate districts of country of equal dimensions, and furnishing an equal amount of tonnage and passengers, each district to be intersected through its geographical center by a railway, leading to a market on one of its borders at the point A, as marked in the annexed diagram.



a a a a a a a a a a

We will for the sake of mechanical exactness, further suppose those districts to be ten miles square, and the equal products and travel of each to be drawn to the several railways at points which shall average the mileage at that which is the common center of each district. It is obvious that the average distance which the products will be carried on each railway is five miles, and if the total amount of tonnage or passengers be 5,000 in each district, it will at one dollar per ton or passenger for this distance amount to $5,000. If we now take the aggregate of the ten railroads in the several districts, estimated by the same rule, the aggregate income for the 100 miles, will amount to $50,000. This is a fair exhibition of the operation of railways in single isolated districts, each leading to its local market.

We will now examine the effect of a continuous railway through the same number of districts of like dimensions, and furnishing a like amount of tonnage and passengers, the entire length of railway being the same as before, but leading to a common market at the termination of the tier of districts, as at A, in the following diagram.



It is here evident that the tonnage or passengers of each district, will pass the same average number of miles in the districts as in the former case; but mark the difference which is as follows: The tonnage of the district at the market A will reach its destination in travelling an average of 5 miles, rom the common center of the district; but the products of the second district, after travelling the same distance, must pass through the entire length of the first district, or an average distance of 15 miles, and the tonnage of the 3d district must pass in its turn 25 miles; producing the following results:

From 1st district to market at A, estimated 5 miles, cost of transportation	$5,000
Do. 2nd dis. to market at A, estimated 15 miles, cost of transportation	15,000
Do. 3d dis. to mark. at A, estimated 25 miles, cost of transportation	25,000
Do. 4th dis. to market at A, estimated 35 miles, cost of transportation	35,000
Do. 5th dis. to market at A, estimated 45 miles, cost of transportation	45,000
Do. 6th dis. to market at A, estimated 55 miles, cost of transportation	55,000
Do. 7th dis. to market at A, estimated 65 miles, cost of transportation	65,000
Do. 8th dis. to market at A, estimated 75 miles, cost of transportation	75,000
Do: 9th dis. to market at A, estimated 85 miles, cost of transportation	85,000
Do. 10th dis. to market at A, estimated 95 miles, cost of transportation	95,000
	$500,000

Thus it appears that the amount of income or compensation derived from the same amount of tonnage or passengers, from the same number of districts, or a continuous railway of the same aggregate extent, but leading through the several districts in sequence to a common market, will amount to $500,000, being ten times the amount, which the same business will afford on ten local railways of ten miles each, while from the more simple economy in the superintendence and management of the longer route, the aggregate expenses would be but little increased.

We find, therefore, that extended lines of communication, leading from great market towns towards the interior are by far the most profitable, especially in a country of such wide extent as our own; and it is only the converse of the objection that holds true, viz: That short lines of railway or canal cannot be made profitable in this country, unless uniting important cities or great lines of communication.

This doctrine has been fully exemplified in the construction of the Western railway of Massachusetts, as well as the New York and Erie railroad, and we may add the Erie canal. The laterals, do not pay one per cent on their cost, but make a grand aggregate, when added to the tolls on the main trunk.

Permit me while you are noticing the several branch railroads from Sodus Bay, etc., to the Erie railroad, to draw your attention to a railroad that is projected—from Syracuse to intersect the Rome and Cape Vincent railway, at a point near Kasoag, —or not far from the Sand Banks, Oswego county. If you will look at the map, you will perceive that 30 miles of railway fill up and make a continuous line in the direct travel from Philadelphia, via Binghamton and Syracuse to Cape Vincent, Ogdensburg, and of course Upper Canada, uninterrupted by Lake Ontario.

On another occasion I may give you further information on this subject.

J. E. B.

New York.

The Saratoga Whig says that the work of the Albany and Eagle Bridge railroad is in rapid progress along the whole line, and is nearly completed and will soon be in operation as far north as Waterford, passing through West Troy and Cohoes. The abutments for the bridge over the Hudson river, three miles north of Waterford, will soon be finished and ready for the superstructure, and much of the grading on either side of the river, for several miles has been finished. It is predicted that this road, when completed to Eagle Bridge, will do an extensive and profitable business.

Vermont Central Railroad.

At the annual meeting of the stockholders of this company, recently held at Northfield, Mr. Wm. Raymond Lee from the Committee of Investigation, made a verbal report of the result of their investigations into the affairs of the company, and alleged charges against some of the directors and officers of the road. Mr. Lee stated that, there had been a manifest want of system in the records of the corporation, the stock list had been kept very imperfectly, but is now correct. The bond account was quite imperfect also. Mr. Quincy had received bonds which do not appear on the books, and $30,000 of bonds are charged to him which he did receive. The late Mr. Belknap had also $22,000 of bonds of which there is no record on the books.

The committee report that they do not consider the salary of the president, Mr. Paine, $5000 per annum, too high for a person competent for the place. The directors had also purchased from him land for a depot; this they did with the advice of experienced business men. They also find that the president has loaned large sums to the company at 6 per cent interest, and has without compensation endorsed the papers of the corporation, and that by investments in its stock, he has depreciated his estate, according to their estimate $80,000.

As it regards the charges of peculation, or robbery against the directors, the committee do not see the least taint of suspicion.

With reference to Mr. Quincy, the late treasurer, they deem the matter of too much importance to report, until possessed of all the facts.

The committee consider the location of the road through Northfield, and the location of the repair shops at that place as judicious steps.

The committee have examined thoroughly into the condition of the road, and have found the mason work and bridges substantial; the iron shows some defects; the cross-ties are very much deteriorated and must be soon partially renewed. The station houses are generally well built and commodious, and reasonably cheap. The engines owing to the late fire are not in good order, but this the shops at Northfield will soon remedy; the freight cars are generally in good order.

As to receipts the committee state that from July 1, 1851, to July 1, 1852, they were about $550,000, and the expenditures about $334,000. For the months since May, 1852, the increase of receipts has been 45 per cent, and the committee think that the increase for the entire year may be estimated at 25 per cent. This, after deducting all expenses, interest, etc., would leave a small balance.

Mr. Lee concluded with some remarks relative to the expediency of raising the price of freight.

A resolution offered by Mr. Mead, authorising the issue of the second mortgage bonds was passed, also a resolution of thanks to Messrs. Langdon, Putnam and Dunn, late directors.

The following gentlemen were chosen directors, the last four unanimously, and the others nearly so: Charles Paine, C. O. Whitmore, John Smith, Nathl. Thayer, H. H. Hunnewell, Joel W. White, John H. Peck. The number of shares voted on was 76,129.

A letter from Josiah Quincy was received, addressed to the stockholders, in reference to the matter at issue between him and the board of direetors.

Susquehanna Railroad.

At an election held recently, R. M. Magraw and Michael Herr, Esqrs., were chosen directors of the Baltimore and Susquehanna railroad company, on behalf of the individual stockholders.

Ohio.

The Cincinnati and Dayton railroad company are about to prepare their road bed for a second track, and will commence laying the iron in a short time.

Notice to Contractors.

SEALED PROPOSALS will be received at the Office of the New Orleans, Jackson and Great Northern Railroad Company, in the city of New Orleans, until the 30th of November next, for the grading, masonry, piling and bridging of that part of their road from Lake Maurepas, to the line of the State of Mississippi, a distance of 51 miles.

Also, for the masonry required on the first 36 miles of road from the city of New Orleans to the Lake, at the South Pass Manchac.

The first 9 miles of the section to the State Line, is through the Lake swamp, and includes the piling and bridging (with one draw) of the South and North Passes, the remainder is through a healthy fine country, which, with the contemplated lettings of the remaining 100 miles to Jackson, Mississippi, render this work well worthy the attention of Northern Contractors.

Payments will be made in cash, with 20 per cent retained until the completion and acceptance of the work.

Satisfactory evidence of ability will be required with the proposals.

Plans and profiles will be ready for examination ten days before the letting.

JAMES CLARK, Chief Engineer.

New Orleans, October 16th, 1852.

SAUGATUCK IRON WORKS
WESTPORT, CONN.
Miller & Williamson,

PROPRIETORS.

OFFICE, NO. 5 NASSAU ST., NEW YORK.

MANUFACTURERS of Car Wheels, Axles, Boxes and Pedestals, Locomotive Drivers and Cylinders, Screw Cutters, Drilling Machines, Switch Stands, Levers and Targets, Frogs, Head and Heel Blocks, Chairs, and all Castings connected with the superstructure of Railroads.

REFER TO

Morris Ketchum, Esq., Treasurer, } N. Y. and N. H.
Robert Schuyler, Esq., President, } & Ill. Cent. R.R.
George L. Schuyler, Esq., President, } Saratoga &
J. VanRensselaer, Esq., Eng. & Sup't, } Wash. R.R.
Gouv. Morris, Esq., of Morrisania, V. Pres't } Harlem
M. Sloat, Esq., Superintendent, } R. R.
E. F. Bishop, Esq., President, } Naugatuck R.
Philo. Hurd, Esq., Superintendent, } Road.
Wm. P. Burrall, Esq., Vice President, } N. York &
Geo. W. Whistler, Esq., Eng. & Sup't, } N. H. R.R.
R. B. Mason, Esq., Engineer Illinois Central R. R.
James B. Sargent, Esq., Civil Engineer.
Hon. John S. Brien, Nashville, Tenn.
A. R. Gilmore, Esq., Super't Rock Island Railroad,

October 30, 1852. [Chicago, Ill.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.

Portland, Sept. 21, 1852. tf

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DeWOLF, Jr.

Oct. 2, 1852. 1y*

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 30th November.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

VOLCANO QUARTZ MINING COMPANY, Volcanoville, Eldorado County, California.—Books will be opened at the office of the company, No. 78 Broadway, on Saturday the 30th day of October, inst., at 10 o'clock A. M., for Subscriptions to the Stock of this Company, to the amount of seventy-five thousand dollars. This Company has been organized under the statutes of California, with a capital of $500,000, for the purpose of working the extensive and exceedingly rich mines which have been recently opened at Volcanoville, near the middle fork of the American River; and it is now proposed to sell an amount of stock sufficient to erect machinery of the most approved and powerful description, for the purpose of working them on an improved and profitable scale. The claims of the proprietors of these mines consist of "three thousand six hundred feet, on the line of the vein, with all its offsets, dips, and angles," together with over two hundred acres of land, well timbered supplying an abundance of fuel and timber for many years to come. The vein has been "prospected" or examined at different points for three quarters of a mile, and at one place to the depth of fifty feet, where it is thirteen feet thick, by a shaft six feet in diameter, and by a drift or tunnel of over one hundred and fifty feet, by which it is drained and ventilated, and at the same time worked by a rail track to the mill, which is within five hundred feet of the vein. The proprietors of the vein, who spent nearly a year in opening and thoroughly testing its extent and character, have erected buildings—one forty by fifty, and one thirty by twenty feet—quite sufficient to contain the machinery for working on a large scale, only requiring additional buildings for fuel, offices, etc., so that the machinery may be put in operation in a very short time after its arrival on the ground. As to the vein, its extent and exceeding richness are equal, at least, to the celebrated "Carson Creek Vein," upon which a working capital of over $375,000 has been paid in London, for which the subscribers are to receive forty per cent., and the proprietors of the vein sixty per cent. of the net profits. We will only say that, by a personal examination of the quartz taken from the vein, at different points and various depths, and from free conversation with those who have worked for months upon the enterprise, can be formed a correct estimate of the value and extent of the claims now offered to capitalists and the public. We therefore respectfully solicit those who may feel an interest in such matters to call at the office, No. 78 Broadway, and examine the samples of quartz and gold taken from the Volcanoville mines, and to converse with Mr. Nathaniel Conkling, who was with D. K. Minor, in the mountains during the past year, and who took from the mines the samples now on exhibition.

Perhaps it may be proper for us to say here that our claims are not, in our opinion, surpassed by those of any other company in California, either in extent or richness, and that with proper machinery they will yield very large returns to those who may invest in the enterprise.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

Ten per cent of the amount subscribed to be paid at the time of subscription; 20 per cent in 30 days, or on the 29th of November, and the balance, or 70 per cent on the 29th of December next. Shares of $100 each. Payment to be made in current funds; and subscriptions by mail, addressed to D. K. MINOR, President, No. 78 Broadway, N. York, the same as on personal application.

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR, } of New York.
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY } of California.
JAMES ALLEN,

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Hoole, Staniforth & Co.,
MINERVA WORKS,
SHEFFIELD,

Steel Converters and Refiners;

Manufacturers of Improved Cast Steel Engineering and Machine Files;

Locomotive Engine, Railway Carriage and Wagon Springs.

Saws of every description, Engineers' Hammers, etc., etc., etc.

An assortment of Steel from the above Works constantly on hand by RICHARD MAKIN,
Agent for the Manufacturers,
43tf 65 Broad street.

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

STATE OF NEW YORK.—SECRETARY'S OFFICE, ALBANY, August 14, 1852.

To the Sheriff of the City and County of New York:

Sir—Notice is hereby given that at the next General Election to be held in this State on the Tuesday succeeding the first Monday of November next, the following officers are to be elected, to wit:

A Governor in the place of Washington Hunt;

A Lieutenant Governor in the place of Sanford E. Church;

A Canal Commissioner in the place of Frederick Follet; and

An Inspector of State Prisons in the place of Darius Clark;

All whose terms of office will expire on the 1st day of December next.

Thirty-five electors of President and Vice President of the United States;

A Representative in the Thirty-third Congress of the United States, for the Third Congressional District, composed of the First, Second, Third, Fifth and Eighth Wards;

Also, a Representative in the said Congress, for the Fourth Congressional District, composed of the Fourth, Sixth, Tenth and Fourteenth Wards of said City and County;

Also, a Representative in said Congress for the Fifth Congressional District, composed of the Seventh and Thirteenth Wards of said City and County, and the City of Williamsburgh, in the County of Kings;

Also, a Representative in said Congress, for the Sixth Congressional District, composed of the Eleventh, Fifteenth and Seventeenth Wards of the said City and County of New York;

Also, a Representative in the said Congress for the Seventh Congressional District, composed of the Ninth, Sixteenth and Twentieth Wards of the said City and County; and

Also, a Representative in the said Congress, for the Eighth Congressional District, composed of the Twelfth, Eighteenth, and Nineteenth wards of said City and County of New York.

CITY AND COUNTY OFFICERS ALSO TO BE ELECTED,

Sixteen Members of the Assembly;

A Mayor of the City, in the place of Ambrose C. Kingsland;

A Sheriff, in the place of Thomas Carnley;

A County Clerk, in the place of George W. Riblet;

A Comptroller, in the place of Joseph R. Taylor;

A City Inspector, in place of Alfred W. White;

A Commissioner of Repairs and Supplies, in the place of William Adams;

A Street Commissioner, in the place of John T. Dodge;

A Corporation Counsel, in the place of Henry E. Davies;

Four Coroners, in the place of John Ives, pursuant to chap. 289, Laws of 1852;

Three Justices of the Marine Court, pursuant to chap. 289, of the Laws of 1852, in the place of James Lynch and Edward E. Cowles;

Two Governors of the Alms House, in the place of William M. Evarts and Jonathan I. Coddington;

All of whose terms of office will expire on the last day of December next.

Also, an additional Justice of the Supreme Court for the First Circuit, pursuant to chap. 374 of the Laws of 1852, and

Also, a Justice of the Superior Court in the place of Lewis H. Sanford, deceased.

Yours respectfully,
HENRY S. RANDALL,
Secretary of State.

N. B.—You are without delay, to deliver a copy of the above notice to the Supervisor or one of the Assessors of each town or ward in your county; and also to cause a copy of said notice to be published in all the public newspapers printed in your county, once in each week until the election. If there be no newspaper printed in your county, then the publication is to be made in some one of an adjoining county.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

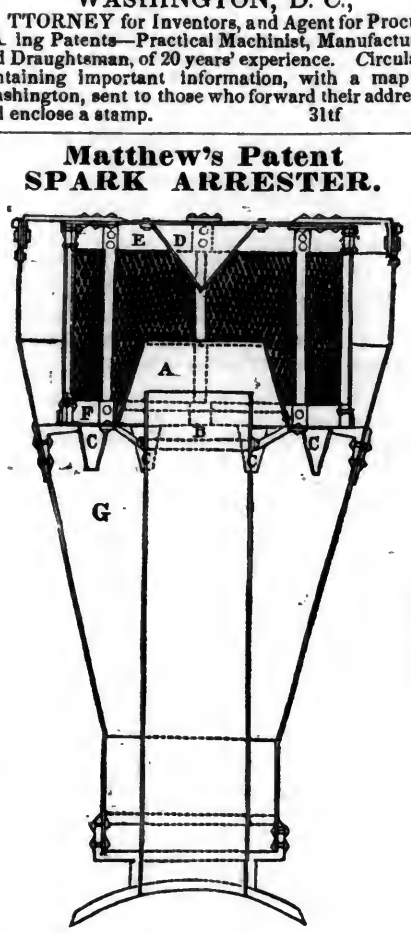
Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:
1st. The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
TO DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
TO DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity. and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

"Leonard's" Patent Double Plate Car Wheel. Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent - WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.

Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United States.

THACHER & SEARS,
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

Elmira Car Shop.

THE Undersigned is prepared to manufacture for Railroad Companies, Passenger, Baggage, Cattle, Freight, Gravel and Hand Cars, also Baggage Barrows and Freight Trucks. WM. E. RUTTER.

Elmira, N. Y., Aug. 14, 1852. tf

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which be now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Babcock & Fennell,

NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent.*
SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO., of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.

August 2, 1852, 1y40

$250.000
San Francisco Water Loan.

Ten per cent. Bonds of $1,000 *each, with Coupons, payable semi-annually, in the City of New York, redeemable on 1st November,* 1862.

THE UNDERSIGNED, PRESIDENT OF the Mountain Lake Water Company, of the City of San Francisco, in the State of California, will receive sealed proposals at the office of Messrs. Dias & Thomas, No. 52 Wall street, in the city of New York, until Thursday, the 4th day of November, 1852, at 2 o'clock P. M., for the whole, or any part of the above mentioned Loan, which will bear an interest at the rate of ten per cent. per annum, payable semi-annually in the City of New York, and be redeemable on the 1st day of November, 1862, in the city of New York.

The undersigned will avail himself of the usual privilege of rejecting conditional bids, and of declining such as he may deem not advantageous.

Bids should be directed "Proposals for San Francisco Water Bonds," and sent to the subscriber.

Twenty per cent. and the premium will be payable on the day after opening the bids, and the balance with accrued interest may be paid at the option of the bidder any time before the first day of February next, thus giving Capitalists an opportunity to secure a most reliable and permanent investment, without precipitately disturbing their financial arrangements.

The debt created by the issue of these Bonds, is for the purpose of paying for the necessary pipes, and fixtures, more than sufficient means being already provided for the purpose of building the dams; reservoirs, laying the pipes, and completing the works; the entire capital of the Company ($500,000,) having been subscribed by the citizens of San Francisco; the subscribers embracing many of its most wealthy and respectable Merchants and Bankers. This is the first and only debt of the Company, and the repayment of the same is secured, by the Transfer in Trust, to James B. Bond and William M. Burgoyne, of all the property and franchises of the Company, valued at upwards of One Million of Dollars.

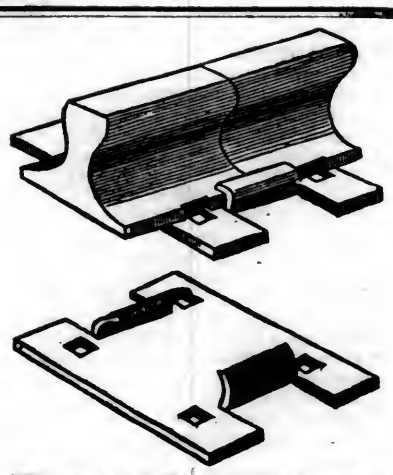
The Company have by law the exclusive right of laying pipes within the city limits, and own by purchase the only source from which water can be introduced into the city.

The Stock of this Company will probably be the best paying stock in the Union.

Copies of the Laws, Reports of Engineer, etc., can be had by calling at the office of Messrs. Dias & Thomas, No. 52 Wall street, second story.

SAMUEL PURDY, President.

New York, October 2, 1852.



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired. Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:
John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D., X. & B. Railroad, Xenis.
A. Degraffe, Railroad Contractor,
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank.

October 8, 1852.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:
Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson, Esq., Baltimore. 38

PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,
ALSO,
Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

Iron Tubes for Artesian Wells, screwed together flush on either side.

THOMAS PROSSER & SON. Patentees,
28 Platt street, New York.

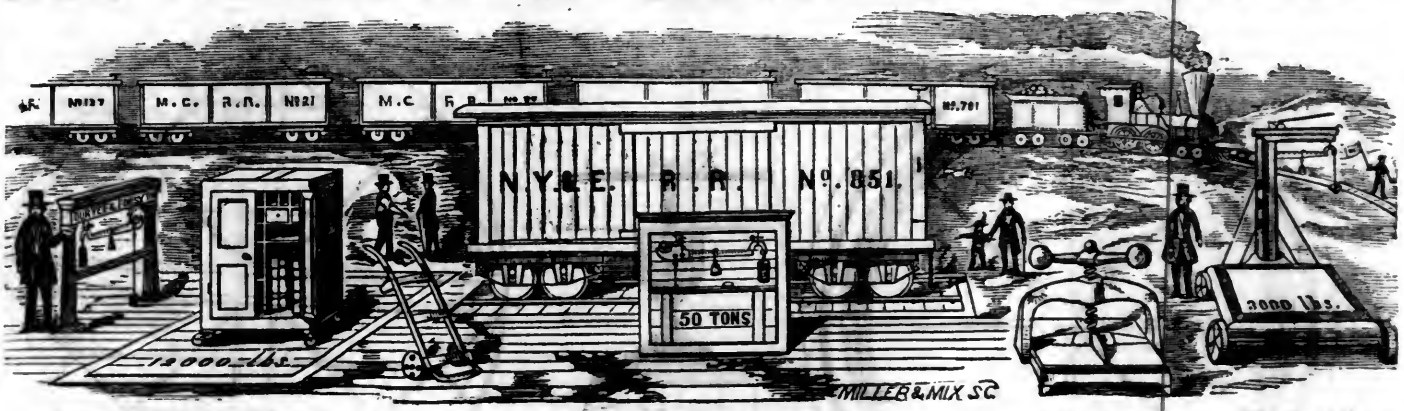
Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFE.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

We wish it distinctly understood, that we use the best CAST STEEL in the bearing edges of our Scales, *although it has been otherwise reported by Messrs. Fairbanks' Agents.* We are ready at all times to test the merits of our Scales with any *honorable* competitor.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to reduce the price of our Scales 10 to 15 per cent from former prices.

Our Mr. Duryee has had over twenty-one years practical experience in manufacturing. The work being under his charge furnishes a sure guaranty of the superiority of our wares. All orders will receive prompt attention. DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr., Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co., " Chicago, Ill.
Crawford & Reynolds, " Cleveland, Ohio.
Joseph E. Elder, " St. Louis, Mo.
Byram, Millier & Shreve, " Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,
New York and Harlem,
New York and N. Haven,
Sandusky, Mansfield and Newark,
Indianapolis and Bellefontaine,
Syracuse and Utica,
Columbus and Xenia,
Lexington and Frankfort,
Hillsboro' and Cincinnati,
Greenville and Miami,
Cayuga and Susquehanna,
Rome and Watertown,
Rutland and Washington,
Erie and State Line,
Rochester, Lockport and Niagara Falls,
Cleveland and Columbus,
Michigan Central,
Mad River and Lake Erie,
Paterson and Hudson R.,
Cincinnati, Hamilton and Dayton,
Buffalo and Rochester,
Rochester and Syracuse,
Louisville and Frankfort,
Chicago and Galena,
Dayton and Western,
Central Ohio,
Chemung,
Illinois Coal Company,
Buffalo and State Line,
Cleveland and Pittsburg,
Michigan Southern,
American Express Co.,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS at the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

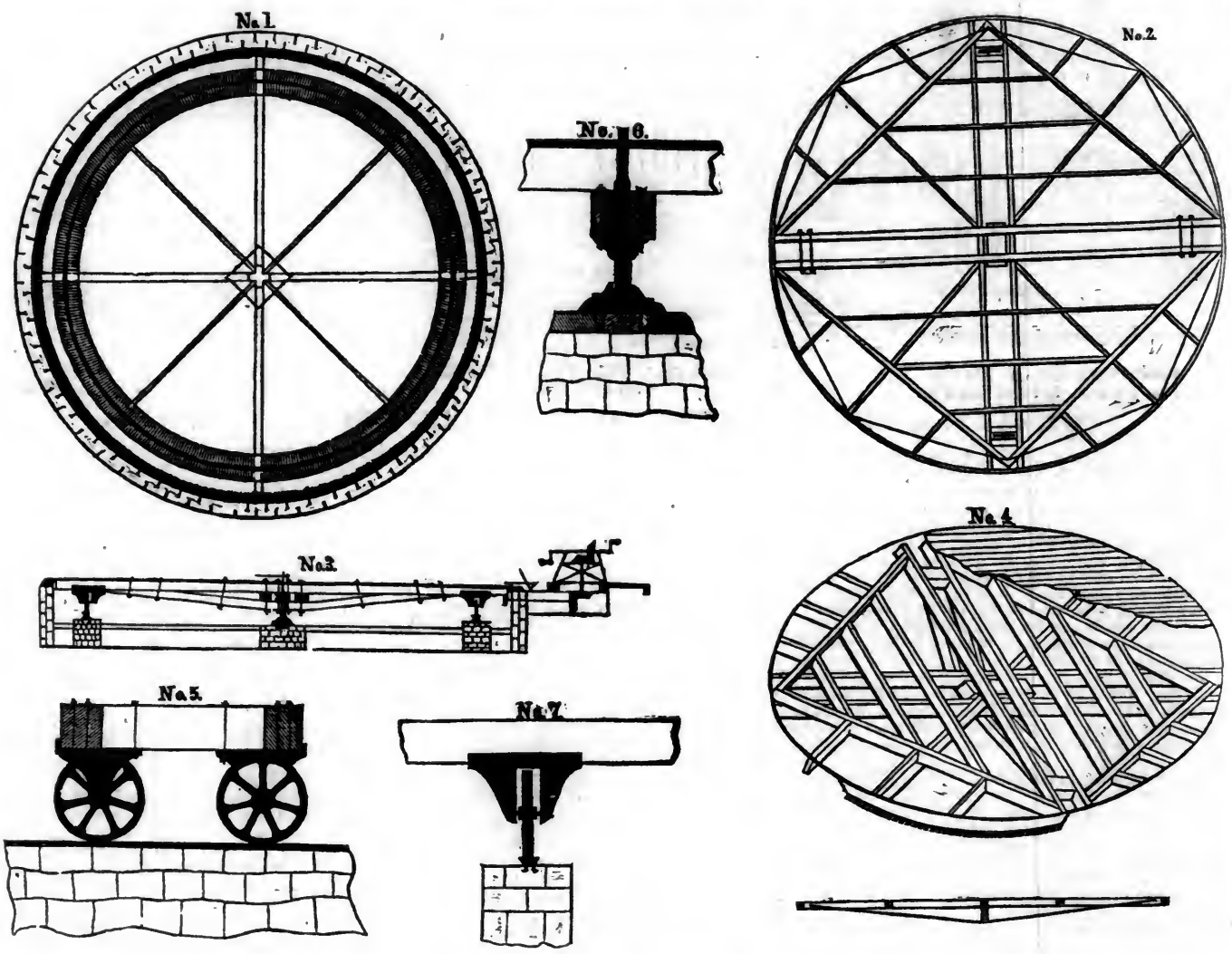
The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

CARHART'S IMPROVED TURNTABLE.



THE Patentee of the improved Turntable solicits an examination of its merits by Railroad Companies. It has been in use on the Hudson River Railroad during the last three years, since which, some improvements have been made upon it. The Patentee is now putting down the fifth table on the Ohio and Pennsylvania Railroad, where these tables have been in use for one year past. The *chief merits* of this Turntable are that it is capable of being turned by two men, with an engine and tender upon it, weighing thirty-five tons, in the space of two minutes. Its cost, including all material, the best kind of workmanship in wood, iron and masonry—except excavating the pit and laying the track—is only *thirteen hundred dollars*, and all repairs, except the ordinary wear and tear, will be guarantied for the sum of five dollars a year, for three years.

Figure 1 of the above cut represents the foundation, consisting of the bank and track walls; centre pier, cross-timber for bolting the step of pivot to. The track, which is spiked and leaded into the coping of the wall, the latter being composed of stone 2½ feet square. The Bank wall is 5 feet high and 20 inches thick, with cut and hammered dressed stone coping laid in lime and sand. Fig. 2 shows the carcass framing. Fig. 3 gives a side view of one main truss, with the mode of gearing, including rack and pinion. Fig. 4 gives a perspective view of rim and segments. Fig. 5 an end view of the main trucks with pedestals and wheels. Fig. 6 screw for pivot, 6 inches in diameter, running to the top of the table, with the lever for adjustment. Fig. 7 shows the cross section of the track wall, wheel and pedestal.

For further particulars please address the subscriber through WM. W. PRATT, Jersey City, N. J.

June 19th. D. H. CARHART.

New York and Canada.


The attention of Merchants, Tra

ders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.

Jan. 20, 1849.

To Telegraph Companies.
TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,

6m*14 75 Broad st., New York.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.

or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Smith & Tyson,,
IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

M. B. Hewson, *Civil Engineer*,
(Open to a New Engagement,)
Memphis, Tenn.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 45] SATURDAY, NOVEMBER 6, 1852 [WHOLE No. 864, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railway Economics.....705
General Railroad Law of Illinois.....706
Journal of Railroad Law.....707
Mode of Calculating "Horse Power".....709
Statistics of the State Works of Pennsylvania.710
Debt of the States.....710
Evansville and Illinois Railroad.....710
Cincinnati, Hamilton and Dayton Road..711, 710
New Jersey Central Railroad.....711
Oscillations of Suspension Bridges.....711
Railroad Items.....711
Phœnixville, Cornwall and Pinegrove Road...712
Ventillation of Railroad Cars.....712
Railroads in Florida.....712
Stock and Money Market.....713
Fort Wayne and Southern Railroad.....714
Mississippi and Atlantic Railroad.....714

American Railroad Journal.

Saturday, November 6, 1852.

Railway Economics.

The first step to a correct idea of our railroads, as far as their uses, objects, cost and results are concerned, is a thorough understanding of the social and industrial character of our people, the geographical and topographical features of the country, the uniformity in the pursuits of the great mass of our people, and the great distance that separates the consuming from the producing regions.

Assuming the occupied area of that portion of our territory east of the Rocky mountains to be 1,100,000 square miles; at least 1,050,000 are devoted to agriculture, while not more than 50,000 are occupied by the manufacturing and commercial classes. These last are made up of a narrow belt of territory lying upon the seacoast extending from Baltimore to the eastern part of the States, and are more widely separated from the great producing regions than any other settled portion of the country. The great peculiarity that distinguishes this from older countries, is that we have no interior markets. The greater part of the country has not been long enough settled for the development of a *variety* of industrial pursuits, which constitute them. So entirely are our people devoted to agriculture, and so uniformly distributed are they over the whole country, that some of our largest States, Tennessee and Indiana, for instance, had no towns in 1850 containing a population of over 10,000.

This homogeneousness in the pursuits of the great mass of our people, and the wide space that separates the producing and consuming classes, as they are popularly termed, necessarily implies the *exportation* of the *surplus* products of *each*. The western farmer has no home demand for the wheat he raises, as the surplus of all his neighbors is the same in *kind*. The aggregate surplus of the district in which he resides has to be exported to find a consumer; and the producer for a similar reason is obliged to *import* all the various articles that enter into consumption that his own industry does not immediately supply; and further, as the markets for our agricultural products lie either upon the extreme verge of the country, or in Europe, the greater part of our domestic commerce involves a through movement of nearly all the articles of which it is composed.

In older countries this necessity of distant movement, as will be the case in this country in time, is obviated by the existence of a great variety of occupation in the same district, which supply directly to each other nearly all the leading articles that enter into consumption.

It is well known that upon the ordinary highways, the economical limit to transportation is confined within a comparatively few miles, depending of course upon the *kind* of freight and character of the roads. Upon the average of such ways, cost of transportation is not far from 15 cents per ton per mile, which may be considered as a sufficiently correct estimate for an average of the country. Estimating at the same time the value of wheat at $1 50 per bushel, and corn at 75 cents, and that 33 bushels of each are equal to a ton, the value of the former would be equal to its cost of transportation for 330 miles, and the latter 165 miles. At these respective distances from market, neither of the above articles would have any commercial value, with only a common *earth* road, as an avenue to market.

But we find that we can move property upon railroads at the rate of 1·5 cents per ton per mile, or for one tenth the cost upon the ordinary road. These works therefore extend the economic limit of the cost of transportation of the above articles to 3,300 and 1,650 miles respectively. At the limit of the economical movement of these articles upon the *common* highway by the use of railroads, wheat would be worth $44 50, and corn $22 27, which sums respectively would represent the actual increase of value created by the interposition of such a work.

The following table will show the amount saved per ton by transportation by railroad, over the ordinary highways of the country.

TABLE showing the value of a ton of wheat and one of corn, at given points from market, as affected by cost of transportation by railroad, and over the ordinary road:

	Transportation by railroad.		Transportation by ordinary highway.	
	Wheat.	Corn.	Wheat.	Corn.
Value at market....	$49 50	$24 75	$49 50	$24 75
10 miles from market	49 35	24 60	48 00	23 25
20 " "	49 20	24 45	46 50	21 75
30 " "	49 05	24 30	45 00	20 25
40 " "	48 90	24 15	43 50	18 75
50 " "	48 75	24 00	42 00	17 25
60 " "	48 60	23 85	40 50	15 75
70 " "	48 45	23 70	39 00	14 25
80 " "	48 30	23 55	37 50	12 75
90 " "	48 15	23 40	36 00	11 25
100 " "	48 00	23 25	34 50	9 75
110 " "	47 85	23 10	33 00	8 25
120 " "	47 70	22 95	31 50	6 75
130 " "	47 55	22 80	30 00	5 25
140 " "	47 40	22 65	28 50	3 75
150 " "	47 25	22 50	27 00	2 25
160 " "	47 10	22 35	25 50	75
170 " "	46 95	22 20	24 00	0
180 " "	46 80	22 05	22 50	
190 " "	46 65	21 90	21 00	
200 " "	46 50	21 75	19 50	
210 " "	46 35	21 60	18 00	
220 " "	46 20	21 45	16 50	
230 " "	46 05	21 30	15 00	
240 " "	45 90	21 15	13 50	
250 " "	45 75	21 00	12 00	
260 " "	45 60	20 85	10 50	
270 " "	45 45	20 70	9 00	
280 " "	40 30	20 55	7 50	
290 " "	45 15	20 40	6 00	
300 " "	45 00	20 25	4 50	
310 " "	44 85	20 10	3 00	
320 " "	44 70	19 95	1 50	
330 " "	44 55	19 80	0	

It will be seen that the value of lands are affected by railroads in the same ratio as their products. For instance, lands lying upon a navigable water course, or in the immediate vicinity of a market, may be worth for the culture of wheat, $100. Let the average crop be estimated at 22 bushels to the acre, valued at $33, and the cost of cultivation at $15, this would leave $18 per acre as the net profit. This quantity of wheat (two-thirds of a ton) could be transported 330 miles at a cost of 10 cents per

mile, or $3 30, which would leave $14 70 as the net profit of land at that distance from a market, when connected with it by a railroad. The value of the land, therefore, admitting the quality to be the same in both cases, would bear the same ratio to the assumed value of $100, as the value of its products, $14 70, does to $18 or $82 per acre; which is an actual creation of value to that amount, assuming the correctness of the premises. The same calculation may of course be applied with equal force to any other kind and species of property.

General Railroad Law of Illinois.

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the General Assembly.* That any number of persons, not less than twenty-five, being subscribers to the stock of any contemplated railroad, may be formed into a corporation for the purpose of constructing, owning and maintaining such railroad, by complying with the following requirements: When stock to the amount of at least one thousand dollars for every mile of said road, so intended to be built, shall be in good faith subscribed, and ten per cent. paid thereon as herein required, then the said subscribers may elect directors for the said company: thereupon they shall severally subscribe articles of association, in which shall be set forth the name of the corporation; the number of years the same is to continue, which shall not exceed fifty years; the amount of the capital stock of the company, which shall be the actual cost of constructing the road, together with the cost for the right of way, motive power, and every other appurtenance for the completion and running of said road, as nearly as can be estimated by competent engineers; the number of shares of which said stock shall consist; the number of directors, and their names to manage the concerns of the company, who shall not be one half in the number of the stockholders, and shall hold their offices until others are elected; the place from and to which the proposed road is to be constructed, and each county into or through which it is intended to pass, and its length, as near as may be, and the names of five commissioners to open books of subscription to the stock. Each subscriber to such articles of association shall subscribe thereto his name, place of residence, and the number of shares of stock taken by him in such company. The said articles of association may, on complying with the next section, be filed in the office of Secretary of State, and thereupon the persons who have subscribed, and all persons who shall, from time to time, become stockholders in such company, shall be a body corporate, by the name specified in such articles.

§ 2. Such articles of association shall not be filed in the office of the secretary of state until ten per cent. on the amount of the stock subscribed thereto shall have been actually and in good faith paid, in cash to the directors named in such articles, nor until there is indorsed thereon, or annexed thereto, an affidavit, made by at least three of the directors named in such articles, that the amount of stock required by the first section has been subscribed and that ten per cent. on the amount has actually been paid in.

§ 3. A copy of any articles of association filed in pursuance of this act, with a copy of the affidavit aforesaid indorsed thereon, or annexed thereto, and certified to be a copy by the secretary of this state, or his deputy, shall, in all courts and places, be presumptive evidence of the incorporation of such company, and of the facts therein stated.

§ 4. When the certificate shall have been filed as aforesaid, the persons who shall have signed and acknowledged the same, and their successors, shall be a body politic and corporate, by the name stated in such certificate; and shall be capable of suing and being sued, and may have a common seal, and may make and alter the same at pleasure, and be capable in law of purchasing, holding, and conveying any real estate and personal property whatever, necessary for the construction of such road, and for the erection of all necessary buildings, yards, and appurtenances for the use of the same.

§ 5. The commissioners for opening books of subscription, named in the act of incorporation, shall, from time to time, after the company shall be incorporated, open books of subscription to the capital stock of the company, in such places, and after giving such notice, as a majority of them shall direct; which books of subscription shall be kept open until all the capital stock shall be subscribed, if the corporation shall so long exist; and in case a greater amount of stock shall be subscribed than the whole capital of said company, the commissioners shall distribute such capital stock as equally as possible among the subscribers; but no share thereof shall be divided in making such distribution, nor shall a greater number of shares be allotted to any subscriber than such subscriber shall have subscribed for.

§ 6. As soon as practicable, after such capital stock shall have been subscribed and distributed as aforesaid, the commissioners to receive subscriptions thereto shall appoint a time and place for the meeting of the stockholders to choose directors, such meeting to be held in one of the counties in or through which such railroad is proposed to be constructed: and notice thereof shall be given by said commissioners, by public notice to be published not less than twenty days previous thereto, in the State paper, and a newspaper published in each county through which the said road shall be intended to run, in which a newspaper shall be published.—Thirteen directors shall be chosen at such meeting, by ballot, and by a majority of the votes of the stockholders being present in person or by proxy; and every such stockholder being so present at such election, or at any subsequent election of directors, shall be entitled to give one vote for every share of stock which he shall have owned for the thirty days next preceding such election; but no stockholder shall vote at any such election upon any stock, except such as he shall have owned for such thirty days. No person shall be a director unless he shall be a stockholder owning stock absolutely and in his own right, and qualified to vote for directors at the election at which he shall be chosen; and at least seven of the directors shall, at the time of their election, be residents of the counties in or through which the route of such railroad shall run. The directors shall be directors for one year, and until others are elected in their places.

§ 7. The commissioners named in the last preceding section shall be inspectors of the first election of directors, shall openly count the votes, and declare the result, and shall, within ten days thereafter, file a certificate thereof, subscribed by them, or a majority of them, in the office of the Secretary of State, and in the office of the clerk of each county, or with the clerk of the county commissioners' court, (as the case may be) of each county in or through which such railroad shall be proposed to be constructed, and shall also deliver to the treasurer of such company all moneys [received] by such commissioners on subscription to such capital stock, and all books and papers in their possession relative to such subscriptions. All subsequent elections shall be held at such time and place in one of these counties through which such railroad shall pass, as shall be directed by the bye-laws of the company.

§ 8. A general meeting of the stockholders of any corporation formed under this act shall be holden annually, at the time and place appointed for the election of directors, and a meeting may be called at any time during the interval between such annual meetings, by the directors, or by the stockholders owning not less than one-fourth of the stock, by giving thirty days public notice of the time and place of the meeting, in the State paper, and a newspaper published in each county through which the said road shall be run or be intended to run, in which a newspaper shall be published; and when any such meeting is called by the stockholders, the particular object of such call shall be stated, and if at any such meeting thus called, a majority in value of the stockholders are not represented in person or by proxy, such meeting shall be adjourned from day to day, not exceeding three days, without transacting any business, and if, within said three days, stockholders having a majority of the stock, do not attend such meeting, then the said meeting shall be dissolved.

§ 9. At the regular annual meeting of the stockholders of any corporation, it shall be the duty of the president and directors in office for the preceding year to exhibit a clear and distinct statement of the affairs of the said company, and at any meeting of the stockholders a majority of those present in person or by proxy may require similar statements from the directors, whose duty it shall be to furnish them when thus required; and at all general meetings of the stockholders a majority in value of the stockholders in said company may fix the rate of interest which shall be paid by the company, for loans for the construction of said road and its appendages, may remove any president or any directors of said company and elect others in their stead: *Provided*, Notice of such intended removal has been given, as required by the last preceding section.

§ 10. In case it shall happen at any time that an election of directors shall not be made on the day designated by the bye-laws of the company, when it ought to have been made, the company for that reason shall not be dissolved, if within ninety days thereafter they shall hold an election for directors in such manner as shall be provided by the bye-laws of the company. There shall be a president of the company, who shall be chosen by and from the directors, and also such subordinate officers as the company, by its bye-laws, may designate, who may be elected or appointed, and required to give such security for the faithful performance of the duties of their office as the company, by its bye-laws, may require.

§ 11. It shall be lawful for the directors to call in and demand from the stockholders, respectively, all sums of money by them subscribed, at such time, and in such payments or installments as the directors shall deem proper, under the penalty of forfeiting the shares of stock subscribed for, and all previous payments made thereon, if payments shall not be made by the stockholders within sixty days after personal demand, or notice requiring such payment shall have been made in each county through which said road shall be laid out in which a newspaper shall be published.

§ 12. The directors of such company shall have power to make by-laws for the management and disposition of stock, property, and business affairs of such company, not inconsistent with the laws of this state, and prescribing the duties of officers, artificers and servants that may be employed, for the appointment of all officers for carrying on all the business within the object and purposes of such company.

§ 13. The stock of such company shall be deemed personal estate, and shall be transferable in the manner prescribed by the by-laws of the company; but no shares shall be transferable till all previous calls thereon shall have been fully paid in, or the said shares shall have been forfeited for the non-payment of calls thereon; and it shall not be lawful for such company to use any of their funds in the purchase of any stock in their own or in any other corporation.

§ 14. All the stockholders of any such company that shall be hereafter incorporated under this act, shall be severally individually liable to the creditors of such company to an amount equal to the amount of stock held by them respectively, for all debts and contracts made by such company, until the whole amount of capital stock fixed and limited by the company in the manner aforesaid shall have been paid in, and a certificate thereof shall been made and recorded, as prescribed in the following section; and shall be jointly and severally liable for all debts that may be due and owing to all their laborers, servants and apprentices, for services performed for such corporation, but not be liable to an action therefor before an execution shall be returned unsatisfied in whole or in part against the corporation, and then the amount due on said execution shall be the amount recoverable, with costs, against said stockholders.

§ 15. The president and a majority of the directors, within thirty days after the payment of the last installment of the capital stock, so fixed and limited by the company, shall make a certificate stating the amount of the capital stock so fixed and paid in; which certificate shall be signed by the president and a majority of the directors, and sworn to by the president and secretary; and they shall, within the said thirty days, file and record the same in the office of the secretary of state.

§ 16. If the directors of any such company shall declare and pay any dividend when the company

is insolvent, or any dividend the payment of which would render it insolvent, they shall be jointly and severally liable for all the debts of the company then existing, and for all that shall thereafter be contracted so long as they shall respectively remain in office: *Provided*, That if any of the directors shall be absent at the time of making the dividend, or shall object thereto, and shall within thirty days thereafter, or after his return, if absent, file a certificate of their absence or objection, with the clerk of the county, or with the clerk of the county commissioners' court of the county in which the principal office of said company is located, they shall be exempt from the said liability.

§ 17. If any certificate or report made or public notice given by the officers of any such company, in pursuance of the provisions of this act, shall be false in any material representation, all the officers who shall have signed the same shall be jointly and severally liable for all the debts of the company contracted while they are officers or stockholders thereof.

§ 18. No person holding stock in any such company, as executor, administrator, guardian, or trustee, and no person holding such stock as collateral security, shall be personally subject to any liability as stockholders of such company; but the person pledging the stock shall be considered as holding the same, and shall be liable as a stockholder accordingly; and the estates and funds in the hands of such executor, administrator, guardian or trustee, shall be liable in like manner and to the same extent, as the testator or intestate, or the ward or persons interested in such trust fund would have been if he had been living and competent to act and held the same stock in his own name.

§ 19. Every such administrator, executor, guardian or trustee, shall represent the shares of stock in his own hands at all meetings of the company, and may vote accordingly as a stockholder.

§ 20. Every such company, before proceeding to construct a part of their road into or through any county named in their certificate of association, shall make a map and profile of the route intended to be adopted by such company; which shall be certified by a majority of the directors, and filed in the office of the county clerk of such county, or with the clerk of the county commissioners' court of such county, for the inspection and examination of all parties interested therein.

§ 21. Every such corporation shall possess the general powers, and be subject to the general liabilities and restrictions expressed in the special powers following, that is to say:

1. To cause such examination and surveys for the proposed railroad to be made as may be necessary to the selection of the most advantageous route for the railroad; and for such purpose, by their officers, agents and servants, to enter upon lands or waters of any person, but subject to responsibility for all damages which they shall do thereto.

2. To receive, hold, and take such voluntary grants and donations of real estate and other property, as shall be made to it, to aid in the construction, maintenance and accommodation of such railroad; but the real estate thus received by voluntary grants shall be held and used for the purposes of such grants only.

3. To purchase, and by voluntary grants and donations receive and take, and by its officers, engineers, and surveyors and agents, enter upon and take possession of and hold, and use all such lands, and real estate, and other property as may be necessary for the construction and maintenance of its railroad and stations, depots and other accommodations necessary to accomplish the object for which the corporation is created; but not until the compensation to be made therefor, as agreed upon by the parties, or ascertained as hereinafter prescribed, be paid to the owner or owners thereof or deposited as hereinafter directed, unless the consent of such owner be given to enter into possession.

4. To lay out this road, not exceeding six rods wide, and to construct the same, and for the purposes of cuttings, embankments, and procuring stone and gravel may take as much more land within the limits of the charter, in the manner provided hereinafter, as may be necessary for the proper construction and security of the road.

5. To construct their road upon or across any stream of water, water-course, road highway, railroad or canal, which the route of its road shall intersect; but the corporation shall restore the stream or water-course, road or highway, thus intersected, to its former state, or in a sufficient manner not to have impaired its usefulness.

6. To cross, intersect, join and unite its railroad with any other railroad before constructed, at any point on its route, and upon the grounds of such other railroad company, with the necessary turnouts, sidings, and other conveniences, in furtherance of the object of its connections; and every company whose railroad is or shall be hereafter intersected by any new railroad, shall unite with the owners of such new railroad in forming such intersections and connections, and grant the facilities aforesaid; and if the two corporations cannot agree upon the amount of compensation to be made therefor, or the points or manner of such crossings and connections, the same shall be ascertained and determined by commissioners to be appointed by the court, as is provided hereinafter in respect to the taking of lands.

7. To purchase lands or take them, may change the line of its road whenever a majority of the directors shall so determine, as is hereinafter provided, but no such change shall vary the original route of such road to exceed one mile laterally.

8. To take, transport, carry and convey persons and property on their railroad, by the force and power of steam, of animals or any mechanical powers, or by any combination of them, and receive tolls or compensation therefor.

9. To erect and maintain all necessary and convenient buildings, stations, depots, and fixtures, and machinery for the accommodation and use of their passengers, freight and business, and obtain and hold the lands necessary therefor.

10. To regulate the time and manner in which passengers and property shall be transported, and the tolls and compensation to be paid therefor; but such compensation for any passenger and his ordinary baggage, shall not exceed three cents a mile, unless by special act of the legislature, and shall be subject to alteration as hereinafter provided.

11. To borrow money, to be applied to the construction of their railroad and fixtures, and purchase of engines and cars, at such rates of interest as is hereinafter provided.

§ 22. Any number of persons, not less than thirteen, intending to organize a corporation under the provisions of this act, and every company that may hereafter organize under this act, may present a petition to the legislature, stating the place from and to which they propose to construct their road, and its location and route, with reasonable certainty, or that they intend to run the said road on the most direct and eligible route between the points of terminus, and praying the legislature to determine whether the construction of the said proposed road will be of sufficient public use to justify the taking of private property for the same. And if the legislature shall determine and decide by law that such proposed road will be of sufficient public utility to justify the taking of private property for constructing and maintaining said road, under the provisions of this act, then such company when organized, may enter upon, take possession of and use all such lands and real estate, as may be required for the construction and maintenance of their railroad, and the convenient accommodations appertaining to the same: making compensation in the manner hereinafter provided, for all lands, real estate, thus taken possession of and used, except such may be voluntarily given to or purchased at an agreed price by said corporation. Whenever the said corporation shall not have acquired by gift or purchase any land, real estate, so required as aforesaid, or which may be affected by any operation connected by such construction and maintenance, the said corporation may present to the circuit court of the district where said lands or real estate may lie, a petition signed by its attorney or agent, describing with convenient accuracy and certainty, by map or otherwise, the lands or real estate so required to be taken or affected as aforesaid, setting forth the name and residence of each owner or other person interested therein as owner, lessee, incumbrancer, as far as known to such attorney or agent, or appearing of record, and praying the appointment of commissioners to ascertain the compensation to be made to such owners and persons interested, for the taking or injuriously affecting such land or real estate as aforesaid. The court shall have satisfactory evidence that notice of an intended application, and the time and place thereof, for the appointment of commissioners of appraisement between said corporation and the owners and persons interested in such lands and real estate, had been given at least ten days previously to such owners personally, or on the premises, or by the publication thereof in a newspaper printed in the county in which such lands or real estate may lie. Such publication to be allowed only in respect to owners who shall appear by affidavit to have residence in the country, known to such agent or attorney whereat such notice could be delivered as aforesaid. The court may adjourn the proceedings from time to time; shall direct any future notice thereof to be given that may seem proper; shall have proofs and allegations of all parties interested, touching the regularity of the proceedings; and shall by an entry in its minutes appoint five competent and disinterested persons commissioners to ascertain such compensation as aforesaid, specifying in such entry a time and place for the first meeting of such commissioners. The said commissioners, before entering upon the duties of their office, shall take the oath required by the laws and constitution of this state, and any one of them may administer oaths to witnesses produced before them; and may adjourn, and may hold meetings for that purpose. Whenever they shall meet to hear proofs and allegations, unless by appointment of the court or pursuant to adjournment, they shall cause reasonable previous notice of such meetings to be given to the said owners or parties interested, or their attorney, or agent, and may each of them issue subpœnas and compel witnesses to appear and testify: they shall hear the proofs and allegations of the parties; and any three or more of them, after reviewing the premises, without fear or favor or partiality, ascertain and certify the compensation proper to be made to the said owners and parties interested, for the lands or real estate to be taken, as well as all damages accruing to the owner of the lands and real estate aforesaid, taken in consequence of the condemnation of the same, or injuriously affected as aforesaid, making such deduction or allowance for real benefit or advantages which such owners or parties interested, may derive from the construction of said road, and may in their discretion assess a separate reasonable sum in favor of such owners and parties interested, or of any person appointed by the court to appear as attorney for them, for costs, expenses, and reasonable counsel fees. They, or a majority of them, shall make, subscribe, and file with the clerk of the Co., or with the clerk of the county commissioner's court, in which such lands or real estate shall lie, a certificate of their said ascertainment and assessment, in which such lands or real estate shall be described by map or otherwise, with convenient accuracy and certainty. The court, upon such certificate and due proof that such compensation and separate sums, if any be certified, have been paid to the parties entitled to the same, or have been deposited to the credit of such parties in the state treasury, or other place for that purpose approved by the court, shall make and cause to be entered in its minutes a rule describing such lands or real estate, in manner aforesaid, such ascertainment of compensation with the mode of making it, and such payment or deposit of the same compensation as aforesaid; a certificate copy of which rule shall be recorded and indexed in the proper recorder's office in like manner, and with the like effect, as if it were a deed of conveyance from the said owners and parties interested to the said corporation. Upon the entry of such rule, the said corporation shall become seized in fee of all the lands and real estate described in said rule, as required to be taken as aforesaid, during the continuance of the corporation, by this or any subsequent act, and may take possession of and hold and use the same for the purposes of said road, and shall thereupon be discharged from all claim for any damages by reason of any matter specified in said petition, certificate or rule of said court. If at any time after an attempted or actual ascertainment of compensation under this or any other act, or any purchase by, or donation to said corporation of any lands for the purposes aforesaid, it shall appear that the title acquired thereby to all or any

part of such lands for the use of said road, or if said corporation shall fail or be deemed defective, the said corporation may proceed anew to perfect such title, by procuring an ascertainment of the compensation proper to be made to any person or persons whose title, claim or interest in, or lien upon such lands, and by making payment thereof in the manner hereinafter provided, as near as may be; and at any stage of such new proceedings, or of any proceedings under this act, the court may by a rule in that behalf made authorize the said corporation, if already in possession, and if not in possession to take possession of and use such premises during the pendency and until the final conclusion of such proceedings, and may stay all actions and proceedings against said corporation on account thereof: *Provided*, Such corporation shall pay a sufficient sum into court, or give approved security to pay the compensation in that behalf, when ascertained; and in every case where possession shall be so authorised, it shall be lawful for the owners to conduct the proceedings to a conclusion, if the same shall be delayed by the company. The said commissioners shall be entitled to receive from said corporation a compensation not exceeding two dollars for each day actually employed by them in the discharge of their duties. Sub compensation to be taxed and allowed by the court. If any commissioner so appointed shall die, be unable or fail to serve, the court may appoint another in his place, on reasonable notice of the application to be approved by the court. The proceedings hereby authorized may be had in the circuit court in a county where the lands lie, and all motions to the circuit court shall be made at a general or special term thereof in said county. The said commissioners shall file the said certificate in the county where the lands to be affected may lie; or in any adjacent county, and any clerk may transfer the same and the proceedings connected therewith to the clerk of the county in which the lands to be affected may lie, or of any county adjacent thereto, whenever such commissioner or clerk shall be so required by said corporation, its agent or attorney. And the legislature hereby reserves (the right) to itself to indicate the routes and termini of said roads, and the same shall not be constructed or commenced without the expressed sanction of the legislature of this state, by a law to be passed hereafter.

§ 23. In case any infant, idiot, or insane person, or any unknown owner or owners, not personally notified to appear, and who shall not appear after such notice, on the appointment of commissioners, shall be interested in any such lands, real estate and property, the court shall appoint some proper person to appear before the said commissioners, and act as attorney for and in behalf of such infant, idiot, insane person, unknown owner, or non-appearing owner, not personally served with notice.

§ 23. If at any time after the location of the track of said road, in whole or in part, and the filing of the map thereof, it shall appear to the directors of said company that the line in some parts thereof may be improved, it shall be lawful for the said directors, from time to time, to alter the line and cause a new map to be filed in the office, where the map showing the first location is or shall be filed; and may thereupon proceed to take possession of the lands embraced in such new location, that may be required for the construction and maintenance of said road on such new line, and the convenient accommodations appertaining to the same, either by agreement with the owner or owners, or by such proceedings, as near as may be, as are authorised under the preceding section of this act, and use the same in place of the line for which the new is substituted. Nothing in this act contained shall authorise the said company to make a location of their track within any city without the consent of the common council of said city.

§ 25. Whenever the track of said railroad shall cross a road or highway, such road or highway may be carried under or over the track, as may be found most expedient; and in cases where an embankment or cutting shall make a change in the line of such road or highway desirable, with a view to a more easy ascent or descent, the company may take such additional lands for the construction of such road or highway, or such new line, as may be deemed requisite by said directors. Unless the lands so taken shall be purchased or voluntarily given for the purposes aforesaid, compensation therefore shall be ascertained in the manner in this act provided, as nearly as may be, and duly made by said corporation to the owners and persons interested in such lands; the same when so taken or compensation made, to become part of such intersecting road or highway, in such manner and by such tenure as the adjacent parts of the same highway may be held for highway purposes.

§ 26. If any such corporation shall, for its purpose aforesaid, require any land belonging to the people of this State, or to any of the counties or towns, the General Assembly of the State and the county and town officers respectively, having charge of such lands, may grant such lands to such corporations for a compensation, which shall be agreed upon between them; and if they shall not agree upon a sale and price, the same may be taken by the corporation as is before provided in respect to other cases.

§ 27. Every conductor, baggage-master, engineer, brakeman, or other servant of any such railroad corporation, employed in a passenger train, or at stations for passengers, shall wear upon his hat or cap a badge, which shall indicate his office, and the initial letters of the style of the corporation by which he is employed. No conductor or collector without such badge, shall demand or be entitled to receive from any passenger any fare, toll, or ticket, or exercise any of the powers of his office; and no other of said officers or servants, without such badge, shall have any authority to meddle or interfere with any passenger, his baggage, or property.

§ 28. Every such corporation shall make an annual report to the Secretary of this State, of the operations of the year ending on the first day of January; which report shall be verified by the oaths of the treasurer and the acting superintendent of operations, and filed in his office by the twentieth day of January, in each year, and shall state—

1st. The capital stock, and the amount actually paid in;

2d. The amount expended for the purchase of lands for the construction of the road, for buildings, and for engines and cars, respectively;

3d. The amount and nature of its indebtedness, and the amounts due the corporation;

4th. The amount received for the transportation of passengers, of property, of the mails, and from other sources;

5th. The amount of freight, specifying the quantity in tons, of the products of the forest, of animals, of vegetable food, other agricultural products, manufactures, merchandise and other articles;

6th. The amount paid for repairs, engines, cars, buildings and salaries;

7th. The number and amount of dividends, and when paid;

8th. The number of engine houses and shops, of engines and cars, and their character;

9th. The number of miles run by passenger, freight and other trains, respectively;

10th. The number of men employed, and their occupation;

11th. The number of persons injured in life or limb, and the causes of such injury;

12th. Whether any accidents have arisen from carelessness or negligence of any person in the employment of the corporation, and whether such person is retained in the service of the corporation.

§ 29. Any such corporation which shall neglect to make such report, shall be liable to a penalty of two hundred and fifty dollars, to be sued for in the name of the people of this State.

§ 30. The property belonging to any company organised under the provisions of this act, shall be listed by the resident secretary or other proper officer, with the Auditor of State; which shall be subject to the same rate of taxation as other similar property of individuals; and the revenue arising therefrom shall be paid into the State treasury, until the entire extinction of the internal improvement debt of the State; after which the said property shall be subjected to taxation, and the revenue arising therefrom, paid as in the case of all other property in the State. The revenue derived under this section, to be applied to the payment of the public debt of the State.

§ 31. The state shall have a lien upon all railroads of said corporations, and their appurtenances and stock therein, for all penalties, taxes and dues which may accrue to the state from said corporations; which lien of the state shall take precedence of all demands, judgments or decrees against said corporations; and the citizens of this state shall have a lien upon all the personal property of said corporation to the amount of one hundred dollars, originally contracted within this state; which, after said lien of the state, shall take precedence of all other debts, demands, judgments or decrees, liens or mortgages, against said corporation.

§ 32. The Legislature may, when any such railroad shall be opened for use, from time to time, alter or reduce the rates of toll, fare, freight, or other profits upon such road; but the same shall not, without the consent of the corporation, be so reduced as to produce with said profits less than fifteen per cent per annum on the capital actually paid in; nor, unless on an examination of the amounts received and expended, to be made by the secretary of state, he shall ascertain that the net income divided by the company from all sources, for the year then last past, shall have exceeded an annual income of fifteen per cent upon the capital of the corporation actually paid in.

§ 33. Any such corporation shall, when applied to by the postmaster general, convey the mail of the United States on their road or roads respectively; and in case such corporation shall not agree as to rates of transportation thereof, and as to time, rate of speed, manner and condition of carrying the same, it shall be lawful for the governor of this state to appoint three commissioners, who, or a majority of them, after fifteen days notice in writing of the time and place of meeting to the corporation, shall determine and fix the prices, times and condition aforesaid; but such prices shall not be less for carrying said mails in the regular passenger trains than the amount which such corporation would receive as freight on a like weight of merchandise transported in their merchandise trains, and a fair compensation for the postoffice car. And in case the postmaster general shall require the mail to be carried at other hours, and at a higher speed, than the passenger trains be run at, the corporation shall furnish an extra train for the mail, and be allowed an extra compensation for the expenses, and wear and tear thereof, and for the services to be fixed aforesaid.

§ 34. If any passenger shall refuse to pay his fare or toll, it shall be lawful for the conductor of the train, and the servants of the corporation, to put him out of the cars at any usual stopping place the conductor shall select.

§ 35. Every such corporation shall start and run their cars for the transportation of passengers and property, at regular times to be fixed by public notice, and shall furnish sufficient accommodations for the transportation of all such passengers and property as shall, within a reasonable time previous thereto, offer or be offered for transportation at the place of starting, and the junctions of other railroads, and at sidings and stopping places, established for receiving and discharging way passengers and freight, and shall take, transport and discharge such passengers and property, at, from, and to such places, on the due payment of tolls, freight, or fare, legally authorised therefor.

§ 36. In case of the refusal by such corporation or their agents, so to take and transport any passengers or property, or to deliver the same, or either of them, at the regular or appointed time, such corporation shall pay to the party aggrieved, all damages which shall be sustained thereby, with costs of suit.

§ 37. In forming a passenger train, baggage, or freight, or merchandise, or lumber cars, shall not be placed in rear of passenger cars; and if they or any of them shall be so placed, and any accident shall happen to life or limb, the officer or agent who so directed, or knowingly suffered such arrangement, and the conductor or engineer of the train, shall each and all be held guilty of intentionally causing the injury, and be punished accordingly.

§ 38. A bell of at least thirty pounds weight, or a steam whistle, shall be placed on each locomotive engine, and shall be rung or whistled, at the distance of at least eighty rods from the place where the said road shall cross any other road or street, and be kept ringing or whistling, until it

shall have crossed said road or street, under a penalty of fifty dollars for every neglect, to be paid by the corporation owning the railroad; one-half thereof to go to the informer, and the other half to the state; and, also, be liable for all damages which shall be sustained by any person by reason of such neglect.

§ 39. Every such corporation shall cause boards to be placed, well supported by posts or otherwise, and constantly maintained across each public road or street, where the same is crossed by the railroad, on the same level; said boards shall be elevated, so as not to obstruct the travel, and to be easily seen by travellers; and on each side of said boards shall be painted in capital letters, of at least the size of nine inches each, the words, "*Railroad crossing—look out for the cars while the bell rings, or the whistle sounds.*" But this section shall not apply to streets in cities, or villages, unless the corporation be required to put up such boards by the officers having charge of such streets.

§ 40. If any person shall, while in charge of a locomotive engine running upon the railroad of any such corporation, or while acting as the conductor of any car, or train of cars, on any such railroad, be intoxicated, he shall be deemed guilty of a misdemeanor.

§ 41. If any person shall willfully do, or cause to be done, any act or acts whatever, whereby any building, construction, or work of any such corporation, or any engines, machine or structures, or any matter or thing, appertaining to the same, shall be stopped, obstructed, impaired, weakened, injured, or destroyed, the person or persons offending, shall be guilty of a misdemeanor, and shall forfeit and pay to the said corporation treble the amount of damages sustained by means of such offence.

§ 42. All penalties imposed by this act may be sued for by the district attorney, and in the name of the people of the State of Illinois; and if such penalty be for a sum not exceeding one hundred dollars, then each suit may be brought before a justice of the peace.

§ 43. Every such corporation shall, within a reasonable time after their road shall be located, cause to be made—

1st. A map and profile thereof, and of the land taken or obtained for the use thereof, and file the same in the office of the Secretary of State; and also like maps of the parts thereof located in different counties, and file the same in the office for recording deeds in the county in which said parts of said road shall lie, there to remain as of record forever.

2d. A certificate, specifying the line upon which it is proposed to construct the railroad, and the grades and curves.

§ 44. If any such corporation shall not, within five years after its incorporation, begin the construction of its road, and expend thereon ten per cent. on the amount of its capital, and finish the road and put it in full operation in ten years thereafter, its act of incorporation shall become void.

§ 45. All existing railroad corporations within this State shall respectively have and possess all the powers and privileges, and be subject to all the duties and liabilities and provisions contained in this act, so far as they shall be applicable to their present conditions, and not inconsistent with their several charters; and all railroad companies that are now constructing their roads, may acquire title to lands necessary for that purpose, under the provisions of this act.

§ 46. This act shall take effect and be in force from and after its passage.

APPROVED: November 5, 1849.

Air Line Railroad.

The Air Line project between New York and Boston is again agitated. It is now proposed to make use of the newly constructed Charles River railroad, which will be met at a point called Scott's Hill, in the town of Bellingham, by a direct line of road passing through the great manufacturing town of Woonsocket, R. I., thence across the State of Rhode Island, and thence through Middletown, and the State of Connecticut, to New York city. When this route is completed, passengers will be in Woonsocket, 36 miles from Boston, in one hour by the express mail train, and in New York, through from Boston, in about *seven-and-a-half hours!*

Journal of Railroad Law.

THE RESTRICTION OF THE LIABILITY OF COMMON CARRIER.

In the case of Stoddard, vs. the Long Island railroad company, decided in the New York Superior court in July last the following doctrine was laid down upon the subject of restricting a common carrier's liability, by means of a *special contract*.

Common carriers have a right to restrict their liability by an express contract, and a receipt given in the following form is valid and sufficient to restrict the general liability which is imposed upon them by common law.

"New York, 181 Received of numbered and marked as in the margin, which we promise to forward to and to deliver to or agent, (loss by fire, water, breakage, leakage, and perils of the sea excepted)."

Yet the just interpretation of such a contract is not to exempt the carriers from *all* losses, but they still remain liable for such as may result from the wrongful acts or the want of due care and diligence of themselves or their agents or servants.

And as the goods in question were delivered by the plaintiff not immediately to the defendants, but to an express company using and enploying the cars on their road, it was held that the plaintiffs were bound by the *special agreement* which they had made with the express company, and were not entitled to recover against the railroad company, unless they could have recovered in a suit against the express company.

The question as to how far a common carrier can restrict his liability by means of an express contract with the party by whom he is employed, does not seem to be perfectly settled. A brief reference to the authorities touching this point may not be without interest.

In the New York Steam Navigation Co., vs. the Merchants Bank, 6 Howard's U. S. Reports 344, the limitation of a carrier's responsibility by express contract was sanctioned by the Supreme court of the United States.

In the 19th Wendell's reports of the Supreme court of the state of New York, in the case of Hallister vs. Nowlen, Judge Bronson remarked in substance that "he should not deny but what a carrier may restrict his liability by express contract. If this doctrine is a sound one, it must rest upon the principle, thnt when a party enters into an express contract for the transportation of goods, therein restricting his ordinary liability he no longer acts as a common carrier, but only as a special agent.

In exonerating such agent from the ordinary risks of transportation, the parties agree that he shall only be liable for negligence or misconduct. If he does act as a *common carrier* it is difficult to perceive how he can escape the legal liabilities of a common carrier.

In a subsequent case, however, Gould, vs. Hill, 2 Hill's New York Supreme court Reports, p. 623, the rule was laid down that a common carrier cannot restrict his legal liability in any way. And this doctrine was sustained in the case of Atwood, vs. Reliance transportation Company 9 Watts Penn. R. 87. In the New York court of Appeals, in 2 Comstock, 204, Judge Bronson remarked that the question as to whether or not a carrier can limit his liability, was considered as perhaps still open.

In the New York Common Pleas in October 1850, it was adjudged by the full court that a carrier *can* limit his responsibility by express contracts. The printed receipts given by the carrier in this case, protected him against all loss by fire. The goods to be delivered were burned before reaching their place of destination. There being no evidence of negligence on the part of the carrier, the court held that he was exonerated from liability.

LAND UNDER WATER.

The Court of Appeals in the case of John S. Gould vs. the Hudson River railroad company, last week decided that the owners of land on the bank of a navigable river, where the tide ebbs and flows, and where their tide extends no further than high water mark, have no such property in the land under water, or such privilege of using the river as to be entitled to recover damages from a railroad company, who by grant from the State, construct their road below high water mark, and cut off the riparian proprietors from access to the channel.

Horse-Power.

The power of the horse is equal to the raising of 150 lbs. through 2¼ miles in an hour. By exerting this amount of force it can, on an average, and under the ordinary vicissitudes of the weather, draw on the turn-pike road about 14 cwt. nett, or 30 cwt. gross; on an iron railway, from twelve to nineteen tons.

The exertion of the animal is the same throughout; the difference in the amount of useful action is dependent on the opposing forces or obstacles with which it has to contend. When drawing on the turnpike-road, its power is opposed by the friction between the axle and nave, between the sides of the wheel (tyres) and the ruts in which they sink, and between the periphery of the wheel and the ground. Besides these obstacles, there are the stones and pieces of dirt, and the like, which form with the wheel a series of inclined planes; and there is the continuous inclined plane produced by the sinking of the earth beneath the wheel, ultimately forming the rut through which it passes.

In the raised or improved modern railway, some of the most important of these opposing forces are withdrawn; the wheel rests on a firm and substantial base—can no longer sink into ruts, and no longer has to contend with a series of inclined planes; consequently the horse exerts its strength simply against the friction between the nave and the axle, and the periphery of the wheel and the rail. The railway is therefore proportionately superior to the turnpike-road. The opposing forces on the railway vary 1-180 to 1-280 part of the power; and in other words, any given power can move along the railway from 180 to 280 times the quantity. The horse, therefore, by the due exertion of its strength, can draw these amounts multiplied by 150; for the power of the horse, when producing the maximum of effect is equal to 150 lbs. The effects produced by the horse under various opposing forces may be thus expressed:

1-180	(180×150) lbs. = 12	tons
1-200	(200×150) lbs. = 13 1-4	tons
1-240	(240×150) lbs. = 16	tons
1-280	(280×150) lbs. = 19	tons

gross weight drawn by the horse through 2¼ miles per hour, or twenty-five miles per day of ten hours.

The great difference, in the amounts of laboring force expressed by 12 and 19 tons result principally from the degree of attention that is paid to the lubricating substance interposed between the axle of the wheel and the nave to diminish friction. When the requisite care is bestowed by frequently cleaning the parts, employing oil of a good quality and often renewing it, the horse will draw about 19 tons, and under other circumstances the effect may be reduced to twelve tons.

Having shown the quantity of gross weight which a horse can draw along the improved railway, it is necessary, for the clear perception of the subject, that we determine as nearly as possible—that is, as the variations in practice will admit—the net amount of effect. The wagons for the transit of merchandise, say on the Liverpool and Manchester railway, weigh respectively about 28 cwt. If the goods conveyed by them were of the same weight, bulk for bulk, the difference between the net and gross amounts might be readily assigned. But as great variations do result, we can only fur-

nish amounts that are approximately correct. I believe, however, that they will be found as nearly correspondent with the effects of practice as can under the circumstances be obtained.

Opposed force.	Gross.	Wagons.	Net Weight.
1-180	12 tons	4¼ tons	7¾ tons
1-200	13¼ tons	4¼ tons	8¼ tons
1-240	16 tons	5½ tons	10½ tons
1-280	19 tons	7 tons	12 tons

drawn by the horse through two and a half miles per hour for ten hours daily.

From the foregoing investigations we can determine the ratios or show the relative amount of horse power that must be expended both on the turnpike road and on the railway, to draw through a given distance the same weight of merchandise.

Opposing Force.	Railway.	Turnpike road.	Ratio.
1-180	12 tons	1½ tons	8 to 1
1-200	13¼ tons	1½ tons	8 5-6 to 1
1-240	16 tons	1½ tons	10 2-3 to 1
1-280	19 tons	1½ tons	12 2-3 to 1

By these numbers we are apprised that one horse on the railway, when the opposing forces are equal to the 1-180 part of the weight can produce as much effective labor, or draw as great a weight through a given distance in a day, as can be accomplished by eight horses on the turnpike road; and when the opposed forces are such as are afterwards stated, the 1-200, 1-240, and 1-280 part of the weight, one horse on the railway will perform as much as 8 5-6, 10 2-3, and 12 2-3 horses on the road respectively; the differences, so far as power is concerned, being decidedly in favor of the general introduction of railroads.—*Glasgow Practical Mechanic.*

Table of Length and Cost of the State Works of Pennsylvania.

Finished Works.	Length.	Cost.
Philadelphia and Columbia railroad, Philadelphia to Columbia.	82	$4,204,970
Eastern division of Pennsylvania canal, Columbia to the mouth of Juniata	43	6,736,509
Juniata division of Pennsylvania canal, mouth of the Juniata to Hollydaysburgh	130	3,521,412
Allegheny Portage railroad, Hollydaysburgh to Johnstown	36	1,828,462
Western division of Pennsylvania canal, Johnstown to Pittsburgh.	105	3,069,877
Total, main line from Philadelphia to Pittsburgh	306	$14,361,320
Delaware division of Pennsylvania canal, Easton to Bristol	60	$1,381,742
Susquehanna division of Pennsylvania canal, mouth of Juniata to Northumberland	39	896,380
North branch of Pennsylvania canal, Northumberland to mouth of Lackawannock	73	1,580,671
West branch of Pennsylvania canal, Northumberland to Lockhaven	72	1,808,472
French Creek division of Pennsylvania canal and feeder, Franklin to Meadville	45	795,802
Beaver division of Pennsylvania canal, mouth of Beaver to New Castle	25	511,671
Total finished works	710	$21,336,058
Unfinished Works.	**Length.**	**Cost.**
North branch canal, Lackawannock to N. Y. State line.	89	$2,484,939
West branch extension, Lockhaven to mouth of Linnemahoning	40	352,456
Erie extension, Newcastle to Erie.	115	3,160,567
Wisconiso feeder, mouth of Juniata to Lyken's valley	13	390,013
Allegheny feeder, mouth of Keskemenetas to Kittaning	15	31,172
Gettysburg railroad, Gettysburgh to Hagerstown	41	667,918
Total unfinished works	314	$7,087,065
Whole amount of finished and unfinished works		$28,423,123

Indebtedness of the several States January 1, 1851.

	Absolute debt.	Contingent debt.	Total debt.
Maine	$600,500	.....	$600,500
N. Hampshire.	76,000	.....	76,000
Vermont	none.	.....	none.
Massachusetts.	1,210,375	5,049,555	6,259,930
Rhode Island	none.	.....	none.
Connecticut	33,000	58,212	91,212
New York	22,530,802	933,036	23,463,838
New Jersey	71,810	.....	71,810
Pennsylvania	40,316,362	.....	40,316,362
Delaware	none.	.....	none.
Maryland	10,960,691	4,463,680	15,424,380
Virginia	11,248,965	3,947,894	15,196,856
North Carolina	none.	977,000	977,000
South Carolina.	2,061,292	.....	2,061,292
Georgia	1,828,472	.....	1,828,472
Florida	none.	.....	none.
Alabama	8,539,110	.....	8,539,110
Mississippi	2,271,707	.....	7,271,707
Louisiana	915,566	10,577,000	11,492.566
Texas	12,435,982	.....	12,435,982
Arkansas	1,506,562	.....	1,506,562
Tennessee	3,352,856	.....	3,352,856
Kentucky	4,397,637	.....	4,397,637
Ohio	18,744,504	.....	18,744,594
Michigan	2,529,872	.....	2,528,872
Indiana	6,775,522	.....	6,775,522
Illinois	16,627,509	.....	16,627,509
Missouri	922,261	.....	922,261
Iowa	79,442	.....	79,442
Wisconsin	12,892	.....	12,892
California	485,460	.....	485,460
Total debt.	170,535,238	31,006,386	201,541,624
Total Jan. 1, '50.	169,549,334	38,756,218	209,305,552
" '49.	179,749,453	40,502,979	211,252,432
" '48.	169,776,030	35,932,008	205,708,038
" '47.	165,129,900	51,781,654	216,911,554
" '46.	179,636,022	44,388,805	224,023,827

Indiana.

Evansville and Illinois Railroad.—We give, in advance of publication, the following extract from the report of the President of the road, Judge Hall, submitted to the stockholders on the 1st ultimo.

Since my last annual report, the road has been finished from Evansville to Princeton, and cars have been running daily over the line. On the 15th day of March last, the grubbing and grading of the road from Princeton to Columbia was placed under contract. That portion of our road is now completed, and cars are daily passing over it. On the 1st of July last, the grading of the road from Columbia to Vincennes was let—as also the bridge across White river. That work is now two-thirds done, and it is believed it will be finished in less than three months. The bridges across Patoka and White rivers are also in a forward state to completion, and will be finished by the time the road is graded. The iron to lay the track has been purchased and a large portion of it delivered at New Orleans. It is now rendered almost certain that the road over the entire distance to Vincennes will be completed by the first of July next.

The business done on the finished part of the road fully comes up to the expectation of its most sanguine friends.

The receipts from transportation since the 1st of January last (when the road was finished to within three miles of Princeton) are as follows:

From passengers	$11,282 13	
From freight	5,605 38	
From mails	300 00	
		$17,187 51
The expenses for same time:		
Wages, etc	$4,184 38	
Fuel, oil and waste	2,007 00	
Damages	144 05	
Repairs of track	1,872 00	
" machinery	334 34	
		8,541 77
Profits		$8,645 74

It will thus be seen, that this project is making the most satisfactory progress, and that the connection between Evansville, the most important point on the lower Ohio, and Terre Haute, and at that point with the railroads of the State, is to be effected at an early day. The railroads in Indiana are certainly making the most rapid and triumphant progress.

Ohio.

Cincinnati, Hamilton and Dayton R. R.—The business on this road, says the Cincinnati Price Current, is rapidly increasing. The receipts of the present month will more than double those of the corresponding month last year. The number of passengers daily carried over the road averages about 1,000, nearly double what was expected before the opening of the same; and when the Indiana road, now in course of construction, shall be completed to Indianapolis, Terre Haute, Lafayette, Peru, Fort Wayne, and Logansport, which will be the case by the close of the year 1853, the number of passengers, per day, will not fall much below two thousand. There is, and will be a corresponding increase of freight. This road is so situated as to be a funnel for all the roads of Central and Northern Indiana and Northern Ohio, doing business with Cincinnati.

The road is 59 miles and a fraction in length, and runs through most of the populous portion of the Great Miami Valley. It is very substantially constructed, three-fourths of the entire distance being both level and straight, and no grade on the other fourth exceeding 20 feet to the mile.

Few roads in the United States possess characteristics which so well adapt them to high speed, and to the transit of property with the smallest amount of motive power, as this does.

We are told that in the spring an Express train will be run through in one and a half hours, connecting at Dayton with the Mad River, and Lake Erie railroad, which will be completed with the new rail, and well ballasted by that time. Eight hours from Cincinnati to the Lake will be the time next spring on this route. Those who have made investments in the Cincinnati, Hamilton and Dayton railroad need have no fears of always receiving good returns. For a new road, only one year in operation, it has surpassed all others in the West.

American vs. English Railways.

The great economy in the construction of American lines, induces me to ask whether they have engineers, contractors and lawyers among them, and if they have, what sort of people they are? Are they anything like ours of the same profession? As to land, that of course they get cheaply. American land owners have the sense to see that railways are national objects, and benefit them individually, and therefore they encourage them by generally giving their land free of cost. Sharp as Americans are, their land owners have not yet arrived at the refinement of setting up imaginary grievances for the purpose of robbing and plundering great national works. At present that is a chalk behind them; they must come to the old and professedly more civilized country to learn that. Railways made for £3,000 a mile, and the rails imported from England, contrast very curiously with our lines, which cost from 10 to 20, and even in some instances above eighty times as much per mile, as for instance, the Blackwall does. No wonder that £10 per mile per week, will enable them to pay 10 per cent dividend, while one of ours with £190, cannot exceed 1¼ per cent, and others much cheaper—as for instance, our London and Northwestern and Great western, with respectively near £100, and near £70 mile per week—can only pay 5¼ and 4 per cent. This is an enigma whose solution lies in the cost of construction. We admit that the American railways are not constructed as ours are. They have more homely work, and lighter rails, and the £3,000 a mile railways are doubt-

less single miles. Still the small cost does not all lie here. Their railways, their stations, their works, are all made for business and not for show. America has no expensive engineers, no contractors, who can afford to give their partners a couple of hundred thousand pounds not to participate in a contract, and no lawyers receiving £20 000 or £30,000 a year out of the shareholders' profits for mere ordinary business. No! as observed, Americans have not reached that pitch of refinement yet, and hence they can get their 7, 8, and 10 to 20 per cent dividend. We are now, however, beginning to open our eyes. Cheaper lines are projected, and about to be constructed.—*Herapath's Railway Journal.*

New Jersey.

Central Railroad.—The President of this company, John T. Johnston, Esq., has addressed a circular letter to the stockholders, in which, after announcing a final interest dividend of 3½ per cent. for the six months ending 1st Octeber last, the financial condition of the company is presented. The road was opened to Phillipsburg, opposite Easton, Pennsylvania, 75 miles from New York on the 2d July. The cars and engines have been received, the ballasting nearly completed, the buildings at Phillipsburgh completed, those at Elizabethport commenced and the contractors settled with in full, with the exception of a few matters in dispute of small amount. Dividends are to be made in stock till the floating debt is paid off. The whole of the mortgage bonds have been issued.

Ferry interest, and 35 miles of road to Whitehouse	$974,893.65
Extension, 28 miles, to Phillipsburg, including interest	1,510,392.79
Depots, shops, etc	43,147.90
Equipment	182,504.64
Cash, wood, coal, etc	33,600.96
Total cost	$2,744,539.94

This cost is represented by:

Capital stock	$986,100.00
Mortgage bonds	1,500.000.00
Somerville mortgage bonds	28 000.00
Somerville bonds payable	97,000.00
Bills payable, (generally 6 to 9 months to run)	116,464.18
Balances of sundry accounts	16,975.76
	$2,744,539.94

The receipts for the six months have been as follows:

	Passengers.	Freight.	Mails, rents, etc.	Totals.
1852, April.	$7,208.80	$5,169.98	$40.16	$12,418.94
" May.	8,832.84	5,714.82	151.61	14,609.27
" June.	8,311.08	4 531.40	541.15	13,383.61
" July .	13,940 28	5,035 68	31.35	19,007.31
" Aug..	16,593.59	6,767 35	114.30	23,475.24
" Sept..	13,871.56	9,335.05	2,256.44	25,463.05
	68,758.15	36,554.28	3,134.99	108,447.42
1851, same months...	50,674.25	25,785.31	1,541.93	78,001.54
Increase....	18,083.90	10,768.97	1,593.01	30,445.87

Receipts.	1852.	1851.	Increase p. c.
Apl 1 to July 1.	$40,501.82	38,184.83	2,316.99 or 7
July 1 to Oct 1.	67,945.60	39,816.71	28,128.89 or 72
Total.....	$108,447.42	78,001.54	30,445.88 or 40
Expenses.			
Apl 1 to July 1.	$27,912.85	20,726.06	7,186.79 or 35
July 1 to Oct 1.	33,223.58	22,587.27	10,636.32 or 47
Total.....	$61,136.43	43,313.32	17,823.11 or 40
Net earnings.			
Apl 1 to July 1.	$12,588.97	17,458.77	*
July 1 to Oct 1.	34,722.02	17,229.45	17,492.57 100
Total.....	$47,310.99	34,688.22	12,622.77 or 40

* Decrease.....$4,869,80 or 20 per cent.

These statements show a large increase since the opening of the road to Easton, and the business promises to be large and profitable.

Suspension Bridges.

The subject of oscillations in chains suspended at two points, has recently been discussed in a paper by J. H. Rohrs, published in the Philosophical Magazine. The object is to explain the causes of fracture in suspension bridges arising from the tramping of troops, gusts of wind, etc. The following are the principal conclusions arrived at.

1st. That if the tension at the ends of the chain where it is suspended be kept constant by allowing play at those points, the variation of tension due to vibration at any other point of the chain will be but small.

2ndly. That if the chain be tied at the points of suspension so that it can have no motion there, a slight extent of vibration will produce comparatively a great increase of tension.

3rdly. That periodic forces, such as may be taken, for instance, to represent the effect of tramping in time of troops moving across the bridge, are dangerous in the extreme, as if they happen to coincide in period with any of the possible types of vibration, the extent of vibration will increase continuously, till it ceases to be represented approximately by a linear or even an equation of the second order; in this case, the chain will be divided by nodal points where there is no vertical motion.

4thly. That the mere transit, without tramping of ordinary loads at an ordinary pace would not cause sensible vibration in a bridge of wide span; but that terms not periodic might be introduced by the variable pressure of wind sweeping in rapid gusts along the platform.

Cincinnati, Hamilton and Dayton Railroad.

In a recent trip over this admirably constructed road, we met with its efficient President, S. S. L'Hommedieu, Esq., who favored us with some information of its business and prospects, that must be highly gratifying to the public and to those who have made investments in its stock.

From the character of the country through which this road is located—from its *received* connections with all the roads leading into Indiana, and to the north and east of Dayton, we are firm in the conviction that the Cincinnati, Hamilton and Dayton railroad, will be one of the most useful and profitable roads of the country, at least for the balance of the present century. No rival road can be built to materially affect its business, or prevent good dividends to its stockholders.

We learn that the business on the road is rapidly increasing, the last month's earnings being *double* those of the first month of the year. The number of passengers carried over the road, seven-eighths of whom are local, have averaged one thousand per day for the last two months. Six hundred per day was higher than the most sanguine anticipated, during the first year. The local freights are also increasing—and at better prices since an amicable understanding was had between the board of Public works and the President of the road.

In less than sixty days the connection at Union will be formed with the Indianapolis and Bellefontaine road, when Cincinnati and Dayton will be in uninterrupted railway communication with Indianapolis, Terre Haute and Lafayette, and then a passenger may breakfast at one extreme point and sup at the other.

We are also informed that in about two weeks the road from Toledo to Bellevue, on the Mad River road, will be completed, so that Cincinnati and Dayton will then be connected by continuous railway with Toledo and Chicago. From these two connections, we may anticipate a large accession of travel over the Cincinnati, Hamilton and Dayton road.

We also understand that by early spring, the Mad River and Lake Erie road, in connection with the Cincinnati, Hamilton and Dayton road, will be in a position to command a full share of the through travel to the East. The T rail is now nearly all laid on the first named road, and by spring will be well ballasted, and in fine condition for speed and comfort. The boats building to run in connection will be superior to any heretofore on the Lake, and are constructed with a view to the greatest safety, comfort and speed. By spring the Lake Shore road from Sandusky to Cleveland will also be completed.

The citizens of Dayton should be proud of this road, for it has given an impetus to our growing city. From the time the cars commenced running upon the road, an impulse has been given to the business and growth of the city, the results of which are now manifest to all in the extensive improvements in progress; and in the activity which is visible in every department of trade.—*Dayton Jour.*

Railroad Items.

The Albany Northern railroad extends from the city of Albany to Eagle Bridge, Rensselaer Co., N. Y., a distance of 32 miles, the whole of which is in a forward state of construction.

The section between Albany and Cohoes, 11 miles, is nearly finished. The rails are being laid and it will be completed in about 30 days. The remainder will be completed in April next. Cars will run to Cohoes as soon as the track is ready, and through to Eagle Bridge in the spring. It will be a first class road, with the Winslow Compound rail, 71 lb. to the yard.

At Eagle Bridge this road connects with the roads leading through Vermont into Canada, and forms the most direct route from this city to Montreal.

Arrangements are in progress to build a branch of some 18 miles from this road, at a point beyond Waterford to Saratoga Springs, which it is intended shall be completed by the first day of June next. When this is done, passengers will be conveyed from Albany to Saratoga Springs in 45 minutes, and from this city via the Hudson River road and Albany, in five hours.

The Ramapo road is now widened to six feet, and the cars of the Erie road run over it to Patterson. From Paterson to Jersey city the new six feet track is being laid rapidly. Before the new year we shall probably have a six feet guage the entire distance from New York to Dunkirk.

The Message of the Mayor of St. Louis states that the debt of that city on the 1st inst. was $2,098,096, being an increase of $362,000 during the year. The whole issue of bonds for the twelve months was $413,000, of which $125,000 was for railroad stock, and the remainder principally for construction of the city water works, harbor improvements, and sewerage. The payments on account of the debt for the year were $51,000.

The Manchester (N. H.) Union says that Walter French, Esq., of that city, has taken a contract for the construction of eighty miles of the Marietta and Cincinnati railroad, extending westward from Marietta nearly to Cincinnati, including grading, bridging, masonry, and laying the track, and involving an expenditure of more than $2,000,000—the work to be completed in two years.

The Cincinnati Gazette says of the Cincinnati and St. Louis railroad:

"The financial affairs of the company are in the most flourishing condition. All the county and individual subscriptions are of the very highest character, and the loan of $600,000 of bonds from the city of Cincinnati is now at premium."

"In Illinois, the counties along the line will, on the 2d November proximo, vote yea or nay on subscriptions amounting in the aggregate to some two hundred thousand dollars."

The subscriptions necessary to extend the Canal railroad to Northampton, Mass., have been com-

pleted, with the exception of the portion assigned to Northampton—fifty thousand dollars. As soon as that is raised, the road will be put under contract.

American Railroad Journal.

Saturday, November 6, 1852.

Pennsylvania

Phœnixville and Cornwall, and Cornwall and Pinegrove Railroads.—The above form a continuous line of railroad, though under two charters, carried through the coal and mineral region of Pennsylvania, and connecting with the Reading railroad. The report of W. H. Wilson, Esq., Civil Engineer, presents a view of the proposed route, and the probable cost of the line. The first named road starts from the line of the Philadelphia and Reading railroad, skirting the southern boundary of the borough of Phœnixville it follows the valley of French creek, which it crosses twice on stone bridges till it reaches Springfield. At this point the Welch mountain is crossed at an elevation of 540 feet above Phœnixville. Proceeding west from Springfield the line pursues the valley of the Conestoga, crossing Muddy creek, one of its largest tributaries, by a wooden bridge, 800 feet in length at an elevation of 40 feet. Another tributary, the Cocalico, is crossed by a similar structure, of 750 feet in length. The South Mountain is crossed at the Hammer creek gap, and the road is thus led to Cornwall. From this point the terminus fixed by one charter, the second road pursues a nearly straight course over a rolling country to the borough of Lebanon, crossing the Quitopahilla creek by a trestle bridge 850 feet in length. After reaching the Swatara creek the line follows that stream, and along the reservoir of the Union Canal company above the Blue mountain to Pine Grove.

Between Phœnixville and Cornwall, there are two curves of fifteen hundred feet radius; one of them at the intersection with the Reading railroad, and the other at Hammer creek, upon entering the South Mountain; with these exceptions, the minimum radius is two thousand feet. Between Lebanon and Pinegrove there are two curves of fifteen hundred feet radius, and probably one of one thousand feet for a short distance at the Swatara crossing in the Blue Mountain gap; no others are under two thousand feet. The maximum grade made use of is forty feet per mile ascending westward, and thirty-five ascending eastward.

The distances are as follows:

From Philadelphia to Phœnixville by Reading rai road	27 miles
" Phœnixville to Cornwall by survey	55¼ "
" Cornwall to Lebanon by survey.	4 "
" Lebanon to Pinegrove " "	23 "
	109¼ miles.

The cost of 1 mile of superstructure is set down at	$8,498.40
The graduation and masonry for a double track road on the 1st division from Phœnixville to Springfield, 19 miles, is	$480,746.13
2nd division to and including bridge over Muddy creek, 15-12 miles, is	415,746.12
3d division from Muddy creek to Cornwall, 21-38 miles, is	574,619.15
From Cornwall to Pinegrove the cost of graduation on the 1st division, 16-75 miles, is estimated at	337,659.64
And the remaining 10-42 miles at $21,000 per mile.	
The total cost	$3,289,281.04

The economical value of the route is next considered. The valley of French's creek contains farming land in a high state of cultivation.

At the eastern terminus, is situated the extensive iron works of Messrs. Reeves, Buck & Co., consisting of three furnaces, rolling mills, etc., producing annually a large amount of bar iron of every description, including railroad bars. A portion of the ore used at these furnaces, is now obtained from Cornwall by canal, and there is no doubt, but that with the increased facility of direct railroad transportation, the quantity would be largely increased. In the immediate vicinity of the proposed road, are three other furnaces, all of which would probably use some amount of Cornwall ore, and furnish a considerable tonnage in the distribution of their proceeds.

At Jones' mine holes, the American mining company, have a steam engine of seventy horse power, and about one hundred men, engaged in extracting copper ore, about five thousand tons of which are annually sent to Philadelphia for shipment.

Within three miles of this part of the route are six blast furnaces, five ore banks, one copper mine, three steam engines employed in raising ore, three rolling mills, four forges, five cotton and woolen factories, one paper mill, one oil mill, thirty-three flour mills, eighteen saw mills, and forty-seven stores.

Through the Conestoga valley the road runs nearly parallel with the Reading railroad, and the Columbia, at a distance of about 14 miles from each, within a belt of 14 miles along this division are one furnace, four forges, fifty-one flour mills, forty saw mills, two paper mills, three woolen factories, fourteen mills for various purposes, fifty-two stores, sixteen tanneries, and ten distilleries. In addition to Morgantown, Churchtown, Ephrata, and other flourishing villages, the line passes near the celebrated Ephrata Springs, a delightful, and much frequented watering place.

At Cornwall are one Anthracite and one Charcoal furnace, and one inexhaustible supply of superior iron ore.

By the extension from Lebanon to Pinegrove there will be secured some local business, but the main dependence of the road will be the transportation of coal. The amount delivered at Lebanon is now stated at 30,000 tons annually, and the local supply to be furnished by these roads along their line is estimated at 200,000 tons annually.

These, together with a share of the trade of the Susquehanna region are urged as the chief inducements in support of the proposed roads.

Ventilation of Cars.

We took occasion about a twelve month ago to draw the attention of railroad proprietors to the necessity of obviating the misery of cold feet endured by passengers in our cars. This desideratum, unless we are much mistaken, has now been obtained.

Understanding that one of the models entered for the Ray premium comprehended this important object in the principle adapted for its ventilation, we could not resist the impulse of examining into its merits.

Mr. Ruttan, from Coburg, Canada, who is the inventor, explained the whole principle, and certainly, to our minds, perfectly satisfactorily. If we are wrong in our estimate of its philosophy, we should like to be convinced of our error.

The car seats are placed upon a double floor, about six or eight inches higher than the aisle or passage, both sides of which are opened by holes or appertures the whole length of the car. At each end of the car there are two self-acting valves which open outward, so that the front valves are always shut, and (unless contracted by the conductor) the rear ones are open. The whole secret, it appears, lies in the *exhaustion* of the air out of the car by the back or rear valves.

As artificial warmth is required in this climate about eight months out of the twelve, we look upon any system of ventilation which does not comprise provision for winter ventilation, as the next thing to being altogether worthless, and Mr. Ruttan has hit the nail upon the head in making this part of his plan his chief object. So simple and complete is the arrangement, that in two or three seconds of time the conductor may change from winter to summer ventilation, and from summer to winter.

A ventilating stove stands in the centre of one side of the car, which receives its supply of air from the purifying box or tank from the top of the car as it is warmed it, of course, runs to the top, and the whole body of air in the car settles down precisely as if it were water—is drawn under the feet of the passengers and so out in rear of the car. The out-going air is thus made, after doing its work in carrying off the miasm produced by fifty pairs of lungs—to warm the feet of the passengers.

If simplicity of construction and philosophy are akin to each other, this invention of Mr. Ruttan's must claim to be one of this character.

Florida.

This state, with a single exception, has no railroad in operation within its territories and none in progress. There are, however, a number of works projected, the most important of which is a railroad across the neck of the Peninsula. A ship canal upon the same route, has also been repeatedly proposed. From the examination of a map of the United States, such a work would appear to be of the greatest public utility. Their construction would save the very long and dangerous circuit around the Peninsula, so destructive to life and property. A ship canal is doubtless practicable, and notwithstanding its utility, its great cost would prove a sufficient obstacle to the commencement of such an enterprise. For a railroad, the route offers remarkable facilities. The inducement wanting to the construction of such a work is large towns, upon either termini. There being, besides, no immediate impulse operating to secure its commencement. The more remote objects, the accommodation of the business and travel of the country, however important this may be, is hardly sufficient to supply the lack of a direct interest. The project, therefore, if it is to be immediately realized, will probably have to be undertaken or encouraged by the general government.

The progress of the roads further north, which are soon to supply continuous lines of railroad from Charleston and Savannah to Mobile and New Orleans, the two great points upon the Gulf, is daily lessening the motive and the necessity for a railroad across the Isthmus. For these reasons its commencement will be likely to be postponed until sufficient local traffic shall be developed upon the route, to warrant its construction.

Should the Brunswick and Pensacola road be constructed, this work must exert a very favorable influence upon the state. It will traverse for a considerable distance, its northern portion, and will add greatly to the importance of Pensacola as a commercial depot.

From the proximity of the settled portions of Florida to tide water, the necessity of railroads is felt less in this than in most of the other states. From the conformation of her territory, her works of this kind must, to a great extent, have a local character. The routes of the greatest public importance are those crossing the neck of the Peninsula already referred to, and one traversing the state from north to south. The latter is daily becoming of greater and greater consequence from the rapid growth of our commerce with the West India Islands, and from the increase of the planting and commercial interests of Southern Florida.

Railroad Iron.

400 TONS of best English Railway Iron, 57 lbs. per lineal yard, in port and to arrive.
For sale by
DAVIS, BROOKS & CO.,
28 Beaver street.
November 1, 1852. 1t

Railroad Iron.

1500 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Railroad Iron.

1400 TONS Railroad Iron, weighing about 55 lbs. per yard, of an approved pattern, now in bond, for sale by
P. CHOUTEAU, Jr, SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Railroad Iron.

1600 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

New York.

Genesee Valley Railroad.—The contracts for the construction of this road, from Rochester to this place, were concluded at Avon on Friday last.—The competition among the bidders was great. The work, we learn, has been let at a very low figure, to energetic and responsible men. The whole to be completed by the 1st day of November, 1853.

North Carolina.

Charlotte Railroad.—The Palmetto State Banner announces that Thursday, the 28th Oct., has been appointed for the celebration of the completion of the railroad to that place. A great crowd is expected. Columbia and the rest of South Carolina, are expected to be present on the occasion.

Louisville and Nashville Railroad.

The election of directors of this company took place on the 8th Oct., and the following gentlemen were selected:—

James Speed, James Guthrie, L. L. Shreve, H. D. Newcomb, Louisville; Eugene Underwood, Nashville; B. G. Adams, Bowling Green; L. B. Thomas, Elizabethtown.

The Vermont and Boston Telegraph Company.

This company have extended their lines through the Connecticut valley to the present terminus of the Passumpsic railroad, and offices are now open for business at Hanover, N. H.; Bradford, Wells River, and St. Johnsbury, Vt. This company are also building a branch, to be completed this month from Rouse's Point to Montreal, making the whole extent of their line about 700 miles, giving Ogdensburgh and Montreal direct communication with Boston and New York, and the valley of Lake Champlain with the valley of the Connecticut, with offices at forty of the principal towns in Massachusetts, New Hampshire, Vermont, and Northern N. York.—*Brattleboro' Eagle.*

Stock and Money Market.

The stock market remains with very little alteration from our last report. Some few of the fancies have advanced, but the general tenor of the market for the two weeks has been pretty uniform. Money also continues abundant, and rates of interest on short transactions rule low. There is also an active demand for best class railroad securities for investment.

The receipts of the Erie railroad for October, are as follows:

Oct., 1852	$376,838 89
Oct., 1851	356,553 00
Increase	$20,285 89

The aggregate earnings of the first ten months of the year are $2,993,907
1851 2,177,437

Increase in 1852	$816,470

The receipts of the Hudson River road in October are $105,511 11
Oct. 1851 69,038 06

Increase about 53 per cent.	$36,473 05

The following statement shows the collections at the office of the Philadelphia and Columbia railroad for the month of October and for the year:

Amount as per last report	$356,894 90
Amount for month ending Oct. 31, 1852	46,898 77
Whole amount since Nov. 30, 1851	403,793 87
Same time last year	358,243 13
Increase	$45,550 64

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, NOVEMBER 6, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	109¼
U. S. 6's, 1862	115¼
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	119¼
U. S. 6's, 1868	119¼
U. S. 6's, 1868—coupon	119¼
Indiana 5's	99¼
Indiana 2½	56¼
" Canal loan 6's	95¼
" Canal preferred 5's	47
Alabama 5's	97
Illinois 6's, 1847	83
Illinois 6's—interest	55
Kentucky 6's, 1871	110
Maryland 6's	108¼
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	112
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115¼
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105¼
Pennsylvania 5's	96¼
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99¼
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1886	111½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	102½
New York 7's, 1857	108
New York 5's, 1858-'60	102
New York 5's, 1870-'75	102½
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	109
Baltimore 1870-'90	106
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115
Erie 2d mortgage, 7's, 1859	105½
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	98½
Hudson River 1st mort., 7's, 1869	108
Hudson River 2d mort., 7's, 1860	99½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	88
Reading mortgage, 6's, 1860	98½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	98½
Cleveland, Col. and Cin. 7's, 1859	121
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	105
Ohio Central 7's, 1861	96½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Oct. 28.	Nov. 4.
Albany and Schenectady	106	108
Boston and Maine	107	107½
Boston and Lowell	109	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	89	98½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	—	127
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	97½	97
Erie	87	85½
Fall River	—	—
Fitchburgh	103½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	71½	71½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	75	76
Little Miami	—	—
Long Island	28	35
Mad River	—	99
Madison and Indianapolis	107	109
Michigan Central	110½	110½
Michigan Southern	126	125
New York and New Haven	113	113
New Jersey	134	132
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	51	50½
Ogdensburgh	26	26
Pennsylvania	46½	46½
Philadelphia, Wilm'gton & Balt.	35½	36½
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	98½	97½
Rochester and Syracuse	121	123
Stonington	58	5 6
South Carolina	—	122½
Syracuse and Utica	130	133
Taunton Branch	115	115
Utica and Schenectady	141	143
Vermont Central	17½	17½
Vermont and Massachusetts	22	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

For the American Railroad Journal.

Fort Wayne and Southern Railroad.

The above company was chartered by the legislature of the state of Indiana in the year 1849, and Allen Hamilton, Samuel Hanna, J. S. Buckles, and others, named as corporators. On the 19th day of November, 1851, the company was organized by the election of Wm. Rockhill president, and Wm. F. Jones secretary.

Stock books were soon after opened, and an amount of stock subscribed in cash and valuable real estate, was obtained far beyond the expectation of the most sanguine friends of the project.

On the first day of June, 1852, the stockholders met at Bluffton, and elected an efficient board of ten directors. Dr. Samuel P. Anthony, of Muncie, was chosen the permanent president of the company; Joseph S. Buckles, Esq., treasurer, and Wm. F. Jones secretary.

The company have already procured a survey of the northern division of the line, extending from Fort Wayne, on the Wabash and Erie canal, to Muncie, a distance of sixty-four miles, and the estimates as made by Wm. J. Holman, Esq., the chief engineer, of the company, show that the country through which this road passes is remarkably adapted to the construction of railways. The route surveyed makes very nearly an air line, having no curvatures, except at the stations. The maximum grades are less than thirty feet per mile, and estimates place the entire cost of the road when ready for the iron at $2,220 20 per mile, a fact, it is believed without a parallel, in the history of our railroads.

The company intend to have the southern division surveyed and made ready for letting at as early a day as possible, to Columbus, the northern terminus of the Jeffersonville railroad, on the Madison and Indianapolis railroad.

The above road makes the chain complete across the state, from Fort Wayne to the Ohio river at Louisville, and to Madison by the Madison and Indianapolis road. At the Ohio river it connects with the Louisville and Nashville road leading to the southern states. In its connections, this road will possess facilities which few or any enjoy. At Fort Wayne, it connects with the Ohio and Indiana road; at Muncie with the Indianapolis and Bellefontaine; at Newcastle with the Richmond and Chicago; at Louisville with the extension of the Hamilton and Eaton railroad; at Shelbyville with the Lawrenceburg, and with the Madison and the Jeffersonville roads at Columbus; giving to it the business north and south, without a competitor, and all the advantages of the eastern and western trade at the many points of intersection with the roads named. The fertility of the country traversed, promises in a few years, a local trade of an immense value. This road traverses more good land from Fort Wayne to Jeffersonville than any other in Indiana, and the valleys of the Maumee, St. Mary, Little River, Wabash, Salamonee, Lick Creek, Mississinnewa, White River, Beech Creek, Blue River, Lewis Creek, Flat Rock, Haw Creek, etc., are of the best quality. The rivers crossed, are good mill streams. The country traversed is now producing an abundant surplus, and when the above road shall be completed, it will become one of the best agricultural regions in the west. The southern division of the line traverses a country, already in a high state of cultivation, producing corn, wheat, hogs, cattle, horses, sheep, to an almost incredible extent. This division of the road is 74 miles in length.

The 64 miles from Muncie north is uniformly a good country, being gently undulating lands, noble forests of oak, Walnut, Ash, Sugar Tree, Beech Hickory, Buckeye, Elm, etc. This section of country holds out at this time strong inducements, to men wishing to buy. The company is becoming possessed of large tracts for stock, which will be sold as circumstances may require.

In view of all the considerations stated, it is believed that no recent project comes before the public under better auspices, or with better prospects of success.

Banking in Illinois.

The following is a list of the Banks, established under the Free Banking Law of Illinois:

Name.	Capital.	Stock deposits.	Their value.	Circulation
Marine, Chicago.	$550,000	153,000	101,000	78,000
Clark's Exchange.	600,000	554,000	279,000	279,000
Merchant's, Chicago.....	100.000	50 000	54.700	54,700
Darien Stock.....	300,000	30,000	50,000	49 995
Chicago City....	200,000	50,000	50.000	40,995
Ottawa.....	500,000	50,000	50,000	49.995
Lucas & Simonds	250,000	52,000	51,119	58,000
Chicago Commercial.....	264,000	50,000	50,000	35,000
America, Chicago	1,000,000	93,000	50,060	10,000
Chicago Bank...	1,000,000	108,000	52,615	24,000
Rock Island.....	500,000	50,000	50,000	49,995
Peoria Central...	500,000	50,000	50,000	20,000
Quincy City.....	1,000,000	50,000	50,000	.....

Mississippi and Atlantic Railroad.

In another column we give the notice of the opening of the books for subscription to the capital stock of this company, at Winslow, Lanier & Co's, in this city, on Saturday next.

We also give the opinion of Messrs. Sandford and Kent, eminent and well known lawyers, in this city, upon the competency of this company to proceed in the construction of their road, under the general railroad law of the State, without any further authority from the Legislature. We give the general railroad law, and the opinion entire, that our readers may have the whole record before them.

We have good reasons for believing that the stock of the company will be filled immediately, upon the opening of the books. The project is regarded with great favor, as promising a very profitable investment. It is also in the hands of strong parties, who have the confidence of the public, and there will be no danger of any lack of means to carry it vigorously forward.

If any issue is involved in the construction of this road, we are glad to see that it is to be made at once; for it is one in which this company cannot fail to come off most triumphantly. Should one be made, it will be between an absurd and exploded system, which has already subdued the State with an enormous debt, and unjust, and partial legislation, on the one hand, and wise policy, and equal and just rights to all, on the other. It is not difficult to tell which would be the prevailing party in such a contest. Any attempt to defeat the Mississippi and Atlantic road, would only recoil with double force upon the heads of its authors. It, therefore, this company have not sufficient legal rights to proceed, they are pursuing just the proper course to secure them. It is doubtful whether any attempt will be made to stop the project. The courts of the State cannot interfere, as we understand it; neither do we believe the State will attempt to, in its sovereign capacity. It would be too monstrous an act of folly and injustice to be thought of for a moment. We believe the "State policy" to be dead. The people of Illinois have had enough of it. It is an absurdity upon which has been sacrificed 12 or $15,000,000, which has brought with it repudiation, disgrace, and a loss of credit, from which the State will suffer an additional loss of millions more. Illinois railroad securities will not bring so much in this market by 10 per cent. as equally good ones of Ohio and Indiana; owing, in a great measure, to the results of her "State Policy."

With regard to the state of Illinois, all we have ever contended for is, that the people of any particular portion of it shall be allowed to construct their railroads upon such routes and in such directions as they shall deem most for their interest; that this privilege shall not be acceded to one section and denied to others. Abstractly all the projects in the state, stand in the same relation to us. We are equally friendly to all, equally desirous to advance the good of all, and we desire to see all of them possess equal rights at home, as they should public favor abroad. We are glad to see the Mississippi and Atlantic railroad, at last under such favorable auspices. We are assured that capitalists are eager to take up the project, and we do not believe that it will suffer any interruption to its successful progress.

Below is the opinion referred to:

STATEMENT OF CASE.

The tenth article of the constitution of the state of Illinois, declares that corporations, not possessing banking powers or privileges, may be formed under general laws, but shall not be created by special acts, except for municipal purposes, and in cases where, in the judgment of the general assembly, the object of the corporation cannot be attained under general laws.

Also, that the general assembly shall encourage internal improvements, by passing liberal general laws of incorporation for that purpose.

Under this constitution, the general assembly of Illinois passed an act entitled an act to provide for a general system of railroad incorporations.

The first section provides that any number of persons, not less than twenty-five, being subscribers to the stock of any contemplated railroad, may be formed into a corporation for the purpose of constructing, running, and maintaining such railroad, by complying with the requirements therein specified. Among these, articles of association are to be subscribed, in which shall be specified the place from and to which the proposed road is to be constructed, and each county into or through which it is intended to pass. Such articles of association are to be filed in the office of secretary of state, and the act declares that thereupon the persons who have subscribed, and all persons who shall from time to time become stockholders in such company, shall be a body corporate, by the name specified in the articles.

The twentieth section declares that every such company, before proceeding to construct a part of their road into or through any county named in their certificate of association, shall make a map and profile of the route intended to be adopted, which shall be certified by a majority of the directors, and filed with the county clerk of such county.

The twenty-first section declares that every such corporation shall possess the general powers, and be subject to the general liabilities and restrictions expressed in the special powers therein enumerated. Among these are to cause such examinations and surveys for the proposed railroad to be made; to receive, hold, and take such voluntary grants of real estate and other property as shall be made to it; to purchase, and by voluntary grants and donations receive and take, and by its officers, engineers, and surveyors and agents, enter upon and take possession of, and hold and use all such lands and real estate and other property as may be necessary for the construction and maintenance of its railroad and stations, depots and other accommodations necessary to accomplish the object for which the corporation is created; to lay out its road, not exceed-

ing six rods wide, and to construct the same; to take, transport, carry and convey persons and property on their railroad by the force and power of steam, of animals, or any mechanical powers, or by any combination of them, and receive tolls or compensation therefor; to erect and maintain all necessary and convenient buildings, stations, depots and fixtures and machinery for the accommodation and use of their passengers, freight and business, and obtain and hold the lands necessary therefor; to regulate the time and manner in which passengers and property shall be transported, and the tolls and compensation to be made therefor; but such compensation for any passenger and his ordinary baggage shall not exceed three cents a mile, unless by a special act of the legislature; to borrow money to be applied to the construction of their railroad and fixtures, and purchase of engines and cars.

The twenty-second section provides that any number of persons, not less than thirteen, intending to organize a corporation, and every company thereafter organized under the act, may present a petition to the legislature, stating the place from and to which they propose to construct their road, and its location and route with reasonable certainty, or that they intend to run the said road on the most direct and eligible route between the points of terminus, and praying the legislature to determine whether the construction of the said proposed road will be of sufficient public utility to justify the *taking of private property for the construction of the same.* And if the legislature shall determine and decide by law that such proposed road will be of sufficient public utility to justify *the taking of private property* for constructing and maintaining said road under the provisions of this Act, then such company, when organized, may enter upon, take possession of and use, all such lands and real estate as may be required for the construction and maintenance of their railroad, and the convenient accommodations appertaining to the same, making compensation in the manner hereinafter provided, for all lands, real estate thus taken possession of and used, except such as may be voluntarily given to, or purchased at an agreed price by said corporation.

This section then provides for such corporations obtaining the title to such lands, required as aforesaid, which should not have been acquired by gift or purchase and concludes with these words. "And the legislature hereby reserves (the right) to indicate the routes and termini of said roads, and the same shall not be constructed or commenced without the expressed sanction of the legislature of this state, by a law to be passed hereafter."

The forty-fourth section provides that if such corporation shall not, within five years after its incorporation, begin the construction of its road, and expend therein ten per cent on the amount of its capital, and finish the road and put it in operation in ten years thereafter, its act of incorporation shall become void.

Under this general law, a body corporate has been formed, under the name of the Mississippi and Atlantic railroad company, to construct a railroad from Terre Haute to St. Louis, and this corporation either have obtained or are in a situation to procure all the real estate necessary for the construction of said road, and for the erection of all necessary buildings, yards and appurtenances for the use of the same, by voluntary grants and donations, without requiring any compulsory proceedings to take any private property for that purpose.

The question is, whether being so legally organized as a corporation for that purpose, under the law, and having acquired all the necessary lands by voluntary grants and donations, the body corporate may proceed to construct a railroad upon their own land, and transport persons and property thereon, and take tolls and compensation therefor without the express sanction of the legislature of the state of Illinois, by a law to be thereafter passed for that purpose.

OPINION.

I have examined with much attention the several provisions of the act to provide for a general system of railroad incorporation, which is referred to in the case, and have come to the clear conclusion, that the corporation formed as above stated, and having acquired the title to the requisite lands may proceed to construct their railroad, and enjoy all the privileges granted and declared by said law, without any further legislative act or sanction.

No question respecting the existence of this right could have arisen, had the last clause of the twenty-second section been omitted. In that section alone, provision is made for an application to the legislature, and such an application is prescribed for the single contingency of the inability of the company to obtain the necessary lands, without the authority of the law to take private property without the consent of the owner for the construction of the same. In cases where the owners of lands could not be induced to grant the requisite facilities for the construction of a railroad, then it is eminently fit and proper to arrest the action of the corporation which proposed to construct a railroad through such lands, until the legislature had determined that the proposed route was of sufficient public utility to justify the invasion, by force of the law, of private property, for that purpose. The taking of private property, under such circumstances, is one of the highest exercises of sovereign power. It is a well established principle under the constitution and laws of Illinois, that private property cannot be taken, on any terms, without the consent of the owner, except for the necessities of the state. The legislature of the state of Illinois appear to have considered the determination of this question, by far, too important to be delegated to corporations, who are not political agents, to be exercised by them, at their own discretion, and for their own benefit. When that very vague term, "public utility," was adopted as the basis upon which the legislative power and will were to be exerted, in appropriating private property, it became necessary to reserve to the legislature itself, the right to determine when, and in what particular places, the public uses required the forcible assumption of private property, in order to protect the private rights of the individual owner from unjust invasion on the part of his more enterprising neighbors.

But the general Act of the State of Illinois does not provide for nor contemplate the making of any application to the Legislature to authorize the construction of any railroad within the State, in any case where the Corporation which shall be formed under it shall not require the sovereignty of the State to exercise the right of eminent domain, and take private property for its use. If the aid of the law be necessary to dedicate the property of a citizen, against his will, to the use of a railroad corporation, then the Legislature has reserved the right to determine the public utility of the proposed use of the land, and certain circumstances respecting the mode of taking and using it. But where a corporation owns the land which it proposes to use, to construct a railroad, it has no occasion to make any application to the Legislature, and may proceed to construct its road in accordance with the rights granted by the general law.

This is the plain construction of the twenty-first section of the Act.

The twenty-second section was designed to apply *wholly* to the class of cases where the requisite lands for the purposes of the road could not be obtained by purchase, and voluntary grants; and the proviso, at the end of the section, is limited by its own terms, as well as by its context, to this class of cases, in which the Legislature must be applied to, and declare the public utility of the road to be sufficient to justify the taking of private property for constructing and maintaining said road, before they can acquire the right to take such lands for the purpose. It is *the Legislature* which shall, upon such an application, declare the public utility of the proposed road to be sufficient, to which the last clause of the twenty-second section reserves the right to indicate the routes and termini of said roads, and it *is only those roads* which cannot obtain the requisite lands without the exercise of the Legislative power, which the last clause of the twenty-second section declares shall not be commenced, or constructed, without the expressed sanction of the Legislature of the State, by a law thereafter to be passed.

The words of the proviso are, "And the Legislature reserves (the right) to itself to indicate the routes and termini of *said roads*, and *the same* shall not be constructed or commenced without the expressed sanction of the Legislature of this State, by a law to be passed hereafter."

The words "said roads" and "the same" refer to the roads mentioned in the first part of the twenty-second section, for which the lands cannot be acquired without the aid of the law, and not to the roads which the twenty-first section authorizes the construction of, upon lands which the corporation shall acquire by purchase, voluntary grants and donations.

Any other construction would make the last clause of the twenty-second section nullify the whole act, and make the Legislature appear to have been recreant to the duty expressly enjoined upon them by the Constitution. The whole object of the constitutional injunction was to compel the Legislature to provide for the formation of incorporations to construct works of internal improvements by general laws, and to save the necessity of special legislation in every case. As I understand the law, the Legislature have performed their duty. They have authorized incorporations to be formed, and whenever the corporations, when formed, can acquire the means to construct their proposed improvements without any violation of the rights of private property, it has authorized them to proceed to erect and maintain them. It has wisely left to the judgment of the proprietors, the utility of the work in which they propose to engage, knowing that the public will derive all the benefits which can flow from its construction, whether it prove profitable or disastrous to its stockholders.

But it has guarded the rights of private property, as it was bound to do, from any invasion where, in its judgment, public utility did not demand it. And, when applied to for that purpose, it has reserved to itself the right to *modify* the route of the road, described in the articles of association, pursuant to the first section, as it may judge to be required by public utility, and also, to determine when that public utility, of which it is to judge, demands the commencement and the construction of the road.

But I do not understand the Legislature to have authorized corporations to be formed, to construct railroads, and authorized them to acquire lands by purchase, voluntary grants and donations, for that purpose, and to construct, maintain and operate such roads, and then to have expressly abrogated the right to commence or construct such road, until these corporations had obtained the expressed sanction of the Legislature, by a law to be passed thereafter. To authorize the formation of a corporation, under a general law, to execute a work, and then prohibit this corporation from commencing or executing it until it has procured a special law sanctioning it, does not present a case less deplorable in its inconveniences and in its mischiefs, than those which had arisen under the former pernicious system of granting these rights by special charters, and as exclusive privileges, which it was the design of the Constitutton of the State of Illinois to prevent in that State.

I am entirely clear in my conviction, that the last clause of the twenty-second section, relates solely to such roads as require the aid of the law to condemn private property to their use, and reserves a power to modify the contract which the first section authorizes the parties to enter into, as the Legislature may judge that the public utility, which they are to declare, shall require it to be exercised.—That it has no reference to the roads which do not require the exercise of the sovereign power to vest in them the title to the lands necessary for their construction and maintenance. That companies formed to construct roads, who have acquired or can acquire, by purchase or voluntary grant, the requisite lands, are not required by the general law to make any application to the Legislature, for any purpose. That on completing their organization and acquiring the lands necessary, they may proceed to construct the road designated in their articles of association, and to exercise all the powers granted by the twenty-first section of the act, without any further legislation on the subject.

EDWARD SANDFORD.

New York, October 9th, 1852.

I have carefully read the preceding opinion of Edward Sandford, Esq., and fully concur with him in the conclusions to which he has arrived.

WILLIAM KENT.

New York, October 25th, 1852.

Mississippi and Atlantic Railroad, from Terre Haute to St Louis.

BOOKS OF SUBSCRIPTION TO THE CAPITAL STOCK OF THE MISSISSIPPI & ATLANTIC RAILROAD COMPANY, an organization under the General Railroad Law of the State of Illinois, for the construction of a Railroad from Terre Haute, Indiana, to St. Louis, Missouri, will be opened under the direction of Messrs. WINSLOW, LANIER & CO., at their office, No. 52 Wall street, in the city of New York, on SATURDAY, the 6th day of November, 1852, and remain open until the stock of said company shall be subscribed.

The Capital Stock of said Company is TWO MILLIONS OF DOLLARS, of which Four Hundred and Seventy Thousand Dollars has been taken, leaving the sum of One Million Five Hundred and Thirty Thousand Dollars open to present subscription.

This stock has been divided into shares of FIFTY DOLLARS each.

TEN DOLLARS per share will be required to be paid at the time of subscription, and the remainder will probably be called through the whole of the year 1853.

Stock payments will draw seven per cent interest—payable on the first days of each July and January in the city of New York, until the completion of the work, when regular dividends will be made from the earnings of the road.

The first payment of interest will be made on the first day of July, 1853.

Books for the transfer of the stock will be opened and permanently kept in the city of New York, upon which the stock will be transferable after the payment of the first instalment.

This road is 170 miles in length, of which over 165 miles is straight line.

On over two thirds of the line the grades are under twenty feet to the mile, and the maximum grade is less than forty feet.

It is the last uncompleted link in the great chain of railroads from New York, Boston, Philadelphia and Baltimore to the city of St. Louis.

It is the most direct route, and must be a valuable road, and its stock a good investment.

It is designed to complete the road within eighteen months to two years; and it will be built under the personal supervision of the President, JNO. BROUGH, Esq.

Messrs. Winslow, Lanier & Co. will furnish maps of the connections, profits of the route, and the prospectus of the company, containing full particulars as to the organization and prospects of the work, upon application at their office.

SALMON A. PHELPS,
MICHAEL G. DALE,
NATH. M. McCURDY,
DEAN ANDREWS,
Commissioners.

WINSLOW, LANIER & CO., Agents.
New York, November 1st, 1852. 2t

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.

WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Notice to Contractors.



ERIE AND KALAMAZOO RAILROAD.
NEW STATION AT TOLEDO.

SEALED PROPOSALS will be received at the office of the Company, at Adrian, until the 15th of November next, at noon, for the proposed Station, embracing about

250,000 cubic yards of earth work,
40,000 cubic feet square timber in Docking,
70,000 lineal feet round timber in Docking,
Piling, Capping and Planking for wharf, floor and foundation for buildings,
Two Draw bridges—wood on piles,
1,500 to 2,000 cubic yards Hydraulic Stone Masonry in Aqueduct.

Maps and plans may be examined at the Engineer's Office, Adrian, after the 10th of November next,

Satisfactory security will be required for the faithful performance of work.

To be completed one year from the first of June next.

The Company reserve the right to accept or reject proposals, as their interest may require.

JOHN B. JERVIS, Chief Engineer.
Adrian, Michigan, October 25, 1852.

Fulton Iron Works and Car Factory.

W. W. WETHERELL, *Proprietor.*
ELIJAH PACKARD, *Superintendent.*
SANDUSKY, OHIO.

THE PROPRIETOR of the above named extensive works, takes pleasure in informing his friends and the public generally, that he has fortunately secured the services of MR. E. PACKARD, now of Worcester, Mass. late one of the firm of THRESHER, PACKARD & CO., of Dayton, Ohio. The skill and competency of Mr. P. are matters with which Western Railroad men are too familiar to need any comment, and will be understood by customers as an important guaranty of the best and latest style of Railroad Work.

The Proprietor has made provision for enlarging his already extensive Works, and expects to be able to meet every demand in his line of business. He will furnish, upon short notice, First and Second Class PASSENGER CARS, BAGGAGE, FREIGHT, GRAVEL and all other kinds of Cars now in use, of the best quality and at the lowest prices. He will also furnish, upon like notice and at the cheapest rates, CAR WHEELS and all other kinds of Railroad Castings.

He has secured the right of WASHBURN'S CAR WHEEL, together with several other Patterns of the most approved styles.

No expense or trouble has been spared in his preparations to meet the demand of the public in his line of business, and he hopes for a liberal patronage.

W. W. WETHERELL.
August 2, 1852, 1y40

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

Mills, John B., Civil Engineer,

Address to care of Wm. Churchill, Jr., New York.

CORROSIVE SUBLIMATE.

THIS article now extensively used for the preservation of timber, is manufactured and for sale by POWERS & WEIGHTMAN, manufacturing Chemists, Philadelphia.
Jan. 20, 1849.

To Telegraph Companies. TELEGRAPH WIRE.

ORDERS taken for all numbers of best quality of English Telegraph Wire. Samples at the office of the Subscribers. JEE, CARMER & CO.,
6m*14 75 Broad st., New York.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Gerard Ralston,

21 TOKEN HOUSE YARD. LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:
Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 39

PROSSER'S
PATENT LAP-WELDED
Wrought Iron Boiler Tubes,
ALSO,
Their PATENTED TUBES FOR EXTERNAL PRESSURE, made with a free joint either of Iron or Brass.

Every article necessary to drill the Tube-Plates, and to set the Tubes in a proper manner, and to keep them in good condition.

CORE BARS FOR FOUNDRY USE.

Iron Tubes for Artesian Wells, screwed together flush on either side.

THOMAS PROSSER & SON. Patentees,
28 Platt street, New York.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale. every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.
Sept. 11, 1852. 1y*



Wrought Iron Railroad Chairs at Dayton, O.

THE Subscriber, being engaged in the manufacture of Wrought Iron Railroad Chairs at Dayton, is prepared to fill orders on the shortest notice for any size and any quantity of chairs that may be desired. Having made arrangement for an unlimited supply of iron, and having in use the best chair making machinery now used, I feel confident that I can compete with any of the older establishments.

W. H. CLARK.

REFERENCES:
John Swasey & Co., Merchants, Cincinnati.
E. F. Drake, Pres't D., X. & B. Railroad, Xenia.
A. Degraffe, Railroad Contractor,
H. S. Brown, Pres't D. & W. R. R., } Dayton.
Beckel & Co., Farmers' Bank.
October 8, 1852.

Notice to Contractors.

SEALED PROPOSALS will be received at the Office of the New Orleans, Jackson and Great Northern Railroad Company, in the city of New Orleans, until the 30th of November next, for the grading, masonry, piling and bridging of that part of their road from Lake Maurepas, to the line of the State of Mississippi, a distance of 51 miles.

Also, for the masonry required on the first 36 miles of road from the city of New Orleans to the Lake, at the South Pass Manchac.

The first 9 miles of the section to the State Line, is through the Lake swamp, and includes the piling and bridging (with one draw) of the South and North Passes, the remainder is through a healthy fine country, which, with the contemplated lettings of the remaining 100 miles to Jackson, Mississippi, render this work well worthy the attention of Northern Contractors.

Payments will be made in cash, with 20 per cent retained until the completion and acceptance of the work.

Satisfactory evidence of ability will be required with the proposals.

Plans and profiles will be ready for examination ten days before the letting.

JAMES CLARK, Chief Engineer.

New Orleans, October 16th, 1852.

SAUGATUCK IRON WORKS

WESTPORT, CONN.

Miller & Williamson,

PROPRIETORS.

OFFICE, NO. 5 NASSAU ST., NEW YORK.

MANUFACTURERS of Car Wheels, Axles, Boxes and Pedestals, Locomotive Drivers and Cylinders, Screw Cutters, Drilling Machines, Switch Stands, Levers and Targets, Frogs, Head and Heel Blocks, Chairs, and all Castings connected with the superstructure of Railroads.

REFER TO

Morris Ketchum, Esq., Treasurer, } N. Y. and N. H.
Robert Schuyler, Esq., President, } & Ill. Cent. R.R.
George L. Schuyler. Esq., President, } Saratoga &
J. VanRensselaer, Esq. Eng. & Sup't, } Wash. R.R.
Gouv. Morris, Esq., of Morrisania, V. Pres't } Harlem
M. Sloat, Esq., Superintendent, } R. R.
E. F. Bishop, Esq. President, } Naugatuck R.
Philo. Hurd, Esq., Superintendent, } Road.
Wm. P. Burrall, Esq.. Vice President, } N. York &
Geo. W. Whistler, Esq., Eng. & Sup't, } N. H. R.R.
R. B. Mason, Esq., Engineer Illinois Central R. R.
James B. Sargent, Esq., Civil Engineer.
Hon. John S. Brien, Nashville, Tenn.
A. R. Gilmore, Esq., Super't Rock Island Railroad,

October 30, 1852. [Chicago, Ill.

Portland Company's Locomotive Works, Portland, Me.

HAVING made extensive additions to their works, the Company are prepared to receive ORDERS for LOCOMOTIVES and TENDERS; FREIGHT, MAIL, EARTH and HAND CARS, RAILWAY FROGS, SWITCHES, and CHAIRS, CHILLED WHEELS, SNOW PLOUGHS, and CASTINGS generally.

—ALSO—

STATIONARY ENGINES, HIGH and LOW PRESSURE BOILERS, TOOLS for LOCOMOTIVE SHOPS.

The whole warranted to be of the latest improvements and best workmanship.

J. C. CHURCHILL, Treas.
JOHN SPARROW, Supt.

Portland, Sept. 21, 1852. tf

CAUTION.

RAILROAD Companies, and the public generally, are hereby cautioned against purchasing Richardson's Patent Oil Cups, or the right to use the same, except of the undersigned, Proprietor of the Patent, or of some one acting under his authority. Communications addressed to him at Westminster, Vt., will be promptly attended to. E. DEWOLF, Jr.

Oct. 2, 1852. 1y*

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or, MOORE HARDAWAY, Richmond, Va.

March 6, 1850.

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 30th November.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Cotton Steam Packing.

THIS Superior Packing is prepared by us expressly for Locomotive Engines. The advantages resulting from its use are—cheapness—greater safety, and economy of labor.

Orders addressed to us at 91 Wall st., New York, will have prompt attention.

J. M. HALL & CO.

P. S.—Waste for cleaning engines, in quantities as wanted. July 24, 6m*

VOLCANO QUARTZ MINING COMPANY, Volcanoville, Eldorado County, California.—Books will be opened at the office of the company, No. 78 Broadway, on Saturday the 30th day of October, inst., at 10 o'clock A. M., for Subscriptions to the Stock of this Company, to the amount of seventy-five thousand dollars. This Company has been organized under the statutes of California, with a capital of $500,000, for the purpose of working the extensive and exceedingly rich mines which have been recently opened at Volcanoville, near the middle fork of the American River; and it is now proposed to sell an amount of stock sufficient to erect machinery of the most approved and powerful description, for the purpose of working them on an improved and profitable scale. The claims of the proprietors of these mines consist of "three thousand six hundred feet, on the line of the vein, with all its offsets, dips, and angles," together with over two hundred acres of land, well timbered supplying an abundance of fuel and timber for many years to come. The vein has been "prospected" or examined at different points for three quarters of a mile, and at one place to the depth of fifty feet, where it is thirteen feet thick, by a shaft six feet in diameter, and by a drift or tunnel of over one hundred and fifty feet, by which it is drained and ventilated, and at the same time worked by a rail track to the mill, which is within five hundred feet of the vein. The proprietors of the vein, who spent nearly a year in opening and thoroughly testing its extent and character, have erected buildings —one forty by fifty, and one thirty by twenty feet —quite sufficient to contain the machinery for working on a large scale, only requiring additional buildings for fuel, offices, etc., so that the machinery may be put in operation in a very short time after its arrival on the ground. As to the vein, its extent and exceeding richness are equal, at least, to the celebrated "Carson Creek Vein," upon which a working capital of over $375,000 has been paid in London, for which the subscribers are to receive forty per cent., and the proprietors of the vein sixty per cent. of the net profits. We will only say that, by a personal examination of the quartz taken from the vein, at different points and various depths, and from free conversation with those who have worked for months upon the enterprise, can be formed a correct estimate of the value and extent of the claims now offered to capitalists and the public. We therefore respectfully solicit those who may feel an interest in such matters to call at the office, No. 78 Broadway, and examine the samples of quartz and gold taken from the Volcanoville mines, and to converse with Mr. Nathaniel Conkling, who was with D. K. Minor, in the mountains during the past year, and who took from the mines the samples now on exhibition.

Perhaps it may be proper for us to say here that our claims are not, in our opinion, surpassed by those of any other company in California, either in extent or richness, and that with proper machinery they will yield very large returns to those who may invest in the enterprise.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

Ten per cent of the amount subscribed to be paid at the time of subscription; 20 per cent in 30 days, or on the 29th of November, and the balance, or 70 per cent on the 29th of December next. Shares of $100 each. Payment to be made in current funds; and subscriptions by mail, addressed to D. K. MINOR, President, No. 78 Broadway, N. York, the same as on personal application.

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING, } of New York.
D. K. MINOR,
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN, } of California.
JAMES CLOWDSLEY
JAMES ALLEN,

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Hoole, Staniforth & Co.,

MINERVA WORKS,

SHEFFIELD,

Steel Converters and Refiners;

Manufacturers of Improved Cast Steel Engineering and Machine Files;

Locomotive Engine, Railway Carriage and Wagon Springs.

Saws of every description, Engineers' Hammers, etc., etc., etc.

An assortment of Steel from the above Works constantly on hand by RICHARD MAKIN,
Agent for the Manufacturers,
43tf 65 Broad street.

Huger, T. P.,

Northeastern Railroad, Charleston, S. C.

"Leonard's" Patent Double Plate Car Wheel.
Solid Hubb.

THE form of this Wheel is such that the metal is not strained in casting, hence the manufacturer will warrant them in any service Car Wheels are submitted to.

Sold in any quantity, and shipped to any part of the country or Canadas, by the subscriber, Manufacturer's and Patentee's sole Agent 53 Killy St., Liberty Square, Boston. WM. S. SAMPSON.

August 21, 1851.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

UNION WORKS,

North street, opposite the Railroad Depot,
BALTIMORE.
Poole & Hunt,

Manufacturers of Steam Engines and Mill Gearing, Machinists' Tools, and all kinds of heavy and light Machinery.

Also put up *Arrangements of Wrought Iron Pipes* for heating buildings and conveying steam or water.

Castings of every kind furnished at short notice.

Every exertion will be made to insure the satisfaction of customers.

Railroad Spikes.

WE would call the attention of Railroad Companies and Contractors to a superior article of Railroad Spikes, of our own manufacture, which for finish, durability and quality of Iron, are not equalled by any in the United Stetes.

THACHER & SEARS.
79 State st., Boston.

N.B.—T. & S. are prepared to take contracts for the delivery of Spikes, at any port of the U. States.

Elmira Car Shop.

THE Undersigned is prepared to manufacture for Railroad Companies, Passenger, Baggage, Cattle, Freight, Gravel and Hand Cars, also Baggage Barrows and Freight Trucks. WM. E. RUTTER.

Elmira, N. Y., Aug. 14, 1852. tf

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Railroad and Mathematical Instruments.

KUNS & BASELER, Mathematical Instrument makers, manufacture and keep for sale all kinds of mathematical instruments: also drawing instruments, scales and balances for the use of chemists, professional gentlemen, jewellers, etc., etc., of the most perfect description, at the lowest price, at 81 Nassau street, New York.

Babcock & Fennell,
NEW ORLEANS,

GIVE their personal attention to forwarding Railroad Iron, Machinery, etc.

Refer to—
DAVIS, BROOKS & Co., } New York.
CHARLES T. GILBERT, }

To the Owners of Furnaces, Forges and Rolling Mills,
ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

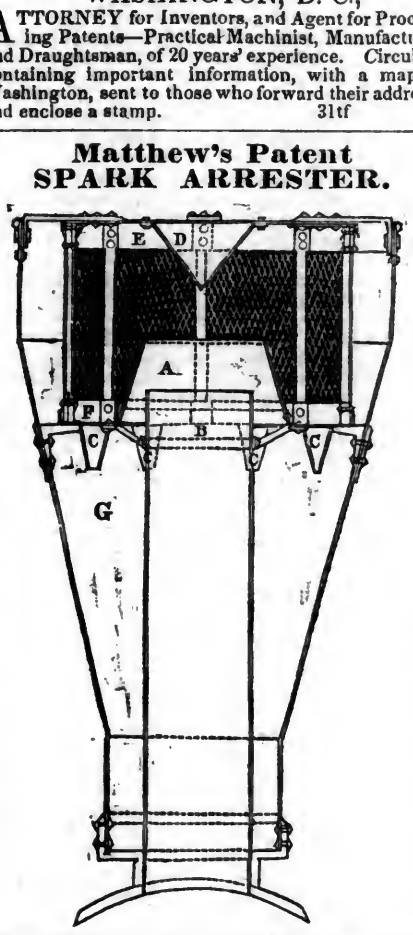
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.

July 10, 1851.

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st. The radius of the smoke box, on which the pipe sets.

2d. The height from smoke box to top of pipe.

3d. The diameter of cylinder and length of stroke.

4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.

TO DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.

TO DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

MR. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

MR. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.
CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

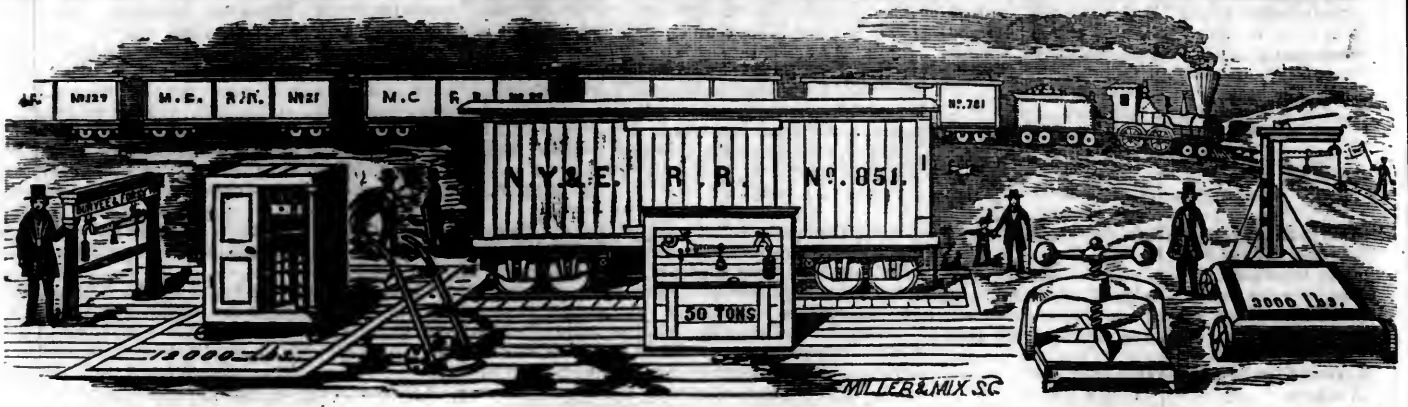
NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity. and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. | **TRACK SCALE, 100,000 LBS.** | **RAILROAD MANIFEST PRESS.** | **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practiaal mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as '*Durable and Accurate*' as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 46] SATURDAY, NOVEMBER 13, 1852 [WHOLE No. 865, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Duty on Railroad Iron.....721
Mississippi and Atlantic Railroad.....722
Atmospheric Railway.....723
Railroads in Missouri.....724
Journal of Railroad Law.....724
American Iron.....725
Telegraph between London and New York.....725
U. S. Mint.....725
Centralization of Railroads.....725
South Western and Georgia Railroad.....726
Railroads in Ohio.....726
Pacific Railroad.....726
Wilmington and Raleigh Railroad.....727
Indianapolis and Bellefontaine Railroad.....727
Railroad Items.....727
Railway Economics.....728
Quartz Mining in California.....731, 729
Stock and Money Market.....729
Railroads of Great Cities.....730
Greenville and Columbia Railroad.....730

American Railroad Journal.

Saturday, November 13, 1852.

Duty on Railroad Iron.

The New York Evening Post, of the 6th instant, quotes a portion of our article in our paper of the 9th ult., upon the removal of duty on rails for first tracks of railroads, and accompanies them by some remarks, in which there is a singular perversion of truth, as well as of the spirit of the article referred to. In the first place the Post—in speaking of the proposition—says:

"The project of which we speak (the removal of the duty) is brought forward, not in a paper avowedly political, but in the *American Railroad Journal*, published in this city, which has embraced protectionist doctrines. The authors of the scheme know very well that no progress would be made by proposing it in a professed whig journal."

Now the truth of the matter is, that the article not only was not suggested by any person, but was never made the subject of conversation with any one interested in making rails, with but one exception, and the concern with which he is connected, is strongly opposed to our view of the subject; neither have we heard, nor do we know up to the present time, that the article has met the approval of a single individual! yet in the face of these facts, the Post, for the purpose of discrediting our arguments, abricates a story, that we are the mere cats-paw of parties behind the scenes, who are working through us for the accomplishment of their own selfish purposes. By uttering a deliberate and circumstantial falsehood, that paper may accomplish its object. The end may justify the means, but we believe that in the long run the falsehood will give even the author more uneasiness and pain, than to witness the triumph of a principle to which his convictions may be opposed.

Let us now see how the Post gives our own arguments, and attempts to answer them.—The following is one of its quotations, with the editor's remarks:

"Railroad iron cannot now be imported at less than $50 or $52 per ton. Within a year from date the English article has been laid down upon our wharves at $35. The advance therefore is equal to from $15 to $17 per ton. Notwithstanding the high figure it has reached, we do not see any prospect of an immediate decline. This advance operates with peculiar hardship upon such of our companies as are now compelled to purchase. A company having a road of 100 miles in length will have to pay from 150 to $170,000 in duty alone. There is certainly a great injustice in subjecting railroads to this heavy burden. These works are great public blessings, by which the national treasury is as directly benefitted as are the people themselves."

To this the Post replies:

"There is the same injustice in subjecting railroads to the burden of high duties, as in subjecting individuals to that burden, and no more. If railroads are a public blessing, so is individual industry. Industrious farmers are a public blessing, industrious mechanics are a public blessing, good laundresses are a public blessing. It is just as hard for a farmer to pay heavy prices for his ploughs, his spades, his drag chains, his wire fences, and the rest, as it is for a railway company to pay a heavy price for its rails. Nay, if we are to make a discrimination, let us make it in favor of the people, not in favor of corporations. The shareholder in a railway is a capitalist. What equality is there in those laws which tax the laboring man and let the capitalist go free? No; if we are to reduce the duties on iron, let us repeal them first on those articles which are most necessary, which are most used by poor and hard working people. Let us begin by giving the farmer cheap ploughs, the mechanic cheap tools, the washer-woman cheap smoothing irons."

As the Post conceals the argument by which we attempted to show the injustice and inexpediency of compelling railroad companies to pay duty on rails for first tracks,—we quote a portion of the article referred to; which, to our minds, makes out a sufficient case.

"The objection to remission of duties is the loss that our revenue will sustain, and the withdrawal of protection from a class of our iron manufacturers. To this it may be answered that every railroad creates a consumption of at least double the amount of iron that goes into rails; consequently the revenue, and our manufacturers would be vastly the gainers, by the construction of railroads, even should the rails come in duty free. The amount of iron used in the construction of a fully equipped railroad, is estimated to be equal to the quantity required for rails, and there can be no doubt that the demand created for this article in all forms, by the various enterprizes to which railroads give birth, by the towns and manufacturing establishments which spring up on the line, and the general stimulus imparted to every kind of business is at least equal to the one half the aggregate of what is used for the road and its equipment. At any rate, we cannot be mistaken in saying that every railroad we build creates a market for double the quantity used for rails. Were all this increase imported, then would our railroad companies secure government, by their own exertions, *twice* the amount of duty paid for rails. Were it to be supplied by our domestic manufacturers, they would double their orders, though they might lose altogether the market for rails. So much for the justice of the claim for the remission of duty on railroad iron as far as our companies are concerned, and for the effects of such a step upon our revenue, and upon our manufacturing interests."

If the effect of the construction of a railroad be vastly to increase the revenue of government, we can see no injustice nor impropriety of encouraging such works, by which the public treasury and the people generally, are so much benefitted.

The Post indulges in the usual cant about protecting capitalists, and not individuals; and *assumes* that it is the former class that are building our roads. Let us see how this is.

Most of our roads that are in progress are in the interior, in sections of the country where there is but little accumulated capital, from the want of such works, to give a marketable value to their products. The people are consequently poor, and they look upon railroads, as the appropriate means of improving their condition. They set about its construction, and after exhausting their own means, they come to New York, mortgage their road, and borrow upon this security the money for the purchase of the *rails* and equipment, at rates averaging 9 per cent., for a period of ten years. It is not until after a sufficient amount has been expended, to make subsequent advances perfectly safe, that the agency of capitalists in the matter

commences. He takes no risks, and assumes no liabilities. His interests are often adverse to that of the company. His profits are measured by their ability to help themselves. If they are struggling for existence, he gets, for 75 cents in the dollar, securities, for which he knows very well, he can realize *par*. Increase the ability of such company, and the capitalist increases his bids until he pays a premium, if he cannot get the securities without. The companies, represent the farmer and mechanic, parties that are struggling to improve their condition by means of a railroad, which we wish to secure for them at as low cost as possible. The Post advocates a policy that directly increases the cost of our roads, and one of oppression to the classes named, and that puts additional power into the hands of the monied men.

Again, says the Post, the Railroad Journal charges the English makers of iron with conspiracy to break down our mills on this side of the Atlantic, by thrusting their commodities upon us at a cheap rate, and then when they have stopped the American furnaces and obtained full possession of the market, putting up the prices of their iron to an exorbitant rate. If this be the case, the owners of the American furnaces can play the same game. Our mountains are but masses of iron; let our enterprising capitalists dig it out, undersell the British in their own country, break up the iron mills of the United Kingdom, and take possession of its market for themselves.

Why has this been done already! Capital was never more abundant in the United States than it has been for years past, yet we have, during the whole time been blowing out our furnaces, and closing up our works; increasing the importation of the foreign article, and reducing the production at home. No, No, *capttal* is more profitably employed in shaving our railroad companies, than it would be by going into iron making. It says to our railroad companies "go to England and buy your iron and we will take your bonds." Such practically is the language; such the result; and such being the case, we desire to place the latter in a position as independent of the former as possible, who stands as the middle man, between our railroad companies, and the foreign manufacturer.

We take the ground, that as low duties have broken down the manufacture of rails, we had better take it off altogether, for rail for new roads; as this duty protects no interest. We also go for a higher, and specific duty, on common bar, for the following reasons, given in the article already referred to.

"For a number of years the price of iron has ruled very low. The result has been that most of our furnaces and rolling mills have been closed; in other words, they have been broken down by English competition. As soon as the English maker has effected his object, and secured the market to himself, by breaking down the manufacture in this country, he puts prices up 75 per cent, to a figure much above what iron can be manufactured for in this country, which we are compelled to submit to, because we have no other sources of supply. We must pay his price till we can construct works and supply ourselves with a domestic article. But the capitalist has no inducement to commence the manufacture in the present condition of things.—It would require years before he could get fairly under weigh, and by that time the foreign manufacturer, having made good all his losses, and compensated for a period of low, by a period of high prices, would drop down to the old mark, till he shall again, as in years past, run all our great establishments under water. The result is, that by pursuing the above policy, the English manufacturer does a good business in the long run, and makes money, and we, as a necessary consequence pay high prices, yet still find this great interest almost completely broken down by foreign competition. Reasonable protection, on the other hand, would not only secure to us the article at as low prices on the average as those we now pay the Englishman, but at the same time secure to us all the immense advantage of manufacturing it in our own country. Such is the common sense view of the matter, and such has been the history of the iron trade for a series of years past, and such will it continue to be, under the *existing* tariff. Let us see what effect the plan we propose would have upon the domestic manufacturer, and the prices of rails."

Prospectus of the Mississippi and Atlantic Railroad Company.

The Mississippi and Atlantic railroad company is an organization under the general railroad Law of the State of Illinois, for the construction of a railroad from Terre Haute, Indiana, to St. Louis, Missouri. This organization, as will be seen from the documents in the Appendix, has been made, in all things, in conformity with the provisions of the law; and the company is, for all purposes of constructing the road, owning and operating it, as perfect and powerful a corporation as could be created by a special charter, except the point hereafter noticed. Nine miles of the route lies in the State of Indiana, for the construction of which there is full power and authority under the laws of that State.

The only exception to the full powers of corporations generally, under the law of Illinois, is the authority to condemn right of way. In this particular, the 22d section of the act provides, that corporations so organized, *may* apply to the Legislature to declare, by special enactment, that the work proposed to be constructed by them is "of such public utility as to justify the taking of private property for public uses;" and upon such Legislative declaration being made, the manner is pointed out in which such property may be taken and paid for.

The powers of the corporation being full and perfect for the construction of the road, in all other particulars except the condemnation of lands, the stockholders, in February last, ordered a survey and location of the road, and undertook the acquisition of the right of way, with a determination not to fail in the accomplishment of their object. An evidence of the spirit and feeling of the people along the line is to be found in the fact, that about three-fourths of this right of way was freely and voluntarily donated; and that not a single instance of refusal to cede, upon fair terms, occurred among the resident or non-resident proprietors of lands; and no case of controversy occurred as to the location of the line.

The whole right of way has been secured by deeds or contracts, and is now under the control of the company; and its entire cost, on the whole extent of one hundred and sixty-one miles, is less than Forty Thousand Dollars. All other powers of construction are full and ample; for which see the law, and read the legal opinions of Messrs. Sandford and Kent, in the Appendix.

ROUTE AND LINE OF ROAD.

Two lines have been run over the entire route of the road. The last one, under the direction of S. Dwight Eaton, Esq., Civil Engineer, will, with a few slight variations, be adopted. A profile of this line is given in map No. 2. It presents, probably, the straightest and best railroad line in the United States. It is not exceeding two miles longer than an air line from point to point. The highest grade is 40 feet to the mile, and but few of these grades. The curvature is very light, and but little of it; and an unusual amount is perfectly straight line, and level grade. For a more full description of this line, see letter of Mr. Eaton, in the Appendix. The design is to build the road in the most perfect manner; to use the compound T rail, weighing 72 lbs. to the yard; and to make the road in all things, susceptible of the highest rate of speed, safety and economy in the working and management.

THE ROAD AND ITS CONNECTIONS.

This road is the last link in the great chain of railroads from Boston, New York and Philadelphia, to the city of St. Louis, and the country further west. A glance at the map No. 1, will show all these connections. By the first day of March next, this whole chain of railroads will be completed, and in operation from the eastern cities to Terre Haute, Indiana. The reader will please fix the point of Galeon, 79 miles south of Cleveland, on the Cleveland and Columbus road. To this point the line of road is now completed from Boston, via Albany, Buffalo and Cleveland; from New York, via Albany and Buffalo, and also via Erie railroad, Dunkirk and Cleveland; and from Philadelphia, via Harrisburgh and Pittsburgh. Then from Galeon, west, we have the Bellefontaine and Indiana road, from Galeon to the Indiana State line; then the Indianapolis and Bellefontaine, from the Indiana State line to Indianapolis; then the Terre Haute and Richmond, from Indianapolis to Terre Haute. At Indianapolis, three lines will connect with Cincinnati. There remains, then, but this link of 170 miles of road, to connect the eastern cities with St. Louis; thus making a connected line of railroad of 1200 miles, between St. Louis and Boston; 1144 miles between St. Louis and New York by the Central, and 1139 by the Erie road.—Add to this, that about 200 miles of the Pacific road, from St. Louis westward, is now under contract, with a grant of 3,000,000 acres of land by the Government, and it presents the longest and most direct connected railroad line in the world.

This must continue to be the great East and West route. It is the most direct, and traverses the best portion of the country, for ease and comfort in travelling, and mild and equal temperature of climate. The route across Illinois is so straight and easy, that it never can be shortened, nor have a competitor. The completion of the Cincinnati and St. Louis road will present a second line; but the distance from St. Louis to Cleveland by that route will be 582 miles, while by our route it will be but 522 miles; making a difference in favor of the latter of 60 miles, and that over straight lines and low grades, that can be traversed with greater speed and safety.

The route of the Mississippi and Atlantic road, through Illinois, lies parallel to, and in the immediate vicinity of the line of the National road. The country is generally settled, and the lands under cultivation. Few sections surpass it in agricultural advantages, whenever an outlet is afforded to market, for the surplus products. The soil is very rich, a large portion of it elevated prairie, with abundance of timber in the vicinity, and all well watered. Lands are rapidly appreciating in value, and the country fast filling up with a hardy and industrious population. The local business of the road will, from the beginning, surpass that of any road that has been constructed in the West, and afford a permanent and constantly increasing source of revenue. I feel safe in the prediction, that in five years from the opening of the road, the local business alone, will be equal to the capacity of one line of track. It is in view of this, that the estimates and arrangements for the construction of the road have been made with a view to a double track within five years.

The resources of Illinois have not been developed; they have scarcely been approached. This line, East and West, and the Illinois Central, North and South, will call them forth. Instead of competing, the lines will be taxed to their utmost capacity; and a few years will present the same results of wealth and prosperity that are now fully illustrated by Ohio, and are brightening and deepening in Indiana. We shall possess this great advantage, that we must reap the full harvest of the future. As an East and West line, no inducement can exist to construct others in competition with us; whilst we shall have the most direct and cheapest route for the products of the country to the great western market of St. Louis, and for the merchandize of the East to the consumers of the West.

CAPITAL STOCK.

The capital stock of the company is two millions of dollars, of which fifteen hundred and thirty thousand dollars will soon be open for subscription in this city, under the direction of Messrs. Winslow, Lanier & Co., 52 Wall street. Books for the transfer of the stock will be kept permanently in New York. Interest, at the rate of 7 per cent on stock instalments, as paid up, will be allowed and paid, semi-annually in this city; the first computation and payment to be made on the first day of July, 1853, and regularly thereafter, on the first days of January and July, until the completion of the work, when dividends will be paid semi-annu-

ally, from the earnings of the road. That this stock will prove one of the best investments in the west, if not in any of our American railroads, I have not the slightest doubt. The following is regarded as a very moderate estimate of the business of the road, the first year after its completion.

300 through passengers per day, at 2½ cts. per mile	$305,175
Way travel, equal to 66 per ct. of through do	203,150
100 tons of freight, average of $2 50 per ton	250,000
Cattle and other live stock	80,000
Mails and expresses	75,000
Total	$913,325
40 per cent for working expenses	365,330
Net revenue	547,995
Interest on $2,000,000, at 7 per cent	140,000
Balance	$307,995

which gives over 15 per cent—the limit of the charter—on the capital stock of two millions.

I have no hesitancy in saying that this calculation is under the mark of the business of the road, when it shall be fully completed, and in working order. The amount of freight is very low; that of the Madison and Indianapolis road, 87 miles long, for 1851, having been 93,147 tons. Many of our western railroad men have estimated the through passengers as high as 400 daily—none so low as the figure I have taken. The way travel I know is estimated low enough. If this be a safe estimate in the beginning, what must be the results when a few years shall have developed the resources of the country, and stamped upon this work the natural increase and progress that have marked our leading lines of western roads.

COST OF THE ROAD.

The estimated cost of the road is four millions of dollars. This includes liberal estimates for building the road in the most permanent manner; for bridges, embankments, and cutting for a double track; for compound rail, 72 lbs. to the yard, with a liberal margin for the prices of iron; for twenty miles of double track now, and abundant sidings; for depot grounds and stations; for a working power of 40 locomotives, 100 passenger cars, and 500 freight cars; for machine shops and engine houses; in a word, for *a railroad complete*. This cost might be reduced, by adopting higher grades, and more curved line, choosing, at some difficult points, the ground, and using a lighter rail. But we have deemed it the best policy to construct a good road, adapted to speed and safety, even at some additional expense. Our estimates also cover interest on stock and bonds, until the completion of the road, estimating that the second year will produce a revenue on the completed parts, sufficient for this purpose. It is estimated that two years, at the outside, will be sufficient for the completion of the work, and if no extraordinary delays are encountered, we hope to accomplish it in eighteen months.

It is proposed to meet the cost of the road by two millions of stock, and two millions of 7 per cent mortgage bonds, in such form as will render most secure and productive the stock interest.

LENGTH OF LINE.

The road will be 170 miles in length, of which about 163 miles will be straight line, and 7 miles of curved line, on which no curve will occur of less than 5730 feet radius. In grades, over 60 miles is level; 11 miles under 5 feet; 25 miles from 5 to 20 feet; 11 miles from 20 to 30, and 32 miles from 30 to 40 feet grade.

PROGRESS OF THE WORK.

No contracts have been let on the work as yet. The engineer corps is now engaged in making a permanent location of the line. It is intended to put all the heavy sections under contract this fall; and by providing cash means, to press the completion as rapidly as energy, industry, and the prompt payment of contractors will do so.

The undersigned has been connected with this enterprise during the past year. It is, and has been with him a favorite project; for it stands forth on the map, and in itself, as one of the most valuable links in the great chain of roads that is bound to connect the waters of the Atlantic with those of the Mississippi river, and at no distant day, those of the Pacific ocean. It is a road that must stand without a rival, either in the construction of a competitor, or the value of its stock and income. On account of its great value, it has encountered opposition, and met with some unusual difficulties in its commencement. The legal obstacles are now overcome. The people on the route have generously donated their lands, and even their houses and their barns, where they stood in the right of way of a direct line. They are mostly farmers, in moderate circumstances, but they have taken of the stock to the utmost of their capacity, and paid up the calls with great promptitude; thus furnishing the means to complete the surveys, and secure the right of way. They have thus borne the burthen of the day; they have struggled through the opposition and the legal difficulties; and thus having prepared a clear field, they invite capital to come in and complete a valuable work, that must, without necessarily impairing the usefulness of other works, yield to that capital a large and permanent return upon the investment. I have gone personally over the entire ground, have supervised the surveys, and the completion of the right of way. I know that both have been thoroughly executed, and I feel warranted in commending this enterprise to capitalists, as one that is every way valuable, and every way safe.

Messrs. Winslow, Lanier & Co., No. 52 Wall street, have been appointed the financial agents of the company in this city, and will keep the transfer books. They will give any further information as to the condition and prospects of the work.

The Appendix contains the General Railroad Law of Illinois; the details of organisation of the company: the opinions of Messrs. Sandford and Kent; and the letter of Mr. Eaton, touching the line of the road. These are recommended to attention.

JOHN BROUGH,
President M. and A. R. R. Co.

JOHN BROUGH, Esq., Pres't A. & M. R. R. Co.

Dear Sir: I have examined and caused surveys to be made upon the line of the Atlantic and Mississippi railroad, commencing at Terre Haute, Indiana, and extending westwardly to Troy, in Madison county, Ill.

From the point of connection with the Terre Haute and Richmond railroad, the survey was made upon a line varying but little from a right line between Terre Haute and St. Louis. Seven miles of the route are in the State of Indiana.

In Illinois, the line traverses the counties of Clark, Cumberland, Effingham, Fayette, Bond and Madison—crossing the Chicago branch of the Central railroad about three miles east of Ewington, in Effingham county, and the main line of the Central road at Vandalia.

The country is generally level, yet the line frequently crosses ravines, sometimes broad and deep, through which are water courses; at these points the construction of your road must be rather expensive.

The prominent features, and the particular merit of this line are, its directness, and the low grades applicable in its construction.

Various preliminary routes were surveyed, across the rivers and ravines; the most direct and feasible of which is represented on the accompanying map, and at no point varies more than three-fourths of a mile from a direct line between Terre Haute and St. Louis.

The total curvature to Troy is 264 degrees; one degree curves (5730 feet radius) can be used, making about 5 miles of curved line, for 140 miles of railroad.

From the table below, it will be found that the grades are light.

TABLE OF GRADES.

Inclination per mile.	Distance.
Level grade	60 2-10 miles.
From 0 to 5 feet	11 2-10 "
" 5 to 20 "	25 2-10 "
" 20 to 30 "	11 2-10 "
" 30 to 40 "	32 2-10 "
	140 miles.

An estimate is now being made, which will be completed in due time, adopting a maximum grade of 45 feet per mile, giving the following gradients.

Inclination per mile	Distances.
Level Grade	55 5-10 miles.
From 0 to 5 feet	11 2-10 "
" 5 to 20 "	22 7-10 "
" 20 to 30 "	10 8-10 "
" 30 to 40 "	11 8-10 "
" 40 to 45 "	28 "
	140 miles.

Very Respectfully,
S. DWIGHT EATON, *Engineer*.

Terre Haute, Sept. 20, 1852.

NOTE.—The whole survey was not completed when the above was prepared. It has since been completed, and the same proportions obtained on the remainder, under 30 feet.

A Successful Atmospheric Railway.

To the French belongs the credit of having brought to a successful issue the experiment of an atmospheric railway on a large scale. This mode of propelling has been adopted at St. Germain, a city about fifteen miles from Paris. The distance run is five miles and a half—the last half mile with an ascent of 3½ per cent. The ascent was too great to be overcome by an engine in all weathers. The following description of the machinery employed is given by a foreign correspondent of the *Ohio State Journal*:

"An iron tube is laid down on the centre of the track, which is sunk about one third of its diameter in the bed of the road. For a distance of about 5500 yards, the tube has a diameter of only 1¼ feet, the ascent here being so slight as not to require the same amount of force as is required on the steep grade ascending to St, Germain, where the pipe for a distance of 3800 yards is two feet one inch in diameter.

The manner of applying the atmospheric pressure to the propulsion of the train is exceedingly simple. The air is exhausted from the entire length of the tube, so as to produce a perfect vacuum, just before the arrival of each train, which is every half hour, by means of powerful and beautiful engines, somewhat resembling those at Fairmount. These engines are placed, two of two hundred horse power at St. Germain, and one each at the towns of Nanterree and Chatton, in the valley towards Paris.

To each engine is adapted two large cylinders, which exhaust fourteen cubic feet of air per second. The pressure in the air cauldron (chaudieres) attached to the exhausting machines is equal to six absolute atmospheres. It will be readily understood that when this long tube is completely exhausted of air, if a piston so nicely adjusted to the size of the tube as to render it airtight, is allowed to go loose at one end, it will rush through to the other end to fill up the vacuum. To apply the motive power, therefore, to the propulsion of the train, it is only necessary that this piston be attached to the train of cars in such a manner as to drag them along after it.

This was the great difficulty to encounter, but so admirably and so simply was this overcome, that the engineer assured us that an accident of any kind seldom ever occurred. Throughout the entire length of the tube, a section is made in the top, leaving an open space of about 5 inches. In each cut edge of the section there is an offset to catch the edges of a valve that fits down upon it.

This valve is made of a piece of sole leather half an inch thick, having plates of iron attached to it on both the upper and corresponding under side to give it strength to resist the suction of the vacuum, which are perhaps one-fourth of an inch in thickness. They are not quite as wide as the leather, but wide enough to touch the offset in the section.

The plates are about nine inches long, and their ends, above and below, are placed three-quarters of an inch apart, forming joints so as to give the leather valve pliability, and at the same time firmness to resist the powerful atmospheric pressure which is brought to bear on it when the air is exhausted. The entire length of the valve, from one end of the tube to the other, is attached to one side, like a cellar door, for example.

From the back side of the piston, a strong iron rod passes up through the aperture, which is made by raising up the edge of the valve, and is attached to the bottom of the foremost car. As fast as the piston passes along, the valve is released from pressure behind it. The loose edge is liberated, and the bar of iron which is attached to the car a foot or more behind the piston meets with no obstruction to its passage.

The pressure of the atmosphere on the valve in front of the piston, where the vacuum still exists, is so great that there is no danger of the bar of iron exerting pressure so far forward as to loosen the pliable valve, but to render the matter more certain and to obviate all doubt, a slide on the bottom of the car slips along on the iron plate of the valve over and in advance of the piston, and presses firmly down. Every part of the tube is kept well oiled. The rate at which trains ascend varies from fifteen to twenty miles the hour, according to the load.

When we went up, there were six cars very well filled with passengers. After the ascent commences, two bridges across the Seine, and one viaduct of 20 feet high, and wide arches, are crossed, and one long tunnel through the brow of the hill and under the King's terrace is passed, where the road is parabolically curved.

The road has now been in operation five years, and so safely and so well has it worked that the experiment is regarded as entirely successful. The cost of the entire machinery was eleven millions of francs.—The cost of working it, or the dividends which the road pays, I did not ascertain."

Missouri.

No effort has been made in this state toward the construction of either railroads or canals within a recent period. This was, in part, owing to the fact of its being a frontier state, in which the necessity of railroads is less felt, than in those which are situated to become thoroughfares for their neighbors, and partly to the sparseness of the population in nearly every portion of the state. At the session of the legislature of 1851, the state agreed to loan its credit to two great lines of railroad; the Pacific road, commencing at St. Louis and running to the west line of the state, on the south side of the Missouri river; and the Hannibal and St. Joseph's road extending from the Mississippi to the Missouri, on the north side of the latter, and connecting the places named. The amount of aid voted was $2,000,000, to the former, and $1,500,000 to the latter. But this loan does not become available until each company shall have obtained $1,000,000 of private stock, and then only so fast as certain portions of stock subscriptions are paid up and expended, which are limited to sums of $50,000. When either company shall have expended such a sum, they are then entitled to call upon the state for its bonds to an equal amount, as security for which, the latter holds a lien upon the road and all the property of the companies. The state aid will probably be increased to meet one half the cost of both roads. Although local considerations are the primary motive in the construction of the above roads, yet their projectors look to their ultimate extension to the Pacific ocean. Although their eastern termini are somewhat widely separated, they approach each other as they proceed west, and would unite west of the Missouri river by prolonging them in their general directions. By reference to the map of the county, it will be seen, though upon the east, they connect themselves, with lines of road belonging to a certain extent to different systems, which would become united by the above lines, after traversing one half the distance across the continent. As local roads, they are of great importance, they will, when complete, add greatly to the convenience of the emigrant and pioneer, by reducing so much the long and tedious journey on foot from the Mississippi to the western boundary of the unsettled territory. They, in connection with the great lines of railroad lying to the east, are to bring to the test our ability to carry a line of railroad across the continent, from one ocean to the other. Every mile we go west, is so much towards the accomplishment of this design, which is regarded on all hands as the crowning achievement of modern energy and science. Private enterprise will soon have accomplished so much, as to leave the portion that must devolve upon the general government, a comparatively easy task. If private companies can, with their unaided means, more than half accomplish this work, certainly what remains is not of such vast magnitude, as to intimidate the collective energies and power of a great nation.

Rapid progress is now making in the construction of the above roads, and there can be no doubt of their early completion.

In addition to the original object of the Pacific railroad, its eastern portion will probably be made the trunk of a branch extending to the mineral districts of the southwestern portion of the state, which are extremely rich in iron, lead and copper. These great resources still remain undeveloped from the want of a suitable outlet, which the above road will create. Measures are now in progress for the construction of this branch. It is also proposed to make this branch a portion of a great line of railroad from St. Louis to New Orleans upon the west side of the Mississippi This last named project is attracting much attention, and though means do not now exist for its construction, the eventual realization of this project can hardly be doubted.

Montreal Manufactures--Locomotive Engines--Railroad Cars.

We have frequently, during the last few years, performed the pleasant task of announcing and describing to our readers, the various manufacturing establishments erected, during that time, within our borders—Gould's magnificent flour mills, Peck's nail factory, Cantin's ship yard, Lyman's oil crushing works, and other industrial establishments. To these we have now to add one, from which, employing, as it necessarily does, a large amount of capital, of raw material, and of skilled labor, the most important benefits to our city's prosperity may be fairly anticipated. We allude to the locomotive factory and general engineering works established by Messrs. Kinmond, Brothers. We had much pleasure in visiting this cyclopean establishment a few days ago, and in observing the rapid progress there is being made in the construction of locomotives for the St. Lawrence and Atlantic railroad company. besides other work of a similar character; and we cannot doubt, from what we know of the Messrs. Kin monds, and of the skilled labor brought by them to the country, that their Montreal locomotives will fairly sustain the high character, as engine builders, which they have long enjoyed in Scotland. It may be known to some of our readers that the locomotives on the Lachine road are from the Messrs. Kimmonds late factory at Dundee. They have, we understand, given the utmost satisfaction, having during the years they have been in use required little or no repair. We therefore trust, that as we now possess an engineering establishment equal to any on the continent, it will receive that encouragement from our public departments, private companies, and individuals, which the enterprise, skill and experience of its projectors and proprietors so clearly entitle them to look for.

On our departure from Messrs. Kinmond's establishment, we paid a visit to Messrs. McLean and Wright's new railroad car factory, in Murray strt., Griffintown, through which Mr. McLean obligingly conducted us. The building occupied by Messrs. M. & W. is 160 feet in length by 60 feet in depth. The machinery is worked by a steam engine of 20 horse power, and consists of 1 axle lathe, 1 sweep saw, 1 tenneting machine, 1 boring do, 1 moulding do, 1 morticing do, 1 iron cutting and punching do, 2 bolt and nut cutters, 2 ripping and 2 cross-cut saws, a planing machine and other machinery.

This establishment has already turned out a great number of railroad cars, and is now, we were glad to learn, full of orders. We noticed a number of cars on the stocks and others nearly ready; and we were told by Mr. McLean that, although they have not yet been over nine months in operation, yet, during that time, they have turned out upwards of one hundred cars; and we learn, have capabilities for turning out one car per diem. Besides the building which contains the machinery, there are two others of nearly the same size, in which there are forges and other works. These works afford employment to about one hundred and thirty hands. We need not add, that we were glad to learn that the enterprise of Messrs. McLean & Wright, in establishing so important a manufactory in our city, had been so satisfactorily appreciated, and that their labors were being encouraged and rewarded by a constant and steady increase of orders.—*Montreal Herald.*

Journal of Railroad Law.

CONSEQUENCES OF AN INJURY SUSTAINED BY ONE SERVANT THROUGH THE NEGLIGENCE OF A FELLOW-SERVANT.

The case of the *Little Miami railroad company*, appellant, vs. John Stevans appellee, 20 Ohio Reports 415, is apparently, if not really, a case of legal *collision*, between the well-freighted Supreme court of Ohio, and the weighty authorities of that of several other States, including New York and Massachusetts.

In the above entitled case it was held as follows:

When a railroad company places the Engineer under their employ under the control of the conductor, who directs when the cars are to start, stop, etc., the company are liable to the Engineer for an injury, occasioned by the negligence of the conductor, whilst they are both engaged in their respective employments.

One of the four judges of the Supreme Court of Ohio dissented from this decision. The leading opinion in favor of the Engineer's right of recovery was in substance as follows.

"The upward and downward trains of cars, had previous to August 13th, 1846, passed each other at Plainville, about nine miles from Cincinnati. A change of the place of passing had been determined on, namely: that the cars should pass at Columbia. This change was to have taken place on 13th Aug., 1846, the day on which the collision occurred. It is the custom of the company when changes of this kind are made, to give a card explanatory of them to the engineers. On the day of the collision in question, Stevens the plaintiff below was the engineer, and Geo. Smith the conductor. By the rules of the company the conductor is the commanding officer on the route, so far as determining when the cars shall start and stop. The upward train came in collision with the downward train about seven miles from Cincinnati, between Columbia and Plainville, and Stevens was badly scalded. The engineer and conductor of the *downward* train had received their cards stating the change, and were running in accordance with it, expecting to pass the upward train at Columbia. There is no evidence that Stevens had received a card stating the change; it is inferrible from the evidence he had not. Stevens stopped at Columbia, but Smith told him to go on, and that the proposed change would go into effect at a subsequent day.

The main question arises on the following charge, asked by the counsel of the railroad company, and refused to them by the courts.

"That where two or more persons are employed by one individual or company, and in doing the work they are employed to do, one of them by his negligence and inattention to duty, causes an injury to the other, no action can be sustained against the employer, whether an individual or a company."

The company contend that Smith and Stevens, both being in the employ of the company, the Co., would not be liable for an injury done to Stevens, through the negligence of Smith and the other agents of the company.

Generally a man is responsible for the consel quences of his own negligence, and for that of his agents. And what can be more reasonable than,

that he who puts any power in motion for his own benefit, which, from its nature, may be destructive to others, if not carefully managed, should be accountable for such injury as may be caused by the careless management of such power.

The safety of society requires that this rule should be adhered to; there must be some good reason for taking any case without its application.

It is said, moreover, that when a party contracts to perform services, he takes into account the dangers and perils incident to the employment, and receives wages accordingly. Admitting this, he cannot be presumed to have contracted in reference to injuries inflicted on him by *negligence*—by wrongful acts. The employer has paid him no money for the right to break his legs, or to scald him. Stevens did not expect that the two trains would run by different cards. The employer has no more control over the person he has employed, outside of the service to be rendered, than he has over the person of any other individual, and is equally accountable for an injury to it.

It is urged that Stevens was guilty of negligence himself, in not stopping at Columbia, and in not keeping a man on ahead to give notice of the approach of a train, as provided for by the rules of the company in doubtful cases.

When we take into account that Stevens had not received the ordinary notice of the change, and the fact that he was told that the change did *not* take place until a subsequent day, by the person who had control of the cars, we do not think there was any evidence of negligence on his part. Stevens was a subordinate. He was injured by those placed over him by the company. We do not see why the company are not liable to him for the damage he has sustained.

It is contended, on the part of the company, that if a servant knows that he can recover for any damage received from the negligence of a fellow servant, it will lead to carelessness. But it is only where such servant has himself been duly careful that a right of action accrues to him.

On the contrary, the care and prudence of the employer is the surest guaranty against mismanagement of any kind. The employer would be likely to be careless of the safety of those in his employ if he were not pecuniarily liable for the carelessness of his agents."

American Iron.

The testimony of the eminent metallurgist, Dr. Mushet, of Scotland is decisive. He says that Scotch bars do not contain more than 90 per cent of pure metal, whereas American iron contains 99 per cent. But we have evidence on this score stronger than an opinion founded on chemical analysis. Late experiments at the Washington Navy Yard demonstrated, that English chain cable of a certain thickness of diameter was ruptured by a breaking strain of 716 pounds less than was required to rupture American chain cable of the same diameter.

During the experiments at the Washington Navy Yard, the strength of a chain of French manufacture was also tried. It yielded at a breaking strain of 1081 pounds, while an American chain of the same thickness only yielded at a strain of 1277 pounds. Similar results followed after over two hundred tests. With regard to Scotch and domestic iron, it is shown that the tenacity of the latter was more than double that of the former! These are important considerations, but they seem to be generally overlooked by congress, or are entirely unheeded.

Life is daily jeoparded on our railroads. The bursting of a wheel or the breaking of an axle, may entail death and misery upon hundreds. What protection have we against such casualties, while we persist in the use of foreign iron?—About a year since, a wheel burst on the Reading railroad, by which a number of coal cars were precipitated over a steep embankment. To all appearances, the wheel had been sound. But a closer inspection brought out the fact, that it had been cast out of iron of only 88 per cent purity. We do not charge that deliberate frauds are perpetrated by the British iron master; but brands which he sells at £6 8s. per ton are changed to brands that bring in the market £8 per ton, and the domestic importer is the first to palm off the imposition. Congress cannot enact a law to prevent these outrages, but it can pass a law imposing heavy duties on iron, and the consequence will be, that American iron will come into general use and the foreign article be partially excluded by the superiority of the former.

Telegraphic Communication between London and New York.

This new and important line of telegraph, which is to transmit intelligence between the Old and New World, is attracting considerable attention in commercial circles. A portion of the line is being prosecuted with considerable vigor. The company propose bringing the news between these two points within four to five days, and act under a charter granted by the British Colonial government, by the name of the Newfoundland Electric Telegraph company, the capital for which has been subscribey to this country and England, and placed under the most efficient management. Fred. N. Gisborne, Esq., a name well known in telegraphic enterprises, is the general agent of the company for the construction of the line. The line commences at Cape Race, and touching at St. John, crosses the island of Newfoundland to Cape Ray, thence a submarine line of 149 miles crosscs the Gulf of St. Lawrence, and a landing is made at Cape East, on Prince Edward's Island, and going through the principal towns of that district, it again tempts the ocean, and crossing Northumberland Straits by another submarine line of ten miles, lands at Cape Torment in New Brunswick, and so on to the boundary of the United States, from whence by an independent line to New York, the connection is completed. The total distance traversed by this line will be between 1400 and 1500 miles, of which 150 miles is submarine; and it is intended that this line shall be completed and perfectly ready for use early in the coming summer. For a large part of the line, wrought iron enamelled posts will be used, and the new insulator, recently invented by Mr. Gisborne, and which has been the object of so much attention both here and in Europe, will be used throughout the line. In the building of the line and the manufacture of materials, all that science and the many improvements that have been effected can do, to advance its completion and assist its durability and strength, has been employed.

This line is intended to be used exclusively for the direct transmission of *foteign intelligence*, and when completed, the only unbroken link in telegraphic communication for many thousand miles will be the Atlantic ocean. At this present moment, a party of capitalists are testing the feasibility of a submarine telegraph connection between Newfoundland and the Irish coast. The existing communication between New York and Europe, will be intercepted by the steam yacht belonging to the Telegraph company, as the vessels approach Cape Race; and a direct communication between St. John by the vessels of a company destined to be completed by the parties interested in the Telegraph company, running from New York to Ireland, touching at St. John's, will bring additional foreign news over the line.

A new and admirable feature in the arrangements of this company, is the being able to deliver a message at the company's office in New York, for any place in the Old World to which a telegraph line extends, whilst messages may be delivered to its agents in Europe, and transmitted by the Newfoundland Telegraph company over this continent. The gentlemen connected with the company, are sufficient guarantee of the affairs of the corporation being carried out with a due regard and attention to the public interests; and there is but little doubt, that as this line will be the most important now existing, so it will be one of the most profitable, as enterprises ought to be that conduce so much to public good.—*Jour. of Commerce.*

United States Mint.

Coinage for October.

Gold.	Pieces.	Amount.
Double eagles	142,061	$2,841,240 03
Eagles	18,600	180,600 00
Half Eagles	23,210	116,050 00
Quarter Eagles	143,036	355,090 00
Gold dollars	178,046	173,046 00
Total	498,945	$3,666,026 00
Silver.	Pieces.	Amount.
Half dollars	14,000	7,000 00
Quarter dollars	30,600	7,650 00
Dimes	200,000	20,000 00
Half dimes	106,000	5,300 00
Three cent pieces	2,666,300	80,004 00
Total	3,516,354	$3,785,980 00
Copper.		
Cents	121,260	1,212 60
Total	3,637,614	$3,787,192 60

Gold Bullion Deposited.

From California	$4,065,000 00
From other sources	75,000 00
Total	$4,140,000 00

The annexed comparative table will show the deposits of gold dust in each month, from January to October, inclusive, in 1851 and 1852. The increase this year, thus far, is $3,643,759.

Gold Deposits.

	1851.	1852.
January	$5,074,669	$3,161,688
February	3,004,970	3,010,222
March	2,880,271	3,892,156
April	2,878,353	3,091,037
May	3,266,491	4,335,578
June	3,037,560	6,689,474
July	3,127,517	4,193,880
August	4,135,312	2,671,563
September	4,046,799	4,253,637
October	4,743,584	4,140,000
Total	$36,795,526	$40,439,285

Centralization of Railroads.

The friends of the railroad system in this country may well congratulate themselves that there is as little tendency towards a centralizing preponderance of control in the various parts of the grand machine of its commerce, as there is in the working of the political affairs of the country. Just now when the last links are going forward to unite all the articulations of the railroad system into an harmonious whole, we should be apt to detect any symptoms of this nature. We have no doubt that there are able and ambitious men conscious of the power they might derive from standing near or at the helm of some mighty company, that should exert a preponderating influence over the affairs of distant corporations, and who might issue their edicts to their provincial vassals. But there exists no such intrusion of corporate or individual despotism, and the sole and paramount ruling influence which controls in perfect harmony, and in obedience to natural laws, the American railroad system is the demands of commerce and the wants of the travelling public.

A very different state of things prevails in other countries. The progress towards centralization has been so rapid as to become alarming both from the actual power exerted by giant companies, and the crushing monopoly that is equally destructive to all outside rivalry, and to the interests even of its own shareholders. The lesson is instructive, though the circumstances social and *political*, of the United States, are so different, that such a state of things could hardly be repeated on this continent. The inconvenience and unprofitableness of one or more gigantic and domineering railroad companies

is strongly set forth in a late article in Herapath's Railway Journal, on the subject of the disputes between the London and Northwestern and Great Western railways in England.

The disputes and contentions between these two powerful companies have long been a matter of deep regret to railway men, and deeper damage to railway property. Each of these companies for several years have been extending their arms and absorbing the little ones in their neighborhood, until, between them, they have swallowed up nearly half the railways in the kingdom, and have monopolized the traffic, by their own admission, of half the country; until indeed they have encroached on each other's limits, and have become both formidable and troublesome neighbors. Like Cæsar and Pompey they are each too great to live as friends, and therefore are eternally quarrelling with each other.

The proper and only remedy for all this would be to reduce them to their original limits. Let the Great Western be confined to a railway simply between London and Bristol, and the London and North Western to a railway simply between London and Birmingham; and the lines merged into each be set free and independent. Then there would be no interference and no quarrelling, no costly contests; no wasteful expenditure of the shareholders' money; no farther reduction of dividends by the addition of blind and useless schemes. This remedy would be effectual, and the only one that would be effectual; but it is one, however desirable, probably that could hardly be called constitutional. It is by our beautiful system perfectly right to produce evils, but when produced eminently wrong to retrace our steps and to cure them.

In a subsequent article, the remedy of amalgamating the interests of these companies, so as to substitute the despotism resulting from still further centralization of interests in place of the contention of rival lines, is shown to be utterly fallacious.

Our condition is happily, widely different from that which has engendered this state of things abroad, but it is well to look at some of its dangers; and prominently among these is the almost unavoidable loss of profit. As far as the strong and wealthy company with a heavy line between important points becomes an insurer of profits to the owners of the auxiliary roads and feeders, it sacrifices its position, and buys with an expenditure of hard money, its extended power or influence.

Again, our country is so widely extended and contains so many important cities with independent interests, that at the worst, each of these centres of trade would furnish so many systems, that although extensive in lineal distance and territorial extent, will not be massed under the control of a monopoly. Between these independent lines is the healthy rivalry of trade, and nothing more; and individual interest is free to choose its route of communication under the wholesome law of free intercourse, and the path over the continent will soon be almost as unshackled as that across the ocean.—Each route as separated by leading cities will of course very properly have its distinct and separate management, and where the route is substantially one as between Albany and Buffalo, a community of interest will fuse the separate corporations into a concert of operations even if not a merger of interests. But here is no compulsion, no over-shadowing influence like that found so detrimental to both the community and the stockholders in the great English companies.

One great advantage, is the higher class of administrative talent obtained by having each distinct road independent, instead of having a central board watching over the interests of many affiliated works, leaving their management to a secondary class of mere clerks and agents. There must be talent, and there must be responsibility to ensure the wisest measures for the policy of our public works, and these can only be secured by leaving the local roads under the supervision mostly of men living in the neighborhood, acquainted with the wants and resources of the country traversed, known to its citizens, and amenable to public opinion along the vicinity of the route.

The railroad is an instrument, the principal object of which is to develop the local resources of each particular section, and when this is best accomplished, we may be certain that the general interests do not suffer. For this reason, it is so important that the stockholders should be found chiefly along the line of the road, that the acute instinct of individual interest may be on the alert to check at once anything detrimental in the policy of the direction. While this remains, others interested may rest secure that their stake is not neglected.

We rejoice that our very political system, by bringing into public life its representatives in every section of the country, prepares a large class for the duties of just such offices as are rendered necessary to direct and manage the concerns of our railroads. State pride and local interests thus conspire to check monopoly, and secure the substantial good of the whole country.

We admit the power of wealth and its tendency to concentration, but all it looks for is a profitable investment, and utterly shrinks from the exercise of any further control as an unpaid and gratuitous labor. Capital may be concentrated in New York, and here may be found the means to aid in the building of half the roads in the country, but the owners of this capital are blind to everything but the prospect of the payment of the stipulated interest on their bonds, and leave everything to those with whom it properly belongs in the local management.

Georgia.

South Western Railroad.—The following statement of the receipts of the South Western railroad, for the first quarter of the second year of its existence, compared with its receipts during the same period in 1851, exhibits a great increase in the business of the road, and furnishes convincing proof of its prosperous condition. The road is fifty miles in length, and has been in operation for fifteen months.

Receipts for Aug...	$6163 80	$5064 58	$1099 22
" for September.	11697 34	9154 36	2542 98
" for October...	16851 00	11770 20	5020 80
Total.....	$34712 14	$25989 14	$8723 00

Increase per cent., nearly 34.

Bales cotton for Sav. and beyond, Oct., 1852..4 686
" " Macon " " 1855..1 151

New York.

There was a meeting at the American Hotel, in Saratoga, on the 26th ult., of the friends of a railroad on the west side of Lake Champlain, connecting those now in operation in some way so as to make a continuous line from New York city to Montreal. The meeting adjourned to meet at the Mansion House, in Albany, on Tuesday, Nov. 23, at 3 o'clock P. M., and that the following gentlemen be a committee to collect statistics and report at said adjourned meeting, viz: O. Keese, R. M. Livingston and S. Mills, of Essex Co.; S. Cheever, M. Pond and G. Strover, of Saratoga Co; A. W. Morgan, T. S. Gray and Joseph Woodward, of Warren Co.; M. K. Platt, H. G. Powers and H. Green, of Clinton Co.; L. Morey, Judge Ingalls and T. Paine, of Washington Co.

Ohio.

Akron and Zanesville Railroad.—The Zanesville Courier states, that this road is under contract to Millersburgh, in Holmes county, a distance of about 50 miles from Akron and 80 from Cleveland; and that the extension of this line to Zanesville is being surveyed, and that there is no doubt of its construction to that place.

Mount Vernon, Pittsburgh and Springfield R. R.—The great railroad from Philadelphia to St. Louis, by the way of Pittsburgh, Canton, Massillon, Wooster, and Loudonville, will pass through our flourishing town of Mt. Vernon, onward to Delaware, Marysville, Springfield, etc., to Cincinnati. We are glad to be informed that the arrangements for the construction of the important link between Delaware and Loudonville are in an encouraging state of forwardness. That portion of the link between this place and Loudonville is already under contract, and we presume that, before long, the contractors will be at work. Re-surveys of the portion lying between this place and Loudonville, we understand, will be made this week, and we presume the work will shortly be put under contract. We understand that such arrangements have been made at the East as will justify the directors in asking our commissioners to issue the Knox county bonds according to the provisions of law. We are truly gratified at the prosecution and speedy completion of this great work of internal improvement in which our town, county and State are so deeply interested. —*Mt. Vernon Times.*

Population of Canada.

The census which has just been completed of Canada, gives the following results:

Population of Canada East.....	890,261
" " " West.....	952,004
Total.....	1,842,265

The following shows the population of some of the leading towns:

Quebec.....	42,052
Montreal.....	57,715
Toronto.....	30,755
Hamilton.....	14,112
Kingston	11,585
Coburgh.....	3,870
Three Rivers.....	4,936
Brantford	3,877
Port Hope.....	2,476
Belleville.....	4,567
London.....	7,035
St. Catherines.....	4,368
Dundas.....	3,517
St. John.....	3,215
Sherbrooke.....	2,998
St. Hyacinthe.....	3,813
Bytown.....	7,760

Pacific Railroad.

Railroad Survey Complete.—We had the pleasure of a visit on Thursday afternoon last, from Mr. C. F. Brown, Ast. Engineer on the Pacific railroad. His survey commenced at Jefferson city, running along the bank of the Missouri river to this city, a distance of forty-five and a half miles—thence along the bank of the river, to the mouth of the Lamine river—up the Lamine to near the mouth of Blackwater, and from thence to Salt Fork in Saline county, running about four miles south of Marshall, and in nearly a direct line to Lexington. His route connected with that run by Mr. Stewart from Kansas down, near Janesboro, in Saline county. The distance by the river route, from Jefferson city to Kansas, by this survey, is 151 miles—and from Jefferson city to St. Louis, 122 miles—or five miles and a half shorter than any route yet surveyed, and the cost of construction supposed to be from $2,500 to $2,000 per mile cheaper than any other route. The whole distance by this route, from St. Louis to Kansas, is 273 miles, and it can be built for about half a million of dollars less than any other road. This looks very encouraging to the friends of the river route. With the large subscriptions they have made to the road and the diminished price at which it can be constructed, they have confidence that it will be located on this route.—*Boonville Observer, 23d,*

North Carolina.

Wilmington and Raleigh Railroad.—The committee on auditing the accounts of this company for the year ending 1st October, 1852, report the result of this company's operations, as follows:

Through travel		$200,425.02
Way "		98,935.10
Freight on railroad		110,194.09
Freight on steamboats		18,420.82
Transportation of mails, rents, etc		82,063.99
		$510,038.72
Expenses.		
Cost of transportation	$119,859.50	
Railroad repairs	53,847.81	
Expense of steamboats	152,030.77	
Office expenses	172.21	
Interest and exchange	68,230.19	
		$394,140.07
Net profits		$115,898.65

The condition of the company at the above date, was:

Debt of the company	$1,134,698.83	
Capital stock paid in	1,338,878.08	
Balance of profits in operations since commencement	491,997.09	
	$2,965,574.00	
Construction	2,075,052.42	
Re-construction	773,650.85	
Stock	13,080.50	
Debts due company	48,410.71	
Cash, etc.	55,379 82	
	$2,965,574.00	

North Carolina.

The state debt of North Carolina is as follows:

State bonds, already issued	$1,224,000 00
Loans authorised by law for various works of internal improvement, for which it is expected bonds will be issued during the next two years	2,140,000 00
Total	$3,364,000 00

The taxes paid to the treasury during the year 1851, amounted to the sum of $157,137 51. The Revenue Act, passed at the last session, will, it is believed, increase the revenue paid into the treasury this pear about $20,000. Neither the demands on the treasury, nor public convenience, will require any increase of taxation during the next two years.

Indiana.

Indianapolis and Bellefontaine Railroad.—We have already noticed that this important road is completed to Winchester, 74 miles, north east from Indianapolis, and that it is to be completed to Union at the Ohio valley, by the first of December, where it will connect at once with the Greenville and Miami road to Cincinnati, and over that road with all the railroads of Ohio; but important as this connection will be, this road has other, and still more important connections to the travelling and business public, it is a link of 83 miles in the great chain of railroads stretching west from the cities of Boston, New York, Philadelphia and Baltimore, through Cleveland, Sandusky, Pittsburg, Wheeling, and Columbus, uniting at Union, on the west line of Ohio, with this important road, which is to extend all these roads to the capital of the State of Indiana, there to meet on the Union track, lines of railroad to St. Louis, through Terre Haute, Lafayette, Peru, Madison, Lawrenceburgh, Richmond, Jeffersonville, near Albany, and Evansville. With the completion of these roads, the connection between the East and the interior of the State of Indiana, and St. Louis, will be complete, by the most direct lines of railways adapted by their low grades, and straight lines to rapid and cheap transportation of freight and passengers. The distance from Indianapolis to St. Louis is only about 235 miles, while that from St. Louis to Cincinnati is 335, making this line much the shortest between Cleveland and St. Louis, that has yet been contemplated.

Railroad Items.

The receipts of the Central Ohio railroad for Sept., amount to $5,373 83, and for the two weeks ending 19th October, $3,016 89. The number of passengers in September was 5,764, and in the two weeks of October, 2,927. This road is finished about 48 miles westward from Zanesville, or within ten miles of Columbus, its western terminus and its present leading connection is with the Mansfield and Sandusky road running to Lake Erie. By the first of December, the remaining ten miles will be constructed; when it will be at once in connection with the great lines running west, southwest and northwest, having their eastern termini at Columbus. The eastern portion of the Central Ohio road, from Zanesville to Wheeling, is now under contract.

The Grand Jury of Alleghany county have unanimously recommended a subscription on the part of the county, of $1,000,000 to the Alleghany Valley railroad company. The recommendation was made in accordance with a provision of law, which requires such recommendation to authorize the county commissioners to make the subscription.

The receipts of the coal at Baltimore in each of the past six years have been as annexed:

COAL TRADE OF BALTIMORE.

Years	Cumberland. Tuns.	Anthracite. Tuns.	Total. Tuns.
1846	18,393	100,000	113,393
1847	50,259	110,000	160,259
1848	66,289	125,000	191,280
1849	71,699	140,000	211,699
1850	146,645	160,000	306,645
1851	163,855	200,000	353,855

This year the receipts will amount to full 500,000 tuns.

The new portion of the line of road upon the Buffalo and Rochester railroad has been opened for travel.

Cornelius Slack, Esq., formerly agent of the Baltimore and Ohio railroad company at Cumberland, has been appointed superintendent of the Mt. Savage railroad.

The company are now pushing forward to completion their railroad connecting with the Baltimore and Ohio railroad at Piedmont. When it is finished, a number of companies already formed and forming—among them the Caledonia, the Swanton and the Westernport companies, with individual proprietors—will at once commence sending their unsurpassed coal to market.—Wm. H. Smith, Esq., the engineer of the road, is using every effort to complete it at the earliest day.

The liabilities of the State of Virginia for works of internal improvement now in progress are as follows:—Manassas Gap railroad $205,450; Richmond and Danville road, $1,200,000; South Side road, $723,200; Virginia road, $992,200; Virginia and Tennessee road, $2,000,000; Orange and Alexandria road, $600,000; Blue Ridge Tunnel and road, $900,000; James River and Kanawha canal, $7,560,126. Total, $14,180,996. The annual interest is $851,059.

General Ely A. Elliot of Clinton, has been elected President of the New London and New Haven railroad, vice F. R. Griffin, Esq., deceased.

The laying of the T rail on the Mad River road (to Sandusky, Ohio,) is nearly completed. This used to be one of the worst and most dangerous of the flat rail roads.

Books are opened at Madison and Prairie du Chien, Wis., for subscriptions to the stock of the Madison and Prairie du Chien railroad.

Eight hundred tons of railroad iron arrived at Savannah, on the 25th ult,, destined for the Fort Valley Branch of the Southwestern railroad.

The citizens of Savannah have subscribed $500,000 toward the completion of the Savannah and Albany road.

The work upon the Belleville and Illinoistown railroad, says the St. Louis Intelligencer, is going on finely; about two hundred men being engaged upon it. The board of directors have ordered a survey for the Belleville and Terre Haute road.—When that is completed, there will be a connection of both St. Louis and Belleville with the great Eastern line of railroad now terminating at Terre Haute.

The Allegheny city 6 per cent. loan, of $200,000, for the Ohio and Pennsylvania railroad, has been taken by Messrs. Kramer & Rahm, bankers, of Pittsburgh, on favorable terms for the railroad company.

The Auditor of the State of Illinois, considers stock certificates of the Pacific railroad company, a sufficient security for the issue of Bank notes, under the general Banking Law of Illinois.

The Halifax papers state Messrs. Sykes & Co., have contracted to build a railroad from Halifax to Windsor for £4,500 per mile. They are to have a lease of the road for nine years after its construction; the first three years at a rental of 2 per cent. on its cost, the second three years at 4 per cent, and the last three years at 6 per cent. The road is to be built as a Government work, and paid for in Provincial debentures, bearing interest at six per cent.

The contract is provisional, subject to the confirmation of the legislature.

The Miner's Journal furnishes the following statement of the Coal trade up to the present date for the season. The following is the state of the trade compared with last year, from the Schuylkill and Lehigh regions:

	1851.	1852.	Inc'se.
Schuylkill railroad	1,513,846	1,524,007	10,151
" canal	515,758	696,521	180,763
Total	2,029,614	2,220,528	190,914
Lehigh	902,616	983,193	80,577
Total	2,932,230	3,203,721	271,491

Showing an increase so far, from the Schuylkill and Lehigh regions, to be only 271,491 tons. The increase from all the anthracite regions will swell the increased supply up to 400,000 or 450,000 tons, at the close of the shipping season, all of which will be required, and will leave the market in a healthy state at the opening of the trade next spring.

The Junction road running along the Lake shore between Cleveland and Toledo have made such arrangements as will secure an early completion of the remaining link in the line from New York to Chicago and Galena. Some $100,000 of the bonds have been recently disposed of, which will enable the contractors to push the work with energy.

The Evening Journal says that the Northern railroad is expected to be completed by the 1st of December. The buildings on the line of road within the bounds of this city are being torn down and the ground prepared for the rails. The first cargo of iron from England for this road has arrived, and a portion of it is now being landed here and along the line of the road near the canal. It is confidently expected that rails will be laid to Cohoes and the road ready for use by the first of December next.

The freight business on the Harlem road will be very large this winter. The proprietors of the People's line have made an arrangement to carry all their freight over this road during the suspension of navigation on the river, on favorable terms to the Harlem road. The freight will be taken at Morrisania over Mr. Morris's road to the East river, whence the boats of the People's line will daily transport it to the lower part of the city. This arrangement must add largely to the revenue of the Harlem road.

The directors of the Potsdam and Watertown railroad have made a contract with Messrs. Phelps, Mattoon and Barnes for the construction of that road.

There is now only eleven miles of track to lay to complete the entire line of Lake Shore road from Cleveland to Buffalo, and if no delay occurs in the receipt of iron, this gap will be filled by the 10th of

November. The interval is now filled by stages, and trains are run regularly over the road. The Elk Creek bridge was crossed by the track on Tuesday last.

American Railroad Journal.

Saturday, November 13, 1852.

Railway Economies, No. II.

The illustration given in our last number, establishes a principle entirely correct in itself, but, of course, liable to be modified to meet the facts of each case. Vast bodies of the finest land in the United States, and lying within 200 miles of navigable water courses, are entirely unsaleable and nearly, if not quite valueless for the culture of wheat or corn for exportation, from the cost of transportation, which, in many instances, far exceeds the estimate in the above table. Under such circumstances as these, products are often fed out to live stock, and converted into higher values which will bear transportation, where the former will not. In this manner, lands are turned into account, where their immediate products would be valueless. But in such cases, the profit per acre is often very small; as in the districts best adapted to the use of corn, it is considered more profitable to sell it for 25 cents per bushel than feeding it out to animals. It will be seen that at this price, thrice its value is eaten up by the cost of transportation of 165 miles.

In this manner, railroads in this country, actually add to the immediate means of our people, by the saving effected in the expenses of transportation, to a much greater extent than cost. We are therefore, in no danger from embarrassment on account of the construction of lines called for by the business wants of the community, as these add much more to our active capital, than they absorb.

Railroads in the United States, exert a much greater influence upon the value of property, than in in other countries. Take England, for example, *there* a railroad may be built without necessarily increasing the value of property or the profits of a particular interest. Every farmer in England lives in sight of a market. Large cities are to be found in every part of the island, which consume the products of the different portions of it almost on the spot where they are raised. Railroads are not needed to transport these products hundreds and thousands of miles to market, consequently they may be of no advantage to the farmer living upon their lines. So with many branches of manufactures. These establishments may be situated immediately upon tide water, and as the fabrics are mostly exported, they would not be thrown upon railroads in any event. Such works may exist in that country without exerting any perceptible influence in adding to the value of the property of a community. The cases of the two countries would be parallel, were the farmer in the neighborhood of Liverpool, compelled to send every thing he could raise to London for a market, or were their manufacturing establishments so far from the consumers of their goods that their value would be sunk before these could be reached. We have in this country, what is equivalent to manufacturing establishments in Great Britain, in good order and well stocked for business, a fertile soil, that will produce bountifully for years without rotation or dressing, all that the farmer has to do is to cast his seed on the soil and to reap an abundant crop. The only thing wanting to our highest prosperity is markets or their equivalents, railroads, which give access to them.

The actual increase in the value of lands, due to the construction of railroads, is controlled by so many circumstances, that an accurate estimate can only be approximated, and must in most cases fall far short of the fact. Not only are the cultivated lands but city and village lots, lying immediately upon the route affected, but the real estate in cities hundreds and thousands of miles distant. The railroads of Ohio for instance, exert as much influence in advancing the prices of real property in the city of New York, as do the roads lying within that state. This fact will show how very imperfect every estimate must be. But taking only the farming lands of the particular district traversed by a railroad, where the influence of such a work can be more directly seen; there is no doubt that in such case the increased value is many times greater than the cost of the road. It is estimated by the intelligent president of the Nashville and Chattanooga railroad, that the increased value of a belt of land, ten miles wide, lying upon each side of its line, is equal to at least $7 50 per acre, or $96,000 for every mile of road, which will cost only about $20,000 per mile; so that this work has already created a value in its influence upon real property alone, equal to about five times its cost. What is true of the Nashville and Chattannooga road, is equally so, probably, of the average of roads throughout the country. It is believed that the construction of the three thousand miles of railroad of Ohio, will add to the value of the landed property in the state, at least five times the cost of the roads, assuming this to be $60,000,000. In addition to the very rapid advance in the price of farming lands, the roads of Ohio are stimulating the growth of her cities with extraordinary rapidity, so that there is much greater probability that the above estimate will be exceeded than not reached by the actual fact. We are not left to conjecture in this matter. But the case of the state of Massachusetts, what is conjecture in regard to the new states, has with her become a matter of history. The valuation of that state went up from 1840 to 1850, from $290,000,000 to $580,000,000. A vast increase, and by far the greater part of it is due to the numerous railroads she has constructed. This increase is in a much greater ratio to the cost of her roads, than has been estimated of Ohio.

We have considered the effect of railroads in increasing the value of property in reference only to lands devoted to agriculture. But such results do not by any means give the most forcible illustration of their value. An acre of farming land can at most be made to yield only a small annual income. An acre of coal or iron lands on the other hand, may produce as many thousands as the former does dollars. These deposits may be entirely valueless without a railroad. With one, every ton of ore they contain is worth one, two, three or four dollars, as the case may be. Take for example, the coal fields of Pennsylvania. The value of the coal sent yearly from there, in all the agencies it is called upon to perform, is beyond all calculation. Upon this article is based our manufacturing establishments, and our government and merchant steam ships, representing values in their various relations and ramifications, equal to thousands of millions of dollars. Without coal it is impossible to conceive the spectacle that we should have presented as a people, so entirely different would it have been from our present condition. Neither our commercial nor our manufacturing, nor consequently our agricultural interests, could have borne any relation whatever to their present enormous magnitude. Yet all this result has been achieved by a few railroads and canals in Pennsylvania, which have not cost over $50,000,000. With these works, coal can be brought into the New York market for about $3 50 per ton; without them, it could not have been made available either for ordinary fuel nor as a motive power. So small, comparatively, are the agencies by which all this has been effected, that they are completely lost sight of in the stupendous results they have produced.

What is true of the Pennsylvania coal fields, is equally true of all others, to a greater or less extent. The coal fields of Alabama may be made to bear the same relation to the Gulf of Mexico and to the manufactures of the southern States, as have those of Pennsylvania to the north. The Gulf of Mexico is to become the seat of a greater commerce than the world ever yet saw upon any sea, and this commerce, and all the vast interests with which it will be connected, will to a very great extent, owe its development and magnitude to the coal fields that slope towards the Gulf.

INCOME OF OUR RAILROADS.

Having shown in the preceding pages the influence of our railroads in creating values which vastly exceed their aggregate cost, the next point to be considered is the *income* of these works. For this after all should be our guide as to the safe extent of the construction.

As both the income of our roads and the influence which they exert in increasing values must bear a close relation to each other, the facts that have already been established in reference to the latter, necessarily involve the idea of a large business upon our roads. The value of lands is largely increased, for the reason that they yield a very large surplus for transportation.

There is no country in the world where an equal amount of labor produces an equal bulk of freight for railroad transportation. One reason is that the great mass of our products are of a coarse, bulky character, of very low proportional value, and consisting chiefly of the products of the soil and forest. We manufacture very few high priced goods, labor being more profitably employed upon what are at present more appropriate objects of industry. The great bulk of the articles carried upon railroads are grains, cotton, sugar and live stock. The difference between the value of a pound of raw and manufactured cotton, is measured frequently by dollars, yet both may pay the same amount of freight. Wheat, corn, cattle and lumber, all pay a very large sum for transportation in proportion to their values.

Again, for the want of domestic markets, the transportation of many of our important products involve a *through* transportation. Take for instance, a cotton producing state, like Mississippi, nearly the whole industry of this state is engaged in the cultivation of this article. Of the immense amount produced, no part is consumed or used within the state. The entire staple goes abroad, but as the industry of a people is confined to the production of one article, it follows that all others entering consumption must be imported; so that over the channels through which the cotton of this is sent to market, an equal value of tonnage must be imported as the case may be. This necessity both of an inward and outward movement equal to the whole bulk of the surplus agricultural product, is peculiar to the United States, and is one of the reasons of the large receipts of our roads. While this is the case, it is equally true that newly settled sections of country will often supply a larger a-

mount of traffic than an older one. There can be no doubt that an equal amount of labor would produce four times as much corn and wheat in Illinois as in Massachusetts; consequently, a man living in the former would contribute four times as much business to a railroad as one in the latter. In clearing the soil, it often happens that the transportation of lumber supplies a larger traffic for two or three years, than agricultural products for an equal length of time.

It is therefore a great mistake to suppose that because a country is new it cannot yield a large traffic to a railroad. In the southern and western states, only one year is frequently required to prepare the soil for crops which may be renewed the same in kind for a long series of years. The amount raised and consequently the surplus capital, is much larger in the more recent than in the longer settled portions of the country. The more recent too, the number of inhabitants being the same in both cases, the greater the amount sent to distant markets from the fact that there is no diversity of pursuits, which, in older communities, supply from a limited circle nearly all the prime necessaries of life that go into consumption. In newly settled districts all these are often imported from distant markets at a very heavy expense for transportation.

Quartz Mining in California.

There will be found, in another page of the Journal, a communication from Mr. D. K. Minor, in relation to *Quartz Mining* in California. As we have said before, Mr. Minor has resided in California three years, and has made the subject of Quartz Mining a study for practical purposes, not for speculation. A residence of a year in the mountains, with a party of men engaged in opening, and testing quartz veins, and a careful examination of many of the mills in operation, and the different mines worked by them, enables him to form a pretty accurate opinion of the present condition and future prospects of the business in California; and it may well be imagined that, if all who have been engaged in it had pursued a similar course before embarking largely in the business, there would have been fewer failures, and less prejudice against the business at this time.

From repeated conversations with Mr. M. on the subject, and a careful examination of the samples which he brought from the mountains—some of which may be seen at our office, and others of the largest and rarest kind, at the office of the company, 78 Broadway—we are led to infer that the Co. which he represents, have a mine of extraordinary richness, and that they only require good machinery, and good management to ensure the most ample returns upon a large capital; and we therefore cheerfully call attention to the advertisement of the company, in the Journal, in the full belief that, under the management of such men as are connected with it, the business will be conducted with prudence and a single eye to the mutual benefit of all the parties concerned.

Illinois.

Rock River Valley Union Railroad.—The Chicago Democrat states that the Hon. Robert J. Walker, who has recently returned from Europe to New York, has made the necessary arrangements with English capitalists for all the additional means requisite to the early completion and equipment of this great work.

☞ The Legislature of New Brunswick, by a vote of 38 to 1, have confirmed the contract for the construction of the European and N. Amer. R. R.

Covington and Louisville Railroad.

A general meeting of the subscribers to the stock of the Covington and Louisville railroad was held at Warsaw on Wednesday last. The Louisville organization was confirmed, whereby all difficulty, in the way of a prompt prosecution of the work has been removed. It is understood, however, that there will be some changes in the board of directors, in order that the upper end of the line may be represented.

More than $900,000 of stock has been subscribed. Every thing now favors the speedy prosecution of this most important undertaking.—*Covington Journal of the 4th.*

Stock and Money Market.

The general favorable state of the market continues as it has done since the slight depression some weeks ago. A steady and uniform advance may be traced through all the leading stocks.

It must be admitted that the general prosperity and ease in the money market has given birth to a speculative feeling, and this is already displayed in the rapid rise of particular stocks. The demand for government and state stocks is steady, and railroad securities and the stocks of the dividend paying companies continue to be eagerly sought for investment. The sales during the week have been remarkably heavy. The same animation seems to pervade the market in all our leading cities. The confidence felt in railroad investments, and the steady advance shown almost universally in their receipts, begin to make them the favorite object of the attention of capitalists. There exists evidently a large surplus of capital, and it must naturally seek, to a considerable extent, a form at once secure and easily convertible, as the exigencies of the owner require.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, NOVEMBER 13, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	110
U. S. 6's, 1862	115¼
U. S. 6's, 1862—coupon	115¼
U. S. 6's, 1867	119¼
U. S. 6's, 1868	119¼
U. S. 6's, 1868—coupon	119¼
Indiana 5's	99½
Indiana 2½	56½
" Canal loan 6's	95½
" Canal preferred 5's	47
Alabama 5's	97
Illinois 6's, 1847	83
Illinois 6's—interest	55
Kentucky 6's, 1871	110
Maryland 6's	108¾
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	110
New York 5½'s, 1865	112
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	110
Ohio 6's, 1870	115½
Ohio 6's, 1875	117
Ohio 5's, 1865	103
Ohio 7's, 1851	105½
Pennsylvania 5's	96¾
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	107½
Virginia 6's, 1866	111½

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	101
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	102½
New York 7's, 1857	108
New York 5's, 1858-'60	102½
New York 5's, 1870-'75	103
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	109
Baltimore 1870-'90	106
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	115
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	99½
Erie convertible bonds, 7's, 1871	98½
Hudson River 1st mort., 7's, 1869	109
Hudson River 2d mort., 7's, 1860	102½
New York and New Haven 7's, 1861	106½
Reading 6's, 1870	88
Reading mortgage, 6's, 1860	98½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	98½
Cleveland, Col. and Cin. 7's, 1859	121
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	105
Ohio Central 7's, 1861	96½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Nov. 11.	Nov. 4.
Albany and Schenectady	109½	108
Boston and Maine	107½	107½
Boston and Lowell	109	109½
Boston and Worcester	105	105
Boston and Providence	89½	99½
Baltimore and Ohio	99	98½
Baltimore and Susquehanna	29½	30
Cleveland and Columbus	127	127
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	98	97
Erie	86½	85½
Fall River	—	—
Fitchburgh	104	103½
Georgia	—	—
Georgia Central	—	—
Harlem	71½	71½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	76	76
Little Miami	—	—
Long Island	39	35
Mad River	—	99
Madison and Indianapolis	108½	109
Michigan Central	111½	110½
Michigan Southern	128½	125
New York and New Haven	113	113
New Jersey	130	132
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	51	50½
Ogdensburgh	26½	26
Pennsylvania	48½	46½
Philadelphia, Wilmington & Balt.	36½	36½
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	99	97½
Rochester and Syracuse	124½	123
Stonington	56½	5 6
South Carolina	—	122½
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	141	143
Vermont Central	17½	17½
Vermont and Massachusetts	22	22½
Virginia Central	—	40
Western	104½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page.

The Railroads of Great Cities.

The great use of the railroad as a mighty engine of civilization is to place, with the least possible loss, the consumer in virtual juxtaposition with the products of the soil. Even the accommodation of the world of travel, now vastly increased by the facilities afforded of unexampled cheapness and rapidity in what seems almost a want of human nature itself, is inferior in importance to the element which gives to labor its food and materials. It is almost endless to point out the different modes in which the railroad ministers to the wants and comforts of man. To the inhabitants of great cities they have a peculiar value, and to their influence will be ascribed much of the growth and importance of these places in the future. Not only does the iron track draw to these centres the teeming fertility of the surrounding country, and collect the votaries of business and pleasure, but it will doubtless modify very greatly the manner of living of those who are engaged in trade in such cities.—We anticipate a very considerable change produced by the general introduction of the railroad. People will not be willing to endure the stenches and insalubrity of a great city when one-half hour will place fifteen miles between their residence and the hundreds of crowded warehouses and houses that make up the city itself. It will now be possible with ease and at comparatively trifling expense to live in the country and daily transact business in New York, Boston or Philadelphia, by means of the railroads which are among the most important instruments of that commerce, the principal cause of the wealth and growth of those cities. If there be any increased expense in the loss of time, etc., the railroad will more than make it up by increasing the profits of those who are the exchangers of value, the mercantile class, as well as multiplying the amount of business. The increase in wealth and magnificence of New York is hardly to be ascribed to the additions made by emigration, nor yet to the influence of foreign commerce, but to the fact that it now by means of railroads, commands a circle of visitors and customers who deal directly and in person in its warehouses and magnificent stores, once removed in distance as many weeks as they now are days.

Railroads are destined to modify very materially, we think, the modes of living of a very large class of those whose daily business and interests are connected with cities, and in a way very much to their comfort and the health of themselves and their families. A residence in the country is now compatible with a presence during the day in the city, and the ability to be at the store, the office, or the counting room, as early as desirable. This is still more evident in the neighborhood of Boston than New York; there the radiation of railroads is much larger than in New York, both on account of the physical conformation of the island on which the latter city is situated, as well as the fact that she was somewhat earlier in the field of railroad construction as a complete system. There the person doing business in the city has a large choice of pleasant towns and villages, where living is cheap, and all the concomitants that make up life, eminently pleasant: besides the securing of a pure and salubrious atmosphere—one of the greatest blessings we can desire. The New York merchant or professional man is not altogether destitute of a choice of position. The Hudson River, the Harlem, and the New Haven railroads, give an opportunity to enjoy a salubrious residence within a range of twenty-five miles from the city, as they pass through a beautiful section of country, affording every variety of agreeable prospect and neighborhood, while the numerous railroads radiating from Jersey city afford a nearly equal range. For those who prefer the neighborhood of the ocean, the Long Island railroad will supply a convenient means of approach.

The pleasant villages on the shores of the Hudson river and the line of the railroad which skirts its bank, will probably be the first localities chosen, although the villages of Westchester, between Fordham and the Harlem river, now numbering several thousands of inhabitants, mostly thriving and industrious mechanics and clerks, are the creation of the facilities given by the operations of the Harlem railroad, one of the earliest enterprises of the city of New York.

The roads we already possess afford abundant opportunities for the establishment of elegant parks adorned by successions of walks, drives, etc., and supplying sites for numerous villas and elegant mansions within their sequestered limits. Take for example a domain of three or four hundred acres on the line of one of our railroads connected with the heart of the city, like the New Haven, Hudson, or Harlem, how easy it would be, as a mere business speculation, to beautify such a tract and lay it off in plots of from one to five acres, separated by winding walks, and all the pleasing adjuncts of the art of beautifying the landscape, and still leaving room enough for gardens, etc. It might be filled with more than a hundred seats for wealthy families, whose superfluous money would be laid out in such a way as not only to render this joint park an ornament to the country, but an example to those less favored by the gifts of fortune. We feel conscious that there exists a large class who eagerly desire a half-retirement, such as a situation like this might furnish. If this or a similar idea were once successfully carried out, our citizens of all classes would largely adopt its principle, and take advantage of these improvements in the arts which have virtually annihilated space.

It is the destiny of our great cities rapidly to go forward, the commerce of the country and of the world is advancing, wealth is doubling rapidly on itself, and with it a command over all the material which yield enjoyment to life. The closely packed houses of the city are no longer a necessity in the vast centres of population and commerce, and by means of the very concentration of wealth there exists an omnipotence of choice in the mode of life. Railroads exclusively for city use, have already begun a career in New York, and the upper portions of the island will soon become more accessible than the upper sections of the now settled parts of the city were a few years ago. The population is fast verging on a million; we cannot doubt that the Sixth and Eighth Avenue roads, and branches from the Hudson River and Harlem will, before many years elapse, form a net work over the whole of the lower portion of Westchester county. Nor is the experiment altogether untried. Boston, in her more closely articulated system of railroads, has set the example, and it has been found so attractive to men fond of home and its comforts, and has so many advantages both physical and social, that we can hardly doubt its adoption to a great extent in all the metropolitan cities. City life is artificial, and the natural tendency is continually to escape from it; and though the desires and wants of mankind compel them to the bustle and feverish excitements of trade, they continually sigh to look on the face of nature and be refreshed by the presence of her "garniture of fields." The railroad enables the citizen to retire after the close of each day's labor, to breathe during the hours of repose a better and more salubrious air, while he leaves in its quiet and comfort those who by their sex or tender years are exempted from the confinement of the workshop or the counting room.

It is not our intention to attempt to lead in any such enterprise; but we believe that the time is ripe for it, and that we have a large and overflowing as well as a wealthy population anxious to avail themselves of such a plan; and not only so, but something of the kind has been already proposed, and we are confident of its feasibility, and think that it must add to the revenues of our railroads terminating both in the heart of the city and at Brooklyn and Jersey City, if carried out extensively. Already the residents of Sing Sing, Tarry Town and Yonkers are negotiating for their separate cars, and to have their regular hours to be carried to and from New York; this is a step in the same direction. The railroad thus puts in the power of all to choose their place of residence; and the luxury of dwelling in the country, which once belonged exclusively to the wealthy man who could command his carriage and span of horses, is now shared by all who are able to pay the moderate commutation of the railroad line. Considering the high rents in the city of houses suited for the accommodation of the middling classes, it may be found that economy as well as comfort will commend this plan of living, and if found equally eligible, there can be no doubt that the railroad company will be as cheerfully paid as the city landlord.

South Carolina.

Greenville and Columbia Railroad.—The annual meeting of the stockholders of this company was held at Greenwood, S. C., on the 14th July last.

The President, Hon. John Belton O'Neale, presented the report showing the condition and prospects of the road. From it we learn that the road has been completed 90 miles from Columbia, the grading of the entire road and its branches nearly finished, and 35 miles of the wooden superstructure beyond the present terminus have been put down, and 4,000 tons of iron is now contracted for and in progress of delivery. Thirty-four or thirty-five miles of flange iron taken from the South Carolina railroad has been paid for in the bonds of that company, equal to $62,421 75. The delays in the construction of the road between Ninety Six and Greenwood have arisen from the inability of the South Carolina railroad, from the great press of freight, to forward the iron lying at Charleston. It is now hoped that the road will reach Anderson certainly by the 1st January next, and Greenville by the 1st April, 1853. The Abbeville branch is to be opened simultaneously with the completion of the road to Anderson. From the present business, it is believed the net income will be over 7 per cent per annum.

The policy of the company not to permit forfeitures has been found of great advantage, and of the subscriptions sued, five per cent it is believed will cover all the loss. Including the $75,000 to be subscribed by the State on completing the grading from Abbeville and Greenville, at least $150,000, and possibly more, of subscriptions remain to be collected. The means of the company consist of $44,000 bonds of the South Carolina railroad company, and $30,000 Columbia bonds. The income of the road is relied on to aid in its completion.

Last year it was $99,116. The net profit, $38,319, was applied to construction.

There is still need, however, of funds to meet the demands of construction, and that for iron, engines, etc.; and it is recommended to issue the bonds of the company to the amount of $250,000, due ten years hence, bearing seven per cent interest. The President was satisfied during his visit in New York that the bonds of the company might be sold there from $90 to $95 per hundred, at least if secured by a mortgage; but in Charleston and other parts of the State the bonds will be sold without a mortgage at or near par.

The entire cost of the road, when completed, with all its fixtures and rolling stock, will be, according to the Engineer's report, $1,601,991 35. The interest on this capital will be $112,139 39.

The workshops at Helena are in successful operation, and the necessity of a round house for the protection of the engines is strongly urged.

A committee of the board and stockholders attended the meeting of the stockholders of the Union and Spartanburgh railroad, to locate their road. They were forced by the competition of the Charlotte and South Carolina railroad company, to agree not only to take in stock the cost of the survey, the transportation of the iron rails, as heretofore agreed on, but also $50,000 of the capital stock, in order to induce a junction with the road at Alston. This is of so much importance to the company, that it is hoped there will be no dissent from the action of the committee.

It is supposed that it may be interesting to the stockholders to look at the prospect of the connection of the road with the great Rabun Gap project, or Blue Ridge railroad. A notice was given for the extension of the road to the South Carolina line. This was done to place it in the power of the stockholders to make the extension. But if the Legislature will, as recommended by the late convention, re-enact the Blue Ridge railroad charter, so as to connect at Anderson, it is all that can be desired.

The late convention at Anderson, from four States, has settled, that the road is to be and will be built from Anderson. The Greenville and Columbia road is to participate largely in the profits of thus opening out another way to and from the great west. Indeed, it is no exageration to say, that the stock of this company will be doubled in value by the junction. It is, therefore, a matter of great importauce that this company should take great interest in the enterprise, and no subscription that can be made will be too great.

The report of the Chief Engineer, the late lamented Wm. Spencer Brown, exhibits the following matters connected with the road not as fully treated in the President's report.

We copy the following:

The gross income of the company for the twelve months ending thirtieth June, has been ninety-nine thousand one hundred and sixteen dollars and forty-five cents.

Expenditures for transportation and maintenance of way, same period, $60,797 42.

Net income, $38,319 03.

This income has been derived from the use of 75 miles of road, extending from Columbia to Ninety-Six station, the portion only as far as Newbury, having been in use the whole year.

The total cost of this section of road has been $841,022 99 The net income is therefore 4½ per cent upon the capital invested.

It is proper to observe, that in the expenses of transportation is included cost of carriage, of materials used in construction, viz: iron rails, crossties and sills, and several bridges, all which if charged as freight, would have added largely to the gross receipts of the road.

The difficulty in procuring timber for superstructure along the line of road, passed over the last year, has taxed the transportation department with unusual expenses in distributing material.

The Spartanburg and Union railroad company, has been organized and the route located connecting with this road at Alston, twenty-five miles above Columbia, the income from the Broad River division must thereby be greatly increased, and the interest of this company become identified with a large section of this state and North Carolina, which else would find its access to market through other channels.

The granting of a charter for a railroad by the state of Georgia across the Blue Ridge, through Rabun Gap, in that state, has opened up a new enterprise, which promises to this company such connection with the improvements of the valley of Tennessee, as will make it one of the most important avenues of communication in the Southern states. In order to give certainty to the favorable opinions that have been entertained of the practicability of a route through this Gap, and to put into the possession of this company such information as a proper view of its own interests call for, a party of engineers was organized about the 1st of May, and have since been actively engaged in prosecuting surveys, both in this state and in Georgia.

By connecting my lines with those run by Gen. A. H. Brisbane, for a company of gentlemen in Clarksville, Ga., I have been able to obtain a continuous line from the Gap to the country below the mountains in this state. This route passes through Rabun and Habersham counties, Ga., near Clayton, the Tallulah and Toccoa Falls, Ga., and Bachelor's Retreat in this state, and admits of the remarkably favorable grade of forty feet per mile. The line is circuitous, increasing the distance over a straight line from Anderson, C. H., to the Gap, about twenty miles.

The condition of the road on the 30th June, 1852, was as follows:

Capital stock	$960,906.80
Interest and exchange	4,197.34
Income of road	116,031.37
Bills payable, balance	151,400.00
Company's bonds short dates	42,171.00
" 7 per cent coupons	150,000.00
	$1,424,706.51

The expenditures up to that time had been:

Account of construction	$982,563.60
Real estate, depots and machine shops.	68,191.55
Locomotives and cars	134,860.96
Profit and loss, and expenses Bureau department	29,445.60
Transportation, and maintenance of way	94,207.30
Accounts with other railroads, bonds of South Carolina railroad, and bonds of Town Council of Columbia	89,668.20
Cash	25,769.30
	$1,424,706.51

The amount of business done during the year from 1st July, 1851, to 1st July, 1852, was as follows:

No. of passengers up	10,096
No. of passengers down	9,768½
Total number	19,864½
Amount	$30,378.86
Freight up, in amount	34,974.04
Freight down, in amount	31,665.21
Mails	2,098.38
	$99,116.45

The number of bales of cotton transported during the year was 48,432.

The committee to whom the various reports were referred, reported in favor of carrying out the various suggestions in the President's report, they especially concurred in the propriety of the subscription to the Spartanburgh and Union railroad. The following is an extract on this subject:

It never would do that this portion of the country should be carried away from us, to become feeders of a work to which they do not properly belong.—The committee are delighted with the prospect of a connection with the Blue Ridge railroad. They believe that it is not only a State, but a National work. It is to bind indissolubly together, the South and the West. It is the revival, after almost twenty years' sleep, of the great Louisville and Cincinnati project, under more favorable auspices. Every South Carolinian should respond to a work which is to pour the rich products of the West and South through the centre of South Carolina, to her time-honored metropolis.

A series of resolutions were also reported and adopted, in furtherance of the main objects of the reports, viz: to issue bonds to the amount of $25,000, to subscribe $50,000 to the Spartanburgh and Union railroad, and authorising the President to call a special meeting to consider the propriety of subscribing to the Blue Ridge railroad company or any kindred project.

The following gentlemen were elected by the stockholders:

For President.

Hon. John Belton O'Neall.

For Directors.

William Patton, Esq., of Charleston; Col. John S. Preston, Columbia; Drayton Nance, Esq., Col. S. Fair, Newberry; Joel Smith, Esq., Dr. F. G. Thomas, Col. T. C. Perrin, Abbeville; J. P. Reid, Esq., Hon. J. N. Whitner, Anderson; Josiah Kilgore, Esq., Vardry McBee, Esq., Greenville; Daniel Blake, Esq., North Carolina.

Pennsylvania

The Dauphin and Susquehanna Coal company has contracted, on very favorable terms, for building and completing the extension of their present railroad from a point at Cold Spring on their coal estate, to Port Clinton on the Philadelphia and Reading railroad, at a total cost of less than $17,000 per mile, including rails. The route passes through Fishing creek Gap, the populous and thriving town of Pine Grove, the rich valley of Bear creek, and the town of Auburn, a distance of 31 miles, with exceedingly favorable grades, in the direction of the trade. By the terms of the contracts, this work is to be entirely completed, ready to receive the locomotives and cars on or before the 1st of July next. Contracts for heavy American T rails for this road were made previous to the late heavy advance in rails, and the deliveries are to be made early next spring.

Quartz Mining in California.

To the Editor of the Railroad Journal:

Dear Sir: I addressed you on the 10th of August last, on the subject of *Quartz Mining* in California. I then gave you my views *why* the early operations in Quartz Mining had not been successful—and it was because there was a lack of *experience*, and a want of *suitable machinery* to work the Quartz to advantage—and not on account of a lack of gold in the rock.

Since I wrote you last—about three months—important facts have been developed by *experience*, and I now address you again in the hope that you will give them to your readers.

Though there are from fifteen to twenty mills in operation in *Nevada County*, most of which I visited in May last, yet I can only speak *definitely* in relation to *three*, in Grass Valley, from which I have late information.

When I was at Grass Valley on the first days of May last, I examined, with *care*, all the mills then in operation, and you may recollect that I spoke more particularly in relation to the *new Helvetia*

company, the *Grass Valley Quartz Mining Co.*, and the *Gold Hill company*. Those were *then* the most successful mills in operation; but I can now speak of the *Empire mill*—which was then not quite ready to work; as equally successful with any other mills in California.

To those who are familiar with the business, as carried on in California, I need not say a word; but to those who have never been there, or never investigated the subject, I will simply say that, when you have a *good vein* of *gold bearing quartz*, all you need to make money is *good machinery, ample power, and good management*.

With *good* machinery and *judicious* management, a company can realize *large* returns from rock that will pay two cents per *lb.*; of course, *much larger* returns may be obtained from quartz which will yield *three* or *four* or *five* cents per lb—as the *cost of working* is the same in either case—therefore the richest veins hold out the greatest inducements for the investment of capital.

From recent information, received from Grass Valley, I learn that the operations of the first three mills, above alluded to, have been even more successfull than previous to my visit to them on the first day of May, and that the managers of the "Empire Mill" have *more* than realized their anticipations, since they got their mill in operation—as their *saw mill* alone, at $45 per M, will give them a net profit of over *ten per cent per annum* upon an outlay of $250,000.

In speaking of those mills in operation, of which I have definite information, I must not omit to refer to those now in progress of erection, viz: the "Grass Valley Gold Mining company," of which GENL. WINCHESTER is the President and Manager—and of the "Manhattan company," of which JOHN A. COLLINS is the President. These companies are about to introduce machinery of an improved plan, and upon a much larger scale than any now in use in California, from which very important results may be anticipated. A few months operation of these mills will, I have no doubt, give returns which will be entirely satisfactory to those interested.

From the latest reports received from the Quartz mills in California, I learn that they are yielding increased returns upon the outlay, from the improved mode of working and *amalgamating*, or separating the gold from the quartz when it is pulverised. This is an important consideration, as, upon it depends much of the success of quartz mining—especially when the gold is very fine.—Indeed, in the rock of one of the richest veins worked in Grass Valley, you can scarcely perceive a particle of gold with the naked eye—yet on working it the yield averages from $80 to $100 to the ton; of course the mode of working which will save the very *fine* gold will also save that which is coarser, and in larger quantities; consequently the most favorable results may be expected from working such rock as is found in the mines of the *Volcano Quartz Mining company*, and was exhibited at the late Fair of the American Institute. Good machinery, ample power, and proper management are only required with such rock to ensure the most ample returns upon a large capital.

The very extensive and rich claims of this comt pany are situated on the table land between Otter creek on the south, and the middle fork of the American river on the north, and about two miles from *Big Bar*, *Volcano Bar*, and *Sandy Bar*—of which the following accounts are given in the last California papers. The Sacramento Union says that:

Below is the account current of gold dug, and expenses of digging, by the following river mining companies, owned at and near Big Bar, for two weeks, ending Oct. 2d—this being the first report.

Independent company, 16 shares—		
Dug in four weeks		$8,329
Less 304 days' work at $6	$1,824	
Sundries	43	—1,867
Total net proceeds		$6,462
Wing Dam compan, 12 shares—		
Dug in three weeks		6,291
Less 258 days' work, at $6	1,548	
Sundries	80	—1,628
Total net proceeds		4,663
E. Pluribus Unum company, 5 shares—		
Dug in two weeks		5,000
Less 118 days' work, at $6	708	
Sundries	30	— 738
Total net proceeds		4,661
Sub-Marine company, 13 shares—		
Dug in five weeks		30,929
Less 558 days' work, at $6	3,348	
Sundries	97	—3,445
Total net proceeds		27,484
Cash Rock company, 11 shares—		
Dug in one week		2,000
Less 66 days' work, at $6	396	
Sundries	10	— 446
Total net proceeds		1,594
Davenport company, 3 shares—		
Dug in two weeks		3,700
Less 36 days' work at $6	216	
Sundries	31	— 247
Total net proceeds		3,453
Ne Pius Ultra company, 10 shares—		
Dug in four weeks		8,256
Less 240 days' work, at $6	1,440	
Sundries	39	—1,479
Total net proceeds		6,777
Total net proceeds of the above Co's		54,695
Connecticut, El Dorado and Empire claims, about net		13,400
Total net proceeds of nine companies		$68,095

From this it will be seen that these ten companies realized over $68,000 in a little over two weeks, afier paying six dollars per day for about 2000 days work, expended during that period with incidental expenses.

I also learn that the parties working on Sandy Bar, and in Yankee Slide, are realizing large returns for their labor, especially Sandy Bar; and there can be little doubt in the minds of those familiar with the position of these rich localities—all of them, with perhaps one exception, Sandy Bar, being below the point where our quartz vein has been broken through by the river—that these immense amounts of gold have bken set free from those portions of the quartz veins which have been disintegrated by the action of the elements; and it may be well anticipated that equally large, and probably much larger amounts yet remain in those portions of the veins which have not been disturbed; and this company now propose to work with ample power, and the most approved machinery—sufficient, at least, to work an *average* of forty tons per day, which, at the very low rate of *two cents* per pound, will yield over $1600, or $1130, *over* and *above working* expenses per day; or for *two hundred* working days in the year, *two hundred and twenty-six thousand dollars*, or nearly *fifty per cent* on a capital of $500,000. This may appear incredible to those who have not examined the samples—*from a vein in place*—now in the office of the company, 78 Broadway, but *not* to those who have *handled* them, as such rock as these will yield over $40,000 to the *cubic yard*.

Startling as this may appear, any person of intelligence will admit the fact on examining for himself, which those curious in such matters are requested to do,

And oblige, respectfully yours,
D. K. MINOR.

The Cold Spring Iron Works,
INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—
John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder, " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry, Timber Bridging, and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 30th November.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Railroad Iron.

1400 TONS Railroad Iron, weighing about 55 lbs. per yard, of an approved pattern, now in bond, for sale by
P. CHOUTEAU, Jr, SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

Oxford Furnace, N. J.
ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.
Sept. 11, 1852. 1y*

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY,
CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR, } of New York.
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY
JAMES ALLEN, } of California.

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

To Railroad Contractors.

PROPOSALS will be received at the office of the New York and Boston Railroad Co., in the city of Middletown, until the 20th inst., for the grading and masonry for the road bed for a double track of the N. Y. and Boston Railroad.

Proposals are invited for the first, second, and third divisions, commencing at New Haven, and extending easterly about 71 miles. Also, for the fourth divisions if prepared in time.

Profiles may be examined and specifications of the work can be had by applying at the Company's Office.

CHAS. R. ALSOP, President.
City of Middletown, Nov. 1, 1852.

Mississippi and Atlantic Railroad, from Terre Haute to St Louis.

BOOKS OF SUBSCRIPTION TO THE CAPITAL STOCK OF THE MISSISSIPPI & ATLANTIC RAILROAD COMPANY, an organization under the General Railroad Law of the State of Illinois, for the construction of a Railroad from Terre Haute, Indiana, to St. Louis, Missouri, will be opened under the direction of Messrs. WINSLOW, LANIER & CO., at their office, No. 52 Wall street, in the city of New York, on SATURDAY, the 6th day of November, 1852, and remain open until the stock of said company shall be subscribed.

The Capital Stock of said Company is TWO MILLIONS OF DOLLARS, of which Four Hundred and Seventy Thousand Dollars has been taken, leaving the sum of One Million Five Hundred and Thirty Thousand Dollars open to present subscription.

This stock has been divided into shares of FIFTY DOLLARS each.

TEN DOLLARS per share will be required to be paid at the time of subscription, and the remainder will probably be called through the whole of the year 1853.

Stock payments will draw seven per cent interest—payable on the first days of each July and January in the city of New York, until the completion of the work, when regular dividends will be made from the earnings of the road.

The first payment of interest will be made on the first day of July, 1853.

Books for the transfer of the stock will be opened and permanently kept in the city of New York, upon which the stock will be transferable after the payment of the first instalment.

This road is 170 miles in length, of which over 165 miles is straight line.

On over two thirds of the line the grades are under twenty feet to the mile, and the maximum grade is less than forty feet.

It is the last uncompleted link in the great chain of railroads from New York, Boston, Philadelphia and Baltimore to the city of St. Louis.

It is the most direct route, and must be a valuable road, and its stock a good investment.

It is designed to complete the road within eighteen months to two years; and it will be built under the personal supervision of the President, JNO. BROUGH, Esq.

Messrs. Winslow, Lanier & Co. will furnish maps of the connections, profits of the route, and the prospectus of the company, containing full particulars as to the organization and prospects of the work, upon application at their office.

SALMON A. PHELPS,
MICHAEL G. DALE,
NATH. M. McCURDY,
DEAN ANDREWS,
Commissioners.

WINSLOW, LANIER & CO., Agents.
New York, November 1st, 1852. 2t

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.

WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

Notice to Contractors.

ERIE AND KALAMAZOO RAILROAD.
NEW STATION AT TOLEDO.

SEALED PROPOSALS will be received at the office of the Company, at Adrian, until the 15th of November next, at noon, for the proposed Station, embracing about

250,000 cubic yards of earth work,
40,000 cubic feet square timber in Docking,
70,000 lineal feet round timber in Docking,
Piling, Capping and Planking for wharf, floor and foundation for buildings,
Two Draw bridges—wood on piles,
1,500 to 2,000 cubic yards Hydraulic Stone Masonry in Aqueduct.

Maps and plans may be examined at the Engineer's Office, Adrian, after the 10th of November next.

Satisfactory security will be required for the faithful performance of work.

To be completed one year from the first of June next.

The Company reserve the right to accept or reject proposals, as their interest may require.

JOHN B. JERVIS, Chief Engineer.
Adrian, Michigan, October 25, 1852.

Notice to Contractors.

SEALED PROPOSALS will be received at the Office of the New Orleans, Jackson and Great Northern Railroad Company, in the city of New Orleans, until the 30th of November next, for the grading, masonry, piling and bridging of that part of their road from Lake Maurepas, to the line of the State of Mississippi, a distance of 51 miles.

Also, for the masonry required on the first 36 miles of road from the city of New Orleans to the Lake, at the South Pass Manchac.

The first 9 miles of the section to the State Line, is through the Lake swamp, and includes the piling and bridging (with one draw) of the South and North Passes, the remainder is through a healthy fine country, which, with the contemplated lettings of the remaining 100 miles to Jackson, Mississippi, render this work well worthy the attention of Northern Contractors.

Payments will be made in cash, with 20 per cent retained until the completion and acceptance of the work.

Satisfactory evidence of ability will be required with the proposals.

Plans and profiles will be ready for examination ten days before the letting.

JAMES CLARK, Chief Engineer.
New Orleans, October 16th, 1852.

Railroad Iron.

400 TONS of best English Railway Iron, 57 lbs. per lineal yard, in port and to arrive. For sale by

DAVIS, BROOKS & CO.,
28 Beaver street.

November 1, 1852. 1t

Railroad Iron.

1500 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

November 4, 1852. 4t

Railroad Iron.

1600 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

November 4, 1852. 4t

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 3s

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Nat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sho' Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

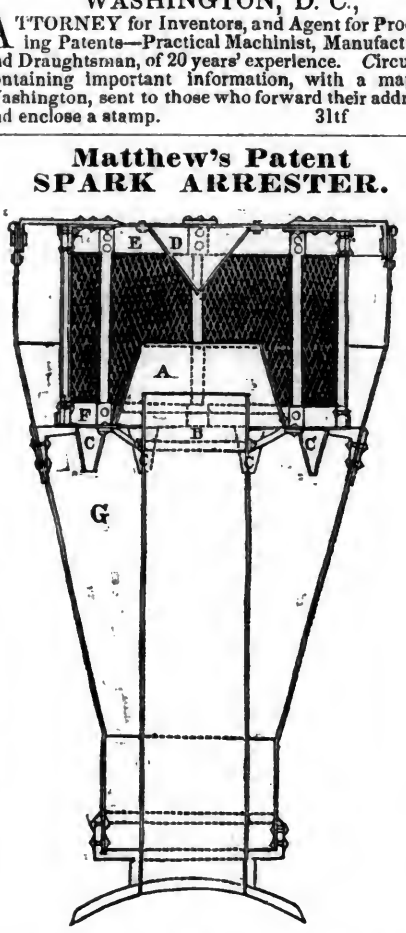
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

Mr. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respectfully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester, patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway, New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

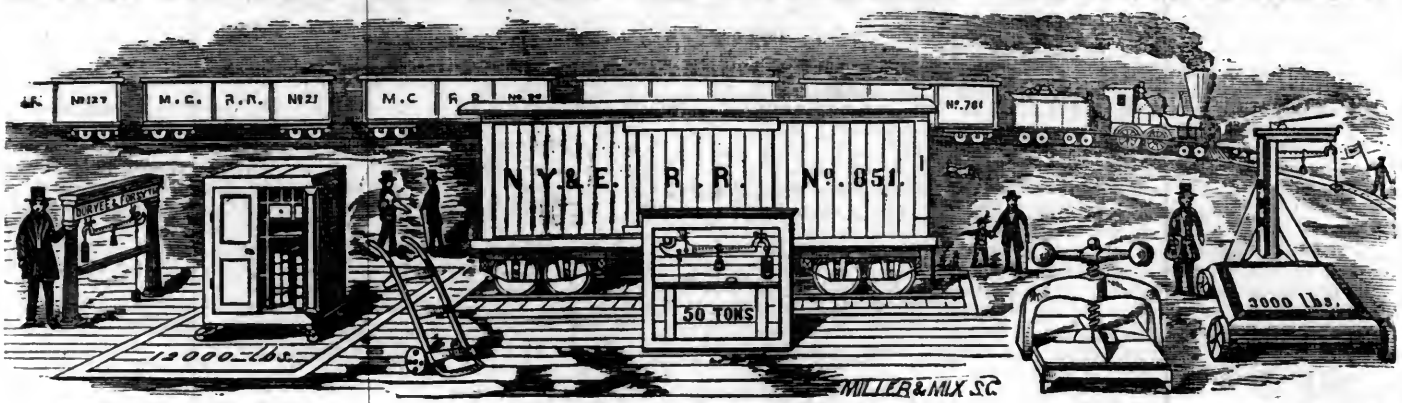
NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852.—6m*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6½ TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates;* Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr DURYEE, who is a practiaal mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as '*Durable and Accurate*' as any scales in the market; the bearing edges are made of the best *Cast Steel,* well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 47] SATURDAY, NOVEMBER 20, 1852 [WHOLE No. 866. VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Convention at Springfield.....737
Inland Commerce of the Mississippi Valley...737
Northern Railroad.....741
Philadelphia, Easton and Water Gap Road....741
Malleable Iron and Railway Axles.....742
James River and Kanawha Canal.....742
New York and Boston Railroad.....744
South Side Railroad.....744
Stock and Money Market.....745
Lafayette and Pontchartrain Railroad.....746
Northern and Southern Routes.....746
Journal of Railroad Law.....747
Railroad Items.....747
Rabun Gap Railroad.....748
Greenville and Miami Railroad.....748

American Railroad Journal.

Saturday, November 20, 1852.

Railroad Convention at Springfield,

ON WEDNESDAY, NOVEMBER 10, 1852.

In our issue of October 9th, we gave a brief report of the doings of the General Railroad Convention at Springfield on the 24th and 25th of August last—the Journal of its proceedings having been published by order of the convention.

This convention adjourned to meet at the same place on the 10th of November, instant, at 2 o'clock P. M. The officers appointed at the first meeting were as follows:

PRESIDENT.

THOMAS HOPKINSON, of the Boston and Worcester railroad company.

VICE PRESIDENTS.

WM. W. BOARDMAN, of the New York and New Haven railroad company.
ISAAC SPAULDING, of the Concord railroad co.
JOHN P. JACKSON, of the New Jersey railroad co.
E. D. MORGAN, of the Hudson River railroad co.

SECRETARY.

WM. P. BURRELL, of the New York and New Haven railroad co.

ASSISTANT SECRETARY.

SOUTHWORTH SHAW, of the Boston and Maine railroad co.

The meeting on the 10th inst. was fully attended. Mr. Hopkinson, President of the Association, in the chair.

Hon. J. W. White, President of the Norwich and Worcester railroad company, chairman of the committee appointed at the previous meeting, on the subject of "competition" between different roads, submitted a report on the subject, with the following resolutions:

Resolved, That in the opinion of this convention the value of railroad stock would be much enhanced, and dividends increased, by a more harmonious action and friendly co-operation among all the lines of railways throughout the country.

Resolved, That in the opinion of this convention, whenever two or more lines of railway come into direct competition for freight or passengers, mutual forbearance should be manifested by all concerned, and every effort should be used by the parties, to benefit, rather than injure, each other.

Resolved, That whenever competing lines are unable to arrange their differences, this convention recommend that a third party be called in, either to act as a friendly adviser, or as legal referee.

On this report an animated discussion took place, in which Messrs Poor, White, DeWitt. Whittemore, Clapp, Hopkinson, Paine, Crane, Banks, Burden and Boardman took part, and the resolutions were unanimously adopted.

Mr. Phelps, of the New York and Erie railroad, called up the question introduced at the former meeting, in relation to the rule requiring passengers to purchase tickets before taking seats in the cars, and charging an additional sum for a neglect of this rule.

On this subject a long discussion was had, and a motion was made that all companies connected with the association should require the enforcement of previous payment, as an absolute rule.

The question was taken by companies, and adopted by a large vote.

Various other topics were introduced in relation to the railway management, which were referred to appropriate committees.

Mr. Jackson, of New Jersey, introduced a resolution to the effect that the compensation for carrying the United States Mail was altogether inadequate to the service performed.

This resolution was referred to a committee of five, who subsequently reported that the whole subject matter be referred to a committee of seven, with instructions to prepare forthwith a Memorial to Congress, and to the Postmaster General, and take such further measures as they might think necessary to secure the co-operation of the railroad interest of the country, and to carry out the views of the convention.

The report was adopted, and the following gentlemen appointed the committee:

Thomas Hopkinson, of Massachusetts.
John P. Jackson, of New Jersey.
Isaac Spaulding, of New Hampshire.
John A. Poor, of Maine.
Charles Paine, of Vermont.
W. P. Burrell, of Connecticut.
Mr. Phelps, of the New York and Erie railroad company.

On motion of Mr. Jackson, of N. Jersey, it was

Voted, That the President of the Association be invited to deliver an address before the Association at its next meeting.

After passing several votes of thanks, and providing for the publication of the Journal of the Proceedings of the Association, it was

Voted, That next meeting of the Association, which shall be regarded as the annual meeting, shall be holden at Saratoga Springs on the last Wednesday of June next, at which time the election of officers shall take place; and that all the railroad companies in the United States be invited to take part in its proceedings.

Thereupon the Convention adjourned.

Inland Commerce of the Mississippi Valley and the St. Lawrence Basin--Its Routes to the Seaboard.

The inland commerce of our country has attained such immensity of importance, as to occupy much of the attention of the shrewd, sagacious, and farseeing capitalists, statesmen, and merchants of this day. And yet, this commerce is generally but very badly appreciated, very imperfectly understood, and its importance greatly underrated by the vast majority of those who would wish to be classed with one or the other of those coteries just mentioned. It may be well understood that the great chain of American lakes have their natural outlet through the river and gulf of the St. Lawrence into the Atlantic.—And it is no less a fact of general appreciation, that the Ohio, Illinois, Tennessee, Cumberland, Iowa, Missouri, Wisconsin, Rock Island, Fever and Des Moines rivers, with many others, are tributaries to the great Mississippi, through whose channel these waters find their way to the Gulf of Mexico—more than four thousand miles distant from the outlet of the waters of the lakes at the Gulf of St. Lawrence. But it may not be a matter of such general knowledge, that the sources of these respective drains between the Alleghanies and the Mississippi, in the state of New York, Pennsylvania, Ohio, Indiana, Illinois and Wisconsin, are to be found in the most intimate association with their branches interlocking each

other. Indeed, the dividing line of the watersheds in these states, is so slightly marked by nature in the physical construction of the face of the country, that it is not unfrequently the case when the spring opens amid frequent rains, melting snows, and disembodied springs of the earth ejecting their contents at the bidding of the departing frost, causing temporary freshets, to see their waters unite in harmony and flow to the lakes sometimes, and at others to the rivers, as the attraction may for the time being, prove strongest. By this operation the southern gulf is robbed, at times, of a portion of the waters apparently designed for it; and again, the northern one is made to suffer a similar depredation. But in the end probably no great deficit is suffered on either side. We merely mention these natural phenomena, as typical of other features of this most interesting section of country. It is well known that the two great combinations of water here alluded to, drain the whole extended country between the Alleghany mountains on the east, and the Rocky Range on the west; that portion of it drained by the Mississippi and its tributaries being familiarly known as the Mississippi Valley; and that bordering the lakes and the St. Lawrence, as the great St. Lawrence Basin. And it is also a fact with which all geographers are quite familiar that so continuous and uninterrupted is the Alleghany Chain, that these channels are the only navigable outlets for the products of the valley and basin to the seaboard. But we have already said that no very perceptible elevation of the earth marked the dividing line between the sources of the rivers and those of the lakes, and it seems not improbable that this fact, and its consequent, the interchanging of the waters of the two, were designed to lead to that artificial union of these waters for commercial purposes, which has already taken place at various points. Hence, as we have seen the waters taking the opposite of their natural course in obedience to some freak of nature, so in consequence of slight changes in the markets, or the prices of freights, we observe the products of the earth seek a northern or southern outlet to the seaboard. The result is a blending by one common channel of the two great arteries of commerce which drain the basin and valley of their rich and varied products, and through which they are in turn supplied with those neceesaries and luxuries which are received in exchange.

This continuous channel forms a vast roadway, open to the common use of all, from the Atlantic to the Gulf of Mexico; and this stupendous highway, with its numerous branches, outlets and tributaries, is the theatre of the great bulk of our internal commerce. It is no part of our present purpose to enter into a history of this inland commerce or to detail its progress or its value. We have, daily, evidence before our eyes to convince us of the rapidity of the one and the immensity of the other; and the Atlantic cities are in the full enjoyment of the increase of wealth inuring from the trade occasioned by it.

The end of this article will be answered by an examination of the face of the country, and the several routes, artificial as well as natural, leading to the seaboard, with a brief comparative synopsis of their business, which may serve to show in some degree their relative importance.

The area of country embraced in the interior valley and basin has something over nine hundred thousand square miles with a population in 1850, of upwards of thirteen million people, or about 14 to the square mile. The land is nearly all of the most rich and fertile nature, susceptible of a very high state of cultivation. The face of that portion of the country drained by the Mississippi is nearly level, causing very few rapids in that stream or its tributaries sufficiently difficult to render serious obstructions to navigation. The surface of the river for miles north of the gulf is above the surrounding country, which is only kept from inundation by a sort of embankment. These features, of course, render this whole section peculiar in its adaptation to the construction of railways from the river back to the interior, at a trifling cost.

That division of the above area known as the St. Lawrence basin or Lake country, is slightly different in its conformation having in some parts a rolling surface, in others prairie, and in a few instances mountainous, but all bearing a rich soil, which yields a bountiful return for the labors of the husbandman. The first interruption to navigation in the lake chain, commencing at the western extremity of lake Superior and passing eastward is presented by the Falls in the St. Marie river at the Sault. A canal is about to be constructed around these rapids with sufficient capacity to pass the largest lake craft. It will be about one mile in length and must have a lift of lockage equal to about 19 feet. It will cost nearly half a million dollars.

Land has been appropriated by the general government of the United States, to aid the state of Michigan in building this work. Should that state proceed to construct the canal, however, it will still be a state work, connecting United States waters so that vessels sailing under United States protection will have to be under tribute to Michigan in passing this rapid. It is to be regretted, therefore, that as the general government is to stand the expense, it had not made the improvement on its own account, and retained it under its own control. The Canadian government have also the route surveyed on the Canada side for a canal, and will probably proceed at once to construct one of the largest capacity. The engineer recommends that the locks be 350 feet long in the chamber, 66 feet in breadth, and 10 feet in depth to the sills. Locks of smaller dimensions than the above would prove of little use five or ten years hence, and if Michigan is not soon awake to the importance of her responsibility in this matter, Canada will have the better channel, the more speedily completed. There is at present little freight passing from Lake Superior to the lower lakes, owing to those obstructions, but the Lake Superior country is rich in mines of iron and copper of the best quality in the known world, needing only the improvement contemplated to make them available.

Passing down Lake Huron and St. Clair river, its outlet, we reach Lake St. Clair, which, is a shoal water and threaded with an exceedingly narrow and circuitous channel carrying from eight to nine feet of water. Though not an interruption to the navigation of the Lakes, the St. Clair flats are a serious obstruction, at times, always requiring skillful pilots, daylight, and vessels of light draft to pass them in safety without lighting. The next impediment to lake navigation is the Falls of Niagara between lakes Erie and Ontario. The fall here is nearly three hundred feet; and, together with some rapids in the river St. Lawrence, and a desire of the people of the city of New York to secure a connection with the interior, led to the projection and construction of the Erie canal, connecting the waters of lake Erie at Buffalo with those of the Hudson at Albany, and forming an artificial outlet to the Atlantic, for the Upper lakes. The opening of this new outlet was soon followed by the construction of the Welland canal on the part of the Canadian government, through Canada, in order to admit the passage of vessels from lake Erie to Ontario, and secure the lake commerce to the St. Lawrence. The St. Lawrence canals around the rapids in that river were also constructed by the same government, to give free passage to vessels to Montreal, Quebec, and the Ocean. The State of New York upon the completion of the Welland, constructed the Oswego canal in order to reach the trade of Lake Ontario, and the Champlain canal was also constructed to compass the commerce of the Lake Champlain and direct it to the Hudson and New York.

The Canadians also connected St. Johns and the St. Lawrence rivers by improvements which admit the passage of vessels from the St. Lawrence to Lake Champlain. Thus we see the St. Lawrence, the natural outlet for the waters of the lakes, has been made navigable, so that vessels may load at Chicago and without transhipment proceed to the Ocean; but it is also to be seen that this natural outlet has been tapped at Lake Erie, at Lake Ontario, and at the St. Lawrence, by water routes to divert the commerce of the West to the Atlantic, through the Hudson instead of the St. Lawrence.

This Northern or lake route has then these two outlets to the seaboard, while Pennsylvania through her canals and railways forms another northern outlet for a small portion of the trade of the country west of the Alleghanies. This might be looked upon as a formidable rival for the trade of the upper Ohio and a portion of the lake trade, did not those mountains almost preclude the possibility of a continuous water route. The heavy inclined planes now used in passing their summit can never, be made serviceable in the transportation of through freight, and even a railway on more favorable grades such as will soon be substituted, will be found far inferior to the capacity of the canal on either side of the ridge. Could a tunnel be made through the mountains for the passage of a capacious canal, there would a large portion of the commerce of the Basin and valley seek that route to the Ocean; but as it is, we shall see that for the transportation of heavy and bulky articles of produce, railways bear a very insignificant comparison to canals, even when constructed on easy grades, and the disparity is many fold greater on such a road as the Portage railway in Pennsylvania over the mountains. This, however, is the third water outlet to the Atlantic. We have compiled some statistics of these different routes of trade from the great interior which we will here present. First, it will be necessary to premise that the Mississippi and the Hudson being the oldest routes are by far the most important so far as the amount of their commerce is concerned, and also have the most systematic mode of keeping their returns. We are therefore enabled to give their business for a series of years, while that of the St. Lawrence and Pennsylvania canals can be given for only one year and that but imperfectly, a mere estimate, upon the basis of the tonnage and valuation of the property transported on the New York State canals. Whether these two routes can hold out in the lead they have thus far maintained, depends almost entirely upon the management of the canal policy in the State of New York. Canada is fully awake to the importance of training the trade of the Basin for the St. Lawrence, and making Montreal and Quebec the depots. No pains or expense will be spared by her

government to secure these laudable and legitimate objects. Time alone will decide the result; whether the Empire State will suffer her prize in the western trade to grow no larger by the efforts of her neighbors to divert the increase from her public works, or whether she will prepare to transact all the business which offers, as cheaply and as speedily as any one else by enlarging her canals to such a capacity as will admit steam for a propelling power.

Value of property received at the seaboard via the:—

Years.	St. Lawrence.	Hudson.	Portage railroad.	Mississippi.
1851....	$9,153,580	53,927,508	125,035	108,051,708
1850....	.....	55,474,637	.....	106,924,083
1849....	.....	52,375,521	.....	96,897,873
1848....	.....	50,883,907	.....	81,989,692
1847....	.....	73,092,414	.....	79,779,151
1846....	.....	51,105,256	.....	90,033,256
1845....	.....	45,452,321	.....	77,193,464
1844....	.....	34,183,167	.....	57,196,122
1843....	.....	28,453,408	.....	60,094,716
1842....	.....	22,751,013	.....	53,782,054
1841....	.....	27,225,322	.....	45,716,015
	$484,924,474			$857,658,164

Of the receipts at New Orleans, cotton, hemp; tobacco, sugar, molasses, pork, bacon and lard from the leading articles, the former great staple constituting nearly one half the whole value of her imports from the interior. Of sugar and molasses the whole estimated crop is included, much of which, of course, is never landed on the levee at New Orleans, though it enters into the commerce of the city, in the shape of commissions, advances and sales.

Value of cotton, hemp, tobacco, sugar, molasses, pork bacon and lard, at New Orleans, during a series of years, ending September 1st.

	Cotton.	Hemp.	Tobacco.	Sugar.	Molasses.	Pork.	Bacon.	Lard.
1851.....	$48,592,222	$257,235	$7,291,765	$11,827,350	$4,026,000	$5,250,541	$6,348,622	$3,925,845
1850.....	48,756,764	452,088	7,736,600	12,678,180	2,625,000	4,134,632	5,879,470	3,381,404
1849.....	41,886,150	695,840	6,166,400	12,396,150	2,400,000	6,632,554	2,992,787	5,024,340
1848.....	30,844,314	436,832	3,938,200	6,800,000	2,288,000	6,621,911	2,989,385	4,970,113
1847.....	35,200,345	410,096	3,430,544	9,600,000	1,920,000	3,934,047	2,098,788	4,611,050
1846.....	32,589,436	903,570	3,604,468	9,800,000	1,440,000	4,511,162	2,935,349	3,804,515
1845.....	33,716,256	309,800	4,144,562	10,265,750	1,710,000	3,666,054	1,671,855	2,729,531
1844.....	23,501,712	462,740	3,697,390	9,000,000	1,960,000	2,651,172	906,970	1,767,211
1843.....	.....	.....	.....	.....	.....	.....	.....	.....
1842.....	.....	.....	.....	.....	.....	.....	.....	.....
1841.....	24,425,115	18,165	3,699,160	3,600,000	450,000	1,542,467	521,912	1,138,919

The year 1851 in the above table ended Sept. 1st, 1852, and so of all the rest, relatively, as that is the date of the commencement of the business year in New Orleans. It will be observed that the above eight enumerations comprise, on the average, nearly four-fifths of the whole value of imports for a series of years, the remaining fifth being composed of numerous less important articles.

Value of each class of property, reaching tide water on the Hudson, during a series of years, ending Dec. 31st.

	Products of the forest.	Agriculture.	Manufactures.	Merchandize.	Other articles.
1851.....	$10,160,656	$36,394,913	$4,335,783	$329,423	$2,706,733
1850.....	10,315,117	38,311,546	3,960,864	063,615	2,323,495
1849.....	7,192,706	38,455,456	3,899,238	508,048	2,319,983
1848.....	6,909,015	37,336,290	3,834,360	593,619	2,210,623
1847.....	8,798,873	54,624,849	6,024,518	517,594	3,127,080
1846.....	8,589,291	33,662,818	4,805,799	276,872	3,770,476
1845.....	7,759,596	27,612,281	3,432,259	88,497	3,559,658
1844.....	7,716,032	21,030,065	3,489,570	86,153	2,328,536
1843.....	5,956,474	18,211,629	2,561,159	56,221	1,967,922

This gives some idea of the "down" trade, or the value of the products of the interior which are exported to the seaboard. These products being easily defined, and put up generally for transportation in uniform packages, their value is easily arrived at; but that of merchandize, sundries, etc., shipped from the seaboard to the interior, is more difficult to obtain. The following estimates, however, have been made by competent persons which are probably very fair approximations, though, we think on the average they are too low. They are as follows:

Value of property sent from the seaboard to the interior, via the:

	St. Lawrence.	Hudson.	Portage railroad.	Mississippi.
1851..	$10,956,793	80,739,899	2,779,731	12,958,294
1850..	.....	74,826,999	.....	10,885,775
1849..	.....	78,481,941	.....	10,050,697
1848..	.....	77,477,781	.....	9,380,439
1847..	.....	77,878,766	.....	9,222,504
1846..	.....	64,628,474	.....	7,222,941
1845..	.....	55,453,998	.....	7,345,010
1844..	.....	53,142,403	.....	7,826,739
1843..	.....	42 258,488	.....	8,170,015
1842..	.....	32,314,798	.....	8,031,190
1841..	.....	56,798,447	.....	10,256,322

In this latter table it will be observed that the estimates for the St. Lawrence and Portage railroad are only for last year, while those for the New York State canals and New Orleans are for eleven years. In the case of New York the figures of the Auditor of the canal department are taken, whereas in that of New Orleans, it is estimated that her shipments to the interior equal her foreign importations. This may be wide of the mark either way, but it is the only method which presents itself as an approximation. Having seen the value of the "down trade" by the different routes, we will now present the "down" tonnage, naming some of the principal articles for 1851 only:

Articles.	St. Lawrence tons.	Hudson. tons.	Portage railroad. tons.	Mississippi. tons.
Lumber.....	62,351	711,731	10,100	.....
Timber.....	9,895	84,755	.....	.....
Shingles.....	217	7,185	75	2
Staves.....	9,177	77,652	..	58,552
Furs.....	.....	242	..	500
Ashes.....	5,576	7,271	..	...
Flour.....	70 966	362,714	7	100,138
Wheat.....	16.867	94,910	.	5,193
Corn.....	3,052	221,633	.	109,989
Oats.....	1,746	57,509	.	6,949
Barley.....	69	43,426	.	.....
Rye.....	284	8,083	.	.....
Cotton.....	11	110	.	321,566
Tobacco.....	135	1,851	3	54,187
Hemp.....	74	580	.	2,858
Beef.....	89	12,215	.	9,077
Pork.....	3,454	7,203	.	47,205
Bacon.....	164	5,452	4	37,291
Butter.....	1,122	4,784	.	2,417
Cheese.....	37	12,801	.	1,811
Lard.....	150	5,407	.	22,766
Tallow.....	413	122	.	196
Potatoes.....	403	17,949	.	22,809
Wool.....	15	5,259	.	.....
Leather.....	..	4,102	2	.....
Eggs.....	..	1,838	.	.....
Lard oil.....	6	1,204	.	2,117
Oil cake.....	.	3,405	.	.....
Sugar.....	.	.....	.	118,278
Molasses.....	1	.....	.	91,500
Lead.....	.	8	.	9,592
Railroad iron...	.	.	.	.....
Castings.....	77	1,224	.	.....
Blooms.....	.	16,675	.	.....
Nails & spikes.	..	.....	1	.....
Pig iron.....	66	2,958	.	62
Coal.....	86	13,655	2,682	85,000
Whiskey.....	649	13,938	51	29,270
Salt.....	134	6,408	..	.....
Merchandize...	923	4,580	97	.....
Sundries.....	141,412	74,722	674	153,350
Total tons...	329,621	1,977,151	13,696	1,292,670

This table exhibits the tonnage arriving at the Hudson, as much in preponderance of the other routes although the Mississippi may exceed it in value. It will also be seen that Philadelphin is indebted for her inland commerce not so much to the region west, as east of the mountains. She has in her coal and iron mines and ample agricultural resources, abundant food for an immense inland railway and canal commerce. The canals of Pennsylvania west of the mountains, appear to feed the commerce of the Ohio at Pittsburgh; and those cast that of the seaboard at Philadelphia.

It is to be regretted that so little regard is paid to arranging and collecting statistics of our inland commerce by the various States in which the great lines are situated. The State of New York is the only one which compiles full reports of traffic, tonnage and valuation of the commerce of her Public Works. Such reports are not only interesting but they are extremely valuable to business men. They are the means of acquainting the producer, the forwarder, the vender the broker and the consumer, with the probable stocks, the rapidity with which those stocks are coming forward to market, and the probable effect on freights, prices and demand.—This information if published weekly with official correctness would prove invaluable to the community. It would enable business men to operate intelligibly, by furnishing them data upon which to base their calculations. It would acquaint ourselves and foreigners, by comparisons of corresponding periods of the several years, and of the totals at the close of each year; of the extent and progress of our internal trade. But, this is a digression, suggested by the difficulty always encountered in this country in procuring reliable statistics

of trade. England has her Board of Trade whose monthly returns show her merchants and manufacturers, and producers, the transactions of the previous month with great exactness, and these returns are at once sent by steam or electricity to Liverpool, Manchester, and Birmingham, whence they are distributed to all parts of the world. Every merchant in the foreign trade looks for them with interest. Why may not the United States have a "Bureau of Commerce" attached to the Treasury department to answer the same purpose with the English Board of Trade, returns from which may be published at the close of each month, quarter and year? Its organization would be easy, and under proper regulations and superintendence, would prove of incalculable value to the country, both at home and abroad. This fact and the preceding query are the result of the digression from which we will now return.

The Mississippi hitherto has stood alone, and unrivalled as the Southern route; and it will continue for a long time to come the only Southern water route. But railways will soon be opened which will contribute much to the trade of other Southern ports, than New Orleans; without, however, detracting much from those sections of country which furnish her trade. The traffic of railways is generally created by bringing the country which they pass within reach of a market, which, previously made no demand upon it. While, therefore, Savannah, Charleston and Mobile are to be vastly benefitted by the trade their railways will bring them, it will not be by diverting traffic, other than passenger, from the river. Many lines of railway are about being opened which will prove as auxilliaries to the great southern route, some of them terminating at New Orleans, Mobile, Savannah and Charleston, and their tendency will be, to greatly increase the tonnage to and from the interior to the seaboard, beyond anything we have yet seen or predicted. And it will be done mainly by opening up resources, and reaching points, which have heretofore been unproductive on account of their inaccessibility.

On the other hand, we have seen that the northern route has three water outlets, delivering at tide water a "down" tonnage of 2,320,468 tons, against 1,292,670 tons by the Mississippi during the year 1851. It should be remembered to, that the latter is open for navigation the whole year, while the northern route is closed upon the average about five months per annum. Besides this immense water tonnage, the New York and Erie, New York Central and the Northern lines of railway, have delivered at tide water an aggregate of no less than 228,107 tons, valued at $11,405,300.

According to the figures thus far presented, then the seaboard is indebted to the interior for 1851—in 3,841,245 tons of property worth.....$182,663,140

The interior is indebted to the seaboard for property valued at.....$151,990,717

Credit to interior..... 20,672,423

It is generally supposed, and the evidences of exchange seem to favor such supposition, that the interior is in debt to the seaboard. Such is no doubt the fact with regard to new countries which have all their improvements to make, their lands to clear up, cultivate and stock before they become profitable, which is much the case with the inhabitants of the valley and basin. The light and costly goods, jewelry, silks, etc., sent west by express, are not included in the above estimates, and if the value of such freight could be accurately computed, it would no doubt more than square the account. There is, however, little confidence to be placed upon the valuation of "merchandize." In the canal estimates upon the New York canals, it is doubtless estimated at too low a rate per ton. At least, as before remarked, these estimates of the value of up tonnage, are but the merest approximations, under the present mode of classifying that species of freight.

From the foregoing it may be seen that, while the value of products of the interior seeking the seaboard is by the Southern route as about ten, to seven by the northern route, so the value of the return merchandize, etc., going by the northern route is as about thirteen to one. Hence, there should be a very great preponderance in the value of western, over eastern freight, on the Northern route.—That such is the fact, the returns of exports and imports at the upper lake ports abundantly testify, the latter in many cases being from three to four hundred per cent. greater than the former.

But if the inland commerce arriving at, and departing from the seaboard, is so considerable, what must be the amount in value, and the gross value, of exports and imports, at the several inland ports? To how many people must its transport, transhipment, storing, handling and selling, give employment? How many tons of boats and shipping are employed? How much fuel is consumed in steam? How much capital is invested, in purchasing, insuring, transporting and exchanging? These are all questions, fraught with deep interest, to all those at all interested in the progress of civilization, commerce, science and the arts. They might be intelligibly answered too, if a proper system for the collection and arrangement of statistics, were established. As it is, however, we can only give a few of the most careful estimates, based upon the most authentic returns obtainable from time to time and arranged with great care. These estimates have always been represented as below the mark, from the fact, that many ports make no returns at all.

The United States has over 3,000 miles of Lake coast, and some 30,000 miles of navigable rivers; to which should be added about 3,000 miles of canal, composing a total of not far from 36,000 miles of inland water navigation. The gross value of the commerce of the lakes alone, in 1841, exclusive of cost of tonnage, passage or express business, was $65,000,000; in 1846 $123,000,000; in 1848, $186,000,000, and in 1851 it was $326,000,000. The unparalleled increase during the last three years is owing to the opening of so many new lines of railway at various points intersecting the lakes, and cheapening the prices of transportation from the interior to the lake shore. The enrolled tonnage of the lakes in 1841 was 56,252 tons; in 1846, 106,836 tons; and in 1851 it was 215,975 tons, being an increase in measurement of nearly four hundred per cent in ten years, while the increase in capacity owing to a substitution of steam for sail, as a motive power, both for propulsion and handling freight, is much greater still. The gross tons entered at all the lake ports in 1851 are estimated at 9,469,506, and cleared 9,456,346. The steamboat tonnage of the western rivers in 1842 was 126,278 tons; in 1846, 249055, and in 1851, it was reported by Secretary Corwin, at 135,559 tons. If there is no error in either of these statements of tonnage, then, the capacity of the tonnage must have been greatly enlarged lately, by quickening the speed and making a greater number of trips. It is most probable, however, that many old worn out craft, were computed in 1846, while in 1851 only the working enrollments were taken into account. The rivers employ 558 steamers; and the lakes 157. The original cost of the whole sail and steam tonnage on the lakes and rivers in 1851, was about $21,838,000. The total net money value of all the property transported on the Lakes in 1841, was estimated at $33,000,0000; in 1846 at $63,0000,000; in 1848 at $93,000,000; and in 1851 $161,000,000. That of property transported on the rivers of the valley in 1842, was estimated at about $130,000,000; in 1846 at about $184,000,000, and in 1851, at about $275,000,000. This gives an aggregate money value for 1851, of interior Lake and river commerce of about $438,000,000, an amount far exceeding our foreign commerce, exclusive of specie. But if we add to this the enormous coasting trade of the United States, including California, the amount would more than double our foreign commerce.

This, it will still be observed, is independent of the railway and canal commorce. The total movement of the New York canals alone in 1851, about 860 miles in length, was 3,582,733 tons; valued at $159,981,801, and paying tolls to the State of $3,329,727. It is estimated that in this navigation 4,047 boats are employed, with an aggregate of 283,290 tons. The amount paid for transportation on these canals, in addition to the above amount of toll to the State, is estimated to have been about $2,500,000. This latter, is the amount paid to the forwarder to indemnify him for carriage, wear of boat, horses, men, etc. These canals have cost the State upwards of $39,000,000, besides the annual charges for repairs and maintenance. The State has received in tolls from the canals since 1824, $50,413,780.

The railways of the United States in operation comprise about 15,000 miles, at an average cost of, say $25,000 per mile; making an aggregate expenditure of some $375,000,000. Nearly all of this railway that has affected the lake and river trade, of 1851, has been opened since the commercial returns of 1848, or at least a large proportion of it, and it has been seen that the results are beyond all anticipations. But, the business of 1851 was benefitted by less than 10,000 miles of railway, whereas, in 1855, we shall have in operation over 20,000 miles, penetrating the agricultural and mineral hearts of almost all the Western States. What must result from the opening of so many feeders to the great through water routes?

It has been observed that the amount of inland commerce reaching the seaboard is but a tithe of the "total movement." It is only the surplus that seeks a foreign market, while the great bulk, the unmeasured, unfathomed mass, is consumed, changed and interchanged among the several States. A little of it adheres to the hands of every person who touches it, as it were; it pays to every exchanger, transporter, and laborer, its stipend as it passes about to its place of consumption. It is, most unquestionably, a good thing to have a foreign commerce through which to dispose of our surplus products, but we should not, for this, sacrifice the internal commerce, so much more valuable to the whole country, and without which our foreign commerce could not survive a single day.

In concluding this subject, the question naturally suggests itself; if such has been the progress of our inland commerce during the past thirty years, what is to be its future? If such results have followed the partial opening of the resources of the new States by water routes, what is to follow the perfect exhumation of the interior of all the States

by means of the iron tracks which are to act as feeders to the great Northern and Southern water routes? The year 1860 will dawn upon an internal traffic in the United States valued at no less than $1,800,000,000, including lake, canal, river, and railway. And there will be but little rivalry between the different routes. They will work harmoniously together, mutually assisting each other and all will be fully occupied. The immense heavy products of the Southwest will continue to float down the Mississippi, to the Gulf of Mexico. in great profusion and increase. Much has been written and said of turning the tide of the Mississippi trade north. Above certain lines where the distance is greatly in favor of the Northern route, some of the present trade, and perhaps, all the increase will take the Northern route during the season of navigation. But the increase of trade south of those lines which will be induced by the opening of projected improvements, will far exceed the amount diverted. The strife now exhibited in procuring means for diverting trade from existing routes will disappear, in the inability to carry off the angmentation. Suppose the Mississippi and the Northern water routes now to have a "total movement" of 10,000,000 tons, which is probably not very wide of the mark, how many railways like the Erie, Northern, and Baltimore and Ohio, will it take to carry the present tonnage. And how long will it take to construct them? It would require ten railways, each, with double tracks stretching from Boston, New York, Philadelphia, and Baltimore, to New Orleans, via the Mississippi valley and the Lake Basin, making at least 40,000 miles of track which would cost at least $600,000,000, and take ten years to build. In the meantime, our commerce would have doubled twice, crowding both water and land routes to their full capacity. So this will not do. Our canals in New York, Pennsylvania, Ohio, Indiana and Illinois, must be enlarged, within the next ten years, to a capacity which will admit boats to pass drawing six feet of water, with steam for a propelling power, and stowage for 2,000 bbls of flour. Freight must be handled by steam, and transit expedited in all possible ways by water. Railways will feed water routes with freight from the interior, the through lines carrying express freight of a light and costly character, and passengers. At least such are our conclusions from the foregoing promises. The great united Northern and Southern routes must always continue the great highways for the products of the interior, upon which they will be exchanged among the States, and the surplus find its way to the seaboard. By them the Northeast and Southwest will be for ever united, while the numerous iron ways intersecting them at various points, will weld together all the various interests of the several States, in such a bond of Union as will prove forever inseparable. N.

New York.

Northern (Ogdensburgh) Railroad.—There is a large quantity of freight pouring in at Ogdensburgh, and a very large increase in the amount sent eastward. The daily receipts of flour at Ogdensburgh are about 8,000 barrels. From the opening of navigation to Sept. 30, the receipts of different kinds of produce, according to the Ogdensburgh Daily News, were as follows:

Flour	426,122	bbls.
Wheat	543,289	bush.
Corn	296,261	"
Oats	30,000	"

In the wheat warehouse. over 800 000 bushels had been stored and passed through.

Pennsylvania.

Philadelphia, Easton and Water Gap Railroad.—The committeee recently appointed to prepare an address to the citizens of Philadelphia and Pennsylvania, interested in the completion of a railroad between that city and the Northeastern section of the State, have finished their task. We think the tone of the address is rather too warm—but if the rivalry and aggressions of cities, eager for commercial domination, had always been confined to the construction of railroads, and the sole instruments to decide their contests the locomotive and the cars, the world would be far happier than it is.

After this contention of building railroads, cities will begin to find their prosperity increased even by the diligence and labors of their rivals.

The views of the address are in the main contained in the extracts given below.

It is proposed, first to construct the road to the Lehigh river, and form a connection with the road now located and about to be commenced, extending from Easton to Mauch Chunk, whence one line will diverge west to the Susquehanna, towards Williamsport, and another line towards Wilkesbarre to be continued north westward along the valley of the North Branch.

This will at once place the whole of the Lehigh Valley in direct uninterrupted communication with our city, and thereby make the Lehigh railroad a continuation or extension of the Philadelphia line, whereas, if the road under consideration be not built, then the Lehigh road, connecting at Easton with the New Jersey Central railroad, will open to a neighbor city a continuous iron route through the Lehigh Valley, and pour into her lap the full measure of its precious treasures.

Shall this be permitted, even while its prevention, which is a bounden duty, will also be a work of profit? Again, the Morris and Essex railroad which is now open from New York to Dover, a distance of 44 miles, will ere long reach across the State of New Jersey to the Delaware Water Gap. From Great Bend, an important station on the New York and Erie railroad in Susquehanna county, a railroad 50 miles in length, is now in operation to Scranton in the Lackawanna valley. From Scranton to the Delaware Water Gap, the Cobb's Gap railroad company has had a route surveyed, and await a fitting time to commence the work. Hence when this period shall arrive, by extending the proposed Philadelphia road from the Lehigh river to the Water Gap, there will be opened from our city a great unbroken line of railroad, passing through our own extreme northern counties into western New York and on to the Lakes and Canada?—Whereas, if the link referred to be not made, our watchful neighbor will have a direct line of railroad reaching to Scranton, and thence ramifying in all directions through and beyond the Lackawanna and Wyoming valleys.

In truth, Philadelphia has only to construct a railroad hence to the Water Gap, to ensure connections with other roads, which will enable her to command the trade of the border countfes of Pennsylvania and New Jersey, and at the same time open to her enterprise the twenty-three populous productive and prosperous counties of western New York.

The physical topography of the country between the Hudson river and the western Lakes, presents but two practicable routes for railroad; one of these routes is occupied by the Albany and Buffalo line of railroad the other by the New York and Erie railroad. The ridgy barriers, raised up by Nature compelled the location of the first in the Valley of the Mohawk, and the latter in the Valleys of the Delaware and Susquehanna, in our own State.—From Syracuse on the Albany and Buffalo route, and Great Bend on the New York and Erie route, the distance will be less to Philadelphia than to the city of New York. Thus, when the great projected cross line of iailroad, sweeping North and South from Philadelphia to Lake Ontario, via the Water Gap, Great Bend, Binghamton, Syracuse and Oswego, shall be completed throughout, under all its separate organizations, only one of which now relies upon Philadelphia for aid, our city will be nearer. in miles distance, to the waters of Ontario and Niagara, tne cities of Buffalo and Dunkirk, and all the intermediate points between Lake Erie and the longitude of Binghamton, than the city of New York! Then Philadelphia, armed as well with the weapons of aggression as defence in the ceaseless strife for trade, will make her power felt in localities which have heretofore poured all their wealth into the coffers of her neighbors.

The mineral and other resources of the Lehigh region is summed up thus:

The quantity of coal sent to market from the Lehigh region, in 1851, was derived from the following sources. The trade for 1850 is also given for comparison:

	1850.	1851.
From mines worked by the Lehigh company	424,258	393,353
From the Rhume Run mines		87,471
Total from the Co's mines	424,258	480,824
Beaver Meadow mines	27,521	42,263
Spring Mountain "	43,793	116,517
Coleraine "	2,076	39,523
Hazleton "	53,236	113,355
Cranberry "	22,493	30,651
Sugar Loaf "	11,106	36,636
Buck Mountain "	103,937	104,456
Wilkesbarre coal Co's mines	35,156	25,072
	721,622	989,296
Increase in 1851		266,674

The distribution of coal in 1851, was as follows:

	Tons.
Consumed on the line of the Lehigh canal.	169,693
Passed into the Morris canal	137,237
Entered the Delaware division of the Pennsylvania canal	691,810

Statistics of counties in the Lehigh, Upper Delaware and Upper North Branch Valleys, prepared from the Census Returns, 1850:—

Counties.	Population.	Dwellings.	Farms.	Man. Establishments.	Area in Sq.M
Northampton	40,234	6,836	2,102	424	370
Lehigh	31,479	5,589	2,874	270	350
Carbon	15,686	2,544	246	158	400
Monroe	13,270	2,155	904	76	600
Pike	5,881	964	370	40	600
Wayne	21,890	3,710	1,336	200	700
Susquehanna	28,688	5,203	3,909	322	797
Luzerne	56,072	9,587	1,938	175	1,400
Wyoming	10,655	1,834	895	59	400
Bradford	42,834	7,391	5,096	562	1,174
Total	267,687	45,822	18,870	2,286	6,791

These are the counties, in number half a score, whose trade is imperiled. Will Philadelphia hesitate to provide the bands of an iron union whereby she may reserve them as profitable customers and faithful allies?

The amount of freight transported on the Lehigh canal, in 1851, ascending, was 62,415 tons; descending, 1,000,391 tons, making a total of 1,162,806 tons.

The original cost of the Delaware Division of the Pennsylvania Canal, from Bristol to Easton, sixty miles in length, was $1,300,000 00

Amount of tolls collected in 1851	$253,873 43
Total Expenditure in 1851	57,263 15
Excess of Receipts over Expenditure,	$196,610 28

The amount of tolls collected at the respective offices, was as follows, to wit:—

	1850.	1851.
Easton	$173,650 09	$204,352 44
New Hope	18,865 21	22,688 16
Bristol	22,832 57	26,832 83
Total	$215,347 87	$253,873 43
Increase of revenue in 1851		38,525 56

Profits in 1851, equivalent to legal interest on a principal of $3,276,838 00, or fifteen and one-eighth per cent, on the original cost of construction.

EXHIBIT of the quantity of Anthracite coal sent to market from the Leigh Region, from the commencement of the trade in 1820, to 1851, inclusive.

Years.	Tons	Years.	Tons.	Years	Tons.
1820....	365	1831....	40,966	1842....	372,546
1821....	1,073	1832....	70,000	1843....	267,793
1822....	2,240	1833....	123,000	1844....	377,090
1823....	5,823	1834....	106,244	1845....	429,428
1824....	9,541	1835....	131,250	1846....	523,002
1825....	28,393	1836....	148 211	1847....	643,973
1826....	31,280	1837....	223,902	1848....	680,745
1827....	32,074	1838....	213 615	1849....	801,246
1828....	30,232	1839....	221,025	1850....	722,622
1829....	25,110	1840....	225,318	1851....	988,296
1830....	41,750	1841....	143 037		

QUANTITY of Anthracite coal sent to market from the Wilkesbarre and Lackawanna regions from the beginning of the trade to 1851, inclusive.

Years	Lackawanna.	Wilkesbarre.	Years.	Lackawanna.	Wilkesbarre.
1829....	7,000		1841....	192,270	
1830....	43,000		1842....	205,253	47,346
1831....	54,000		1843....	227,605	48,900
1832....	84,600		1844....	251,005	115,906
1833....	111,777		1845....	273,435	178,401
1834....	43,700		1846....	320,000	192,503
1835....	90 000		1847....	388 203	284 398
1836....	103,861		1848....	437.500	237,271
1837....	115,387		1849....	454,240	259,080
1838....	78,207		1850....	550,417	242,250
1839....	122,360		1721....	795,095	336,000
1840....	148,470				

The amount of tolls collected on the Wyoming Valley, on the State canal, in 1851, was $138,991.

The great bulk of the business of the Delaware and Hudson Canal, is furnished from north-eastern Pennsylvania, and the entire business of the Western and Lackawanna railroad is from the same region. The revenue collected at several of the depot stations, on the New York and Erie railroad, is also due to the same source:

Such a magnificent and inexhaustible supply of wealth may indeed stimulate to exertion, without the introduction of envy at the prosperity of a rival city, or the prospect of making reprisals on the trade heretofore belonging to her. We look on the growth of Philadelphia and New York as by no means incompatible, and hope that both cities will not only be supplied with cheap coal but stretch their iron arms in all directions over the surface of a free and common country. The iron arms will soon be taxed to the uttermost to compass the demands made upon their capacity. If Philadelphians need any arguments, in addition to the promptings of selt-interest, to wake them up to the necessity of accommodating the wants of the trade of their State they will find them in the address.

Mississippi Repudiation.

One incident of the late election must be universally gratifying. The people of the State of Mississippi, have voted to pay the bonds of the Planter's Bank, and thus remove the stain of repudiation which has hitherto rested upon their State. The history of this debt is interesting. Under the old Constitution of Mississippi, the State chartered the "Planter's Bank of the State of Mississippi," with a capital stock of $3,000,000. Of this capital, two millions were reserved to the State, and the remaining million left to individuals, was subsequently increased to $2,000,000. The individual stockholders paid up; but the State only subscribed and sold its bonds for $500,000 of the amount reserved, the bonds not being issued to the Bank, but negotiated abroad by Commissioners. The Commissioners and a majority of the directors of the Bank were appointed by the Governor. The debt thus created was recognized under the new Constitution of 1832, and, as such, was approved by the people of the State. The bonds, meanwhile, sold above par, and from 1830 to 1840 the State received her dividend on the stock—generally 10 per cent. per annum. The dividends thus served to pay the interest on the bonds, and left 4 per cent profit to the State on its $2,000,000 of stock. This stock was subsequently invested in the Natchez railroad, and was there sunk, together with the Sinking fund created to meet the bonds. The latter issue of bonds are due in the year 1861, 1866 and 1871, and the question at the late election turned upon their payment. The result of the race is highly gratifying, as indicating a purpose on the part of the people, to restore the credit and reputation of the State.

Malleable Iron and Railway Axles.

The changes in the texture of malleable iron produced by mechanical action is a subject of great interest to the engineer. A paper originally published in the London Civil Engineer and Architects' Journal, gives the results of a series of experiments by G. B. Thorneycroft, presented at a meeting of the Association of Civil Engineers. We copy the following:—

Compression, or impact upon the end of a bar of iron, will alter its texture from a fibrous to a granular character. This is well exemplified by two tools used by forgemen. The first is the "gag," which is a short bar of iron, of about two inches diameter, employed for holding up the end of the large helve during the intervals of working; it is subjected to impact endways whenever the lower end is placed on the anvil, and the other receives a vertical blow from the helve falling about an inch upon it. However fibrous may be the quality of iron used for making the "gag," it soon becomes brittle, and literally falls to pieces as if it were made of cast iron.

The second instance is that of the tool employed in puddling, one end of which is constantly subject to blows from a small hammer, in order to detach the metal which adheres to the other extremity; after being some time in use, it frequently breaks at a slight blow, exhibiting a pertectly granular fracture.

If a bar of fibrous iron be bent down at a short angle, the fibres of one side are compressed, and those of the other side elongated; and after being bent back again, the fracture on the compressed side will exhibit a granular appearance, having evidently lost the fibre and been broken off short.

A bar of iron reduced in the centre and used as the connecting rod of a steam engine, by being subjected to constant vibration, or bending, will soon break at the middle, and the fracture will be perfectly granular, although it may have been originally made of the best quality of iron. The connecting rod for working the large shears in rolling mills, and the rods of deep pumps, when they are so small as to bend or vibrate at each stroke, are further examples of this action.

Iron shafting in mills working horizontally being generally too strong to bend, or to vibrate, apparently retains its fibrous quality, even when twisted asunder by a sudden action; but if it be so deficient in strength as to bend and vibrate whilst at work, it soon loses its fibrous nature and is destroyed.

Railway axles should be made parallel from journal to journal, and of sufficient strength to prevent any vibration in rotating. If this general rule were adopted. there would not be any change in texture, and consequently, a less number of fractures would occur. If it be considered necessary to reduce the substance of the middle of an axle, it would be safer to use good granular iron at first, as it is naturally much stiffer and less liable to bend and vibrate than fibrous iron, and would probably not change its form so soon, or receive injury whilst working under ordinary circumstances. It is, however, the author's opinion that axles should be perfectly rigid, so as not to bend or vibrate, even if that should have to be accomplished by making them somewhat larger in the centre, like the connecting rod of an engine.

Many other causes of change could be adduced, but enough has been stated to prove that the compression of iron, when cold, is certain to change fibrous into granular iron, and that vibration or bending, even to a slight extent, if continued for any length of time, has the effect of compressing all the particles consecutively.

A series of experiments was carefully made for the purpose of ascertaining, practically, the best form for railway axles, so as to obtain the greatest strength with a given weight of material. From these experiments it would appear that the forms generally adopted are very erroneous, especially in reducing the substance of the middle of the axles, and in turning rectangular shoulders near to the journals; and they proved, that by simply moving the face of the wheel back from the neck of the journal, the strength to resist impact was increased in the ratio of 100 to 30; that the relative strengths to resist impact where there is no shoulder, and where there is one, is in the ratio of 155 to 55; that the strength of a parallel axle compared with one which has been reduced in the middle, is in the proportion of 5 inches to 1¾ inch. Again, it is well known that the strength of round bars to resist traverse strain is as the cubes of their diameters, which would give the parallel axle an advantage over the reduced axle in the proportion of 83-74 to 58-18: and as the same law obtains in reference to torsion, if the velocity is the same, the strength to resist torsion, will be in a like proportion.

If iron was fibrous when worked into an axle no subsequent jarring motion would alter its character. The granulation of iron might arise from various causes, but nothing so surely effected it as when a bar of iron was gradually bent, so that the fibres on the inner side would be compressed, whilst those on the outer side were extended; and as this process was continued, so the granulation progressed. Nicking the iron would not materially influence the appearance of its fracture, nor would a blow which merely caused a jar destroy the fibrous character of the iron. This was well exemplified by two pieces of iron exhibited, which had been used as liners for a tilt hammer. That portion of each which had been compressed by blows, was granular in its fracture, whilst that which had been subjected to constant vibration remained very fibrous.

With regard to the forms of railway axles, it appeared, from the experiments, that the nave of the wheel should not be placed close to, but at some little distance (say ¾ inch) from the neck of the journal; also, that the shoulder behind the wheel should be entirely done away with; and instead of reducing the diameter of the axle in the middle, it would be advisable rather to increase its bulk at that point, like the connecting rod of an engine. No case had occurred in which the texture of a fractured parallel axle had been changed from a fibrous to a granular character, although a certain amount of granulation had been repeatedly observed with axles which had been reduced in the middle, and had then been broken in course of regular working. It appeared in all such cases as if there had been a progressive and alternate action of compression and extension of the outer fibres, from the bending of the axle whilst it was rotating; and that thus the granular fracture had been produced.

James River and Kanawha Canal.

We have received the report of the Hon, John Y. Mason, President of the James River and Kanawha company.

The works of the company are:

1. The Richmond dock, and the connection of the basin with the tide water.
2. The canal from Richmond to Buchanan.
3. The Blue Ridge turnpike and ferry.
4. The Kanawha turnpike road and river.
5. The third division or extension of the company's water line from Buchanan to Covington.
6. The Rivanna and Southside connections.

Of the present connection of the ship lock at Richmond, the President says:

The coffer dams and sheet piling are completed and the stone is all ready to be laid, prepared at a cost of nearly fifty thousand dollars, and as much force as can be advantageously worked is employed. Of the appropriation of $350,000 for the tide water connection there remains unexpended on that object about $60,000. The cost of the work will certainly exceed that sum, but the excess can it is hoped be met from the sale of property and the re-

venues of the company. The excess of cost over what was anticipated may be accounted for by the heavy amount of land damages and the expense of guarding by coffer dams and sheet piling the lock pit from the river and keeping it free of water from springs and soakage.

The second division of the canal has been opened during the present fiscal year, adding nearly 50 miles to the company's water line.

The interruption of navigation by ice was of greater duration during the past winter than in any former year, and the occurrence of two heavy freshets have seriously affected the business of the canal. The second division, for the first time in use, has suffered scarcely any damage, and this gratifying result furnishes conclusive testimony of the high professional skill with which the location was made and the heavy and expensive works of art have been constructed.

The difficulty of passing through Maiden's Adventure pond in low stages of water, has seriously affected the navigation of the canal for several years past. Temporary expedients, by efforts to stop the leaks of the old dam, were found to be ineffectual, and it was deemed most judicious to build a new stone dam. The material is excellent and the structure in which considerable progress has been made, under the personal superintendence of Mr. Duncan Grant, promises to be one of the finest works, as it is one of the most important on the line. The entire dam may be completed in the coming year.

The receipts from the canal from Richmond to Buchanan, during the last fiscal year, are	$269,210 81
The receipts from rents and scale house fees	8,238 16
Carried forward	$227,448 97
Disbursements for repairs, etc	$95,258.50
Net revenue	$182,190.47
Being an incease of	29,188.39
Estimated cost of repairs, etc	105,000.00
Actual cost	95,258.50
Less than estimate	$9,741.50
The amount of tonnage transported during the year ending 30th Sept., 1851, was	174,615 tons.
The tonnage for the last fiscal year, is	210,040 "
Increase	35,425 tons.
And the estimated value of the freight transported it is believed will exceed	$16,000,000
On the Blue Ridge Turnpike and ferry the recipts for the year, are	$703.33
Disbursements	805.37
Deficit	$102.04

On the Kanawha turnpike and river the receipts have been:

On the river	$9,915.21
Arrearages of tolls	1,082.74
	$10,997.95
Disbursements	5,520.54
Net income	$2,851.00

On the 3d division, including the extension of the company's water line from Buchanan to Covington, satisfactory progress has been made. The outlet lock at Buchanan is completed, and 4 locks placed under contract.

Of the Southside and Rivanna connections, the bridges at Bent creek and Hardwicksville are open to the use of the public—they will soon be entirely finished off. The connection by lateral canal, lock and dam at Cartersville, is also completed—the piers of the bridge at New Canton are finished, and the superstructure will be completed in a short time.

The gross receipts for the year were		$426,983.24
Disbursements, including dock		127,220.09
Net income		$299,763.15
Annuity to old James River company	$21,000	
Redemption of post notes, interest and dividend paid	1,116,78	
Interest on company's bonds, State bonds loaned	$243,018.95	
		265,135.73
Excess of receipts		$34,627.42
The estimate of the gross income was.		332,000.00
The actual amount		$306,983.24

This estimate was based on the tariff of tolls then in operation—the tolls were reduced about 13 per cent. on the first of March last.

It is recommended that an application for a loan of $180,000 be made to the State. The estimated disbursements for the year commencing first Oct. last, are $524,846.28.

Receipts for same period from the canal and miscellaneons sources,	325,000 00
From western improvements in tolls and arrearages	20,000 00
	345,000 00
A loan from the state to pay interest, etc.	180,000 00
	$525,000 00

The following is the concluding portion of the report expressing the views of the President on the future policy of the Company and the State:—

I have more than once expressed to the stockholders my views of the causes which have embarrassed the company. I have shewn that the mode adopted for extending the work, by means of borrowed capital, which carries interest from the date of the loan, and is, in effect, an annual dividend of six per centum from the commencement of construction of the work, before the company can charge or receive tolls for its use—a dividend larger than the average return of internal improvement companies, arising from their business after they are in full operation—and that it is an incubus which must oppress the company until its work shall have reached its western terminus. The subject is one of the gravest importence, and I trust, that in considering your memorials now before that body, the general assembly will, in its wisdom, devise some means by which the company may be relieved, and the securities of the state may not be exposed to the risk of being discredited at every recurring semi-annual period of payment of interest. The company must rely on its own revenues to meet its engagements, keep its works in repair, and complete those in course of construction, where practicable, with such aid as the state may grant; and hence, for the accomplishment of these ends, and in view of its just obligations to its creditors and the state, it appears to be obvious that no measure should be taken to reduce the present receipts, even with a belief of future increase from similar business on the canal, but its value will not be fully estimated until the improvement shall have reached the Ohio river, when, extending near five hundred miles in length, the transportation of freight in quantity not exceeding one third of its capacity to carry, with tolls of one cent a ton per mile, the revenue, without aid from the way freight, will reach five millions of dollars per annum—with a liberal allowance for expenses of repair and administration, the debts of the company will be speedily extinguished, and the stockholders, of whom the state is one to the amount of three fifths, will derive an income which will amply compensate for all the disappointments and delays and expenditures on the protracted construction of this magnificent work.

I have, in a former communication, informed you that a memorial had been presented to the legislature, in obedience to your resolution of the 26th of November last, and I have now the honor to communicate a copy of a memorial which was prepared in obedience to the instructions contained in your resolution of the 25th day of March last, and presented to the legislature, and will come up for consideration at its adjourned session. Events have justified the anticipation expressed in my last annual report, that "the legislature assembling under the constitution, may devise some general system, by which the great works of improvement will be completed, and its large investments in them be made productive." The whole subject was postponed, and will, I think, be adjusted at the approaching session, under circumstances more auspicious, by reason of the favorable results of the new revenue laws, which I learn will be presented to the general assembly. In the unfinished condition of the principal works of improvement in which the state has large unproductive investments, and for whose indebtedness it is interested as creditor, or responsible as guarantor, I have no doubt that it is the part of wisdom for the state to furnish the means of completion. It is confidently believed that such a provision will make the whole investment productive, and thus enable the state, with means derived from the works, to pay the debts contracted for construction, and give to the treasury a return from the stock by dividends, which will reduce the taxes of the people. And the complete execution of the works would enlarge our population, would multiply and give increased value to subjects of taxation, and exert the happiest influence in uniting the people of the whole state by the strong ties of mutual interest and ready commercial and social intercourse.

I doubt not that the stockholders will perceive that the president and directors have, in good faith, carried out their views expressed in their resolution of 26th day of March last, the effect of which will be to make at least for the present, a mixed improvement, partly of water line, and partly of railroad. I yield my own preferences to existing circumstances, because I believe that public sentiment, on which we depend for the means of extending this work, calls for a railroad connection which promises large benefits in carrying travellers and freight, and because the resolution looks to the ultimate establishment of a connection by an unbroken water line of the waters of the Ohio and the Chesapeake. I believe that the inadequacy of the railroad to transport all the freight which will offer, will shew the necessity of the water line with its greater capacity to carry burthen in larger quantity and on terms more favorable in the competition with northern improvements. And entertaining these views of the interests involved, whether connected with the company or not, I will promote your views to the utmost of my ability,—but it is due to candor to state, that while I would not urge the present construction of both the water line and the railroad, on account of the great outlay which would be required, I could not support any plan for the construction of the railroad which did not secure to this company the right of locating and constructing its canal on the location which nature has made practicable. If the developments of the future should demonstrate the necessity of both improvements, it would be an act of fatuity so to locate the railroad, as to place it beyond the power of the state hereafter to construct the canal without destroying the railroad. Your resolution looks expressly to the security of this ultimate object, and in this I fully concur. It gives me pleasure to state, that at a large and most enlightened meeting of friends of internal improvement, delegates of the people from almost every portion of the state, assembled in Union, Monroe county, in August last, the unanimous opinion seemed to be, that the chartered rights of the company should be respected, and that the connecting railroad, if authorized by the state, should be under the control of this company as a part of its improvement. It appears to me that there is no necessity for you to act on this subject again, until the legislature shall have passed an act or acts, which may require your assent to their provisions. It is not improper in this connection that I invite your attention to a supplemental report of Mr. Lorraine, an engineer in the service of the company, accompanying the report of the chief engineer, which clearly establishes on facts ascertained since his report laid before you at your last

general meeting, that the supply of water for the summit level may, with certainty, be obtained from Anthony's creek alone, and which thus establishes the feasibility of a water line across the Alleghany mountain.

American Railroad Journal.

Saturday, November 20, 1852.

New York and Boston Railroad.

It will be observed that the time for receiving proposals for the grading and masonry on this line, has been extended to the 5th of December, in consequence of the injuries sustained by the Chief Engineer. The proposals were to have closed on the 20th, but it is not expected that the Engineer will be able to attend to his duties at that date.

This is an important route, and it is to be regretted that any occurrence should contribute to delay its advancement. The business relations of these two great cities are now so intimate as to require a continued stream of travel to and fro. A well managed air line road will place them only about four hours distance apart. A line that will accomplish this, at a low rate of fare, must, inevitably, be thronged with passengers. A Boston merchant can then leave his counting room at ten in the morning, come to New York, go on 'change, dine and return home before bed-time. Stock in such a line can hardly fail to be a good investment.

Virginia.

South Side Railroad.—The annual meeting of the stockholders of the above company was held on the 20th of October last at Petersburgh, Va.

A resolution was passed at the called meeting of the stockholders on the 13th of July last, authorising the president and directors, a majority of the whole board concurring, to borrow for the purpose of completing the road to Lynchburg, a sum not exceeding $800,000, upon such terms, and payable principal and interest at such times and in such places as to them might seem best; and further authorising them to issue the bonds of the company, with coupons attached, signed by the president and sealed with the seal of the company; and as a further security, to execute a mortgage on all the property and works of the company.

This resolution was amended at the recent meeting, so as to authorise the execution of bonds either for money to be borrowed or work to be done on the road, or materials purchased, in the discretion of the directory.

And a further resolution was passed, that the coupons attached to bonds be signed by the treasurer.

Wm. Pannill, Esq., was unanimously re-elected President, and Peter B. Wills and Joseph E. Venable, directors on the part of the stockholders, and Samuel V. Watkins, Robert Leslie and Joseph E. Cox, on the part of the State of Virginia.

From the report of the President, William Pannill, Esq., we learn that the road was opened so as to form a junction with the Richmond and Danville railroad, a distance of 52¼ miles, in March last, in time to secure the State subscription to the stock of the company. This stock has been transferred, and the scrip furnished to the board of public works. Since then the track has been laid to the bridge over the Appomattox river, below Farmville. The grading and masonry of that portion of the road west of the bridge and Farmville, is nearly completed, bringing it within 23 miles of Lynchburg, and as soon as practicable in the ensuing spring, it is the design of the board to lay down the superstructure, the material for which can be taken across the river at the bridge on a temporary and cheap track. By adopting this course, the whole line of road, to within 23 miles of Lynchburg, will be ready for running by the time the bridge over the Appomattox is completed.

The bridge and road it is believed will be completed and in running order to within 23 miles of Lynchburg in August next.

A corps of engineers is now engaged in locating the western division of the road, all of which has been completed, except about six miles next to Lynchburg, and that will be done in a few days, when the whole will be ready for letting to contractors.

The receipts since the commencement of the work have been—

From stockholders		$1,328,722 51
For passengers	$10,426 45	
For freights	18,065 34	
		28,491 78
		$1,357,214 29
From other sources		75,125 08
		$1,432,339 37
Disbursed during the same time		1,417,583 40
Leaving a balance of cash in the hands of the treasurer		$14,755 97
There still remains unpaid by the subscribers to the capital stock of the company		$55,477 49
Unsubscribed stock		15,800 00
		$71,277 49

The report of the Chief Engineer, C. O. Sanford, Esq., presents many interesting details as to the construction of the road.

"All roads in Virginia, North Carolina, South Carolina and Georgia, which are projected to run from the Atlantic coast to the Blue Ridge, may generally be traced along the summits of the ridges of alluvial deposit; these ridges appear to be the remains of washings from the mountains, and these washings, no doubt, formed an extended inclined plane, like the beach of a sea, having an irregular but average fall from the mountains to the ocean of from 10 to 20 feet per mile; the rivers have since made their way through this deposit in nearly parallel lines from the mountains to the ocean, leaving the ridges nearly as they were originally formed; hence it will be perceived that any road extended along one of these ridges may, by care in the location, have easy grades opposed to the heaviest tonnage which always passes from west to east."

On such a ridge the South Side railroad might have been located throughout, and for the greater part of its line has been thus located, involving no heavier grade than 16 feet to the mile, rising from west to east, except where the road rises from Lynchburg to the main ridge.

The offer of a subscription of $100,000 in stock by the residents of Farmville, on condition that the road should pass through that place, introduced seme difficulties in the location. The fall from the main ridge to the Appomattox valley being so great that the 16 feet grade would necessarily pass at an average of 80 feet above the wide bottom lands of the Appomattox. A number of plans were suggested, among them the introduction of a heavy grade of 55 or 60 feet. The decision was finally narrowed down to a line on the main ridge, and the present line crossing high above the Appomattox.

The following reasons inclined to the latter course:

1st. The extra distance of five miles by the ridge would cost at least $1,500 per mile, or $7,500 for the five miles per annum additional expense of running the trains, being equivalent to a capital of $125,000.

2d. A loss in clear profits upon travel and tonnage by the ridge line, of not less than $6,000 per annum, or its equivalent to $100,000 in first cost.

3d. That Farmville and vicinity subscribed $100,000 towards the present line, and this produced $150,000 on the part of the State, but in summing up the $100,000 only is assumed.

4th. That the adoption of the line by Farmville advanced the completion of the road at least one year, thereby saving interest on capital alone to certainly $100,000.

The bridge over the Appomattox is proposed to be built of wood, and as this is a remarkable work, we shall extract largely from its description in Mr. Sanford's report.

The bridge is 3400 feet long, varying in height from 60 feet at the abutments to 100 feet near the river; the clear spans are 105 feet each, with one exception; the abutments to be built of rubble masonry, and the bases of the piers to 3 feet above high water mark to be of masonry, with cut beds and joints, and laid in courses; the piers to be of brick-work, the whole supporting the superstructure of wood made in every way substantial, and anchored to the foundation masonry by iron rods passing entirely through the piers.

There have been higher bridges not so long, and longer bridges not so high, but taking the height and length together, this is perhaps the largest bridge in the world. And while it ought to be built at any reasonable cost to sustain the sixteen feet grade, still great economy should be used in its plan, having due regard to its strength.

No pains were spared to obtain the best plan; a drawing was obtained of a Russian railroad bridge 140 feet high, with wooden piers 80 feet high; a wooden model of the high timber piers of a bridge in Pennsylvania was carefully examined, and a model was made expressly for the Appomattox bridge, and while I was entirely satisfied that wooden piers were capable of sustaining any load that they could be required to bear, yet, being light, it was possible that a tornado might injure or destroy the bridge; I determined, however, not to put the company to the expense of stone piers in any event, and accordingly chose the next material in point of economy, which is brick, it being known that brick clay of superior quality was to be found in the immediate vicinity of the bridge.

Ths cost of the piers is estimated at not more than one half those of stone, and the examples of strength and durability of the shot towers of Baltimore and Philadelphia 240 feet high, and of a brick stack in Scotland 450 feet in length, were relied on to show the ability of this material to resist the pressure of such a structure.

The estimated cost of the bridge is $160,000.

We copy from the Petersburg Intelligencer part of an able article on the subject of this road and its connections:

It is to be the channel of a trade which will serve more to enrich and strengthen the commonwealth, than any work which has ever been projected within its limits. The country that will be tributary to it is vast and fertile. Its productive energies are such as to give the sure promise of an almost boundless supply of the materials of commerce. Between Petersburg and Memphis lies a region blest with the finest gifts of nature, constituting inexhaustible resources, and waiting only for the freight trains to be developed and realised. When the railroads now being constructed shall all be completed. there will be an incalculable amount of transportation that will pour its treasures into the lap of Virginia, and enable her with joy and pride to hold up her head among her sisters, and look forward to a bright future. It is not only Petersburg, Lynchburg, and the entire southwestern division of the State that will reap the golden harvest, but the broad commonwealth in all its parts. The South Side, and the Lynchburg and Tennessee railroads therefore appeal with peculiar and ir-

resistible force to the fostering care of the legislature, and it is to be hoped that body will readily and gladly grant all the further assistance which may be necessary for the speedy completion of such valuable imporovements. There cannot be a rational doubt that, in every point of view, they are worthy of such assistance. Nor can there be a doubt that, instead of appropriations, on a liberal scale, being a burden upon the treasury, they will only be facilities for relieving and enriching it. This is the way to diminish the pressure of taxation upon the people, and it is the *only way*.

Connecticut.

New London, Willimantic and Palmer Railroad.—At the annual meeting of this company, held at New London, on the 10th Nov., inst., the following gentlemen were elected directors:—Gordon L. Ford, Andrew M. Frinke, Acors Barns, Henry P. Haven, Francis Allyn, Lyman Fllyn, Thos. Fitch, 2d., N. Shaw Perkins, Jr., Loren P. Waldo, Calvin Torrey, of Mass; Joseph Smith.

At a meeting of the directors held subsequently, Gordon L. Ford, Esq., was re-elected president, and Isaac C. Tate, secretary of the company.

Baltimore and Ohio Railroad.

The revenue of this railroad for October was $165,361 47, of which £133,187 94 was from the main stem, and $32,173 53 from the Washington branch. The increase over October 1851, is $32,109 33.

Pennsylvania.

Philadelphia and Sunburry Railroad.—This road is rapidly progressing, and by the first of May next it is expected to be ready for the locomotive between Mount Carmel and Shamokin. In the mean time, the road from Shamokin to Sunbury is to be laid with a new rail, leaving but eighteen miles of staging between Sunbury and Pottsville, and enabling passengers who leave Sunbury in the morning to reach Philadelphia the same evening.

Illinois and Wisconsin Railroad.

The iron has already been laid on three miles of this road, and twenty-five miles will be completed in about two weeks.

Ohio.

Cincinnati and Dayton (short line) Railroad.—The contract for building this road has been awarded to Messrs. Williams, Buchanan, Reed, and Tinmans. The three former an eastern company. The entire road, with the tunnel, is to be finished and completely equipped from Cincinnati to Dayton for the sum of seventeen hundred thousand dollars, one-half cash and one-half bonds of the company, payable in monthly instalments. The contractors are at every expense except for right of way and depots. The road from the tunnel to Dayton is to be finished within twelve months from Monday next—the tunnel within twenty-two months.

Columbus and Hocking Valley Railroad.—A general meeting of citizens interested in the construction of this road was to have been held at Lancaster, O., on the 18th inst.

Stock and Money Market.

The transactions in the stock market have been very heavy, and marked by unusual activity. The ease and abundance of money still continues, and the steamer of Wednesday took out but $101,952—showing an abundant supply of specie abroad. All descriptions of stocks are in large demand, and the advance in rates has been very general. Erie, Long Island and Harlem have been especially active, partly, as it is believed, under the influence of speculative combinations. The sales of Erie on Wednesday, amounted to nearly 10,000 shares, advancing 2¼ per cent. Sales of Harlem to the am't of 3,000 shares were also made. No less than $120,000 of bonds, government and railroad, were purchased on the same day. The late returns on all the leading lines of roads in the country have showed so large an increase in the receipts, varying from 20 to 50 per cent, and even beyond, that investments are made with confidence in this species of property.

A considerable sale of stocks was made at auction by Simeon Draper, on account of executors; a large company attended, and much animation was shown. The following prices were obtained:

$5,000 N. Y. & Erie railroad, first mortgage	113¾
8,000 N. Y. & Erie, second mortgage	106
1,000 N. Y & Erie, income bonds	99¼
1,000 N. Y. & Erie, convertibles	99
500 Hudson River, first mortgage	103
5,000 Hudson River, first "	107¼
6,000 Hudson River, first "	108
500 Hudson River, first "	107¼
2,000 Hudson River, second "	103
10 shares N. Y. & Erie	91¼
12 shares N. Y. & New Haven	115¼
10 shares Cleveland, Columbus & Cin.	127¼
60 shares do. do. & Cin.	127¼
33 shares do. do. & Cin.	127¼

Heavy orders have been received from abroad for leading railroad bonds, and a steady demand for investment may be looked for from the foreign market. It may be questioned whether an equal amount of capital in any country can be pointed out earning as steadily and with such an increase, as that invested in the railroad system of this country.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, NOVEMBER 20, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	110¼
U. S. 6's, 1862	115¾
U. S. 6's, 1862—coupon	115¾
U. S. 6's, 1867	119¾
U. S. 6's, 1868	119¾
U. S. 6's, 1868—coupon	119¾
Indiana 5's	101¼
Indiana 2½	61¼
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	97
Illinois 6's, 1847	83
Illinois 6's—interest	55
Kentucky 6's, 1871	110
Maryland 6's	108¾
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	119
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	114
New York 5½'s, 1865	112
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112¼
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106
Ohio 6's, 1860	106¼
Ohio 6's, 1870	115¼
Ohio 6's, 1875	117
Ohio 5's, 1865	105
Ohio 7's, 1851	105¼
Pennsylvania 5's	98
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99¼
Tennessee 5's	92
Tennessee 6's, 1880	107¼
Virginia 6's, 1886	112

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107¼
Cincinnati 6's	101
St. Louis	96¼
Louisville 6's 1880	96¼
Pittsburg 6's, 1869-1871	102¼
New York 7's, 1857	108
New York 5's, 1858-'60	103¼
New York 5's, 1870-'75	103¾
New York 5's, 1890	106
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	109
Baltimore 1870-'90	107¼
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113¼
Erie 2d mortgage, 7's, 1859	106
Erie income 7's, 1855	99¼
Erie convertible bonds, 7's, 1871	99
Hudson River 1st mort., 7's, 1869	108
Hudson River 2d mort., 7's, 1860	103
New York and New Haven 7's, 1861	106¼
Reading 6's, 1870	89¾
Reading mortgage, 6's, 1860	99¼
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	99¾
Cleveland, Col. and Cin. 7's, 1859	122
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	106
Ohio Central 7's, 1861	96¼

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Nov. 11.	Nov. 18.
Albany and Schenectady	109¼	112
Boston and Maine	107¼	107¼
Boston and Lowell	109	109
Boston and Worcester	105	105
Boston and Providence	89¼	89¼
Baltimore and Ohio	99	91¼
Baltimore and Susquehanna	29¼	30
Cleveland and Columbus	127	127 ¼
Columbus and Xenia	—	—
Camden and Amboy	149	—
Delaware and Hudson (canal)	128	130
Eastern	98	98
Erie	86¼	91
Fall River	—	—
Fitchburgh	104	103¼
Georgia	—	—
Georgia Central	—	—
Harlem	71¾	73¼
" preferred	111¼	111¼
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	76	76¼
Little Miami	—	—
Long Island	39	40
Mad River	—	99
Madison and Indianapolis	108¼	110¼
Michigan Central	111¼	111¾
Michigan Southern	128¼	128
New York and New Haven	113	115
New Jersey	130	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	51	52¼
Ogdensburgh	26¼	26¼
Pennsylvania	48¾	46¼
Philadelphia, Wilm'gton & Balt.	36¼	37
Petersburg	—	—
Richmond and Fredericksburg	105	97¼
Richmond and Petersburg	35	35
Reading	99	101¼
Rochester and Syracuse	124¼	124¼
Stonington	56¼	56
South Carolina	—	122¾
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	141	142
Vermont Central	17¼	17
Vermont and Massachusetts	22	22¾
Virginia Central	—	40
Western	104¼	104¾
Wilmington and Raleigh	57¼	57¼

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

Louisiana.

Lafayette and Pontchartrain Railroad.—This enterprise is in some respects a local one, proposing to connect the upper portion of the city of New Orleans with Lake Pontchartrain; at the same time, as a link between the Opelousas and Jackson roads, the two great railroads of New Orleans, it has a more extended importance. The city of Lafayette is the depot of all the live stock brought down the Mississippi, and the present road would facilitate the transportation of that portion of it destined for the States bordering on the Gulf to the east of Louisiana. An address of the President of the company, Wm. M. Perkins, Esq., has been issued, calling the attention of the citizens of New Orleans, and capitalists generally, to the prospects of the new road. One sentiment in the address has a peculiar significance with respect to the south and west, and should there at all events meet with a hearty response to realise the completion of railroads as the most important element of progress to them. Taxation, if found the only means rapidly to create these works, should be cheerfully concurred in. The people of New Orleans are we think ready now to admit that.

" An iron road with a steam horse and a train of carriages are as essential to this age of progress as were earthen roads, oxen and carts to the generation that preceded us."

The advantages claimed for the new road are, first, by connecting the river directly with Lake Pontchartrain, at a point nearer to the landing of western produce, than any other public improvement, to transport a large share of the freights bound coastwise, or to the interior of Mississippi, Alabama and Georgia.

Second, it is expected to open to a large population a direct and cheap avenue for the resources of the lake, in the way of wood, lumber, brick, sand and shells.

Third, the road starts from the Levee, at the foot of Jackson street, opposite the depot of the Opelousas railroad, and crosses the Jackson and Northern railroad, three miles from the river and one mile above the depot, forming a connecting link between these roads of the same gauge as the latter. When the Jackson road is completed, three hundred thousand bales of cotton will be transported by it, a portion of which will be carried to the presses, etc., in the neighborhood of the terminus on the Levee. And when the Opelousas road is completed, the sugars and western produce brought by it will bring this road in requisition, to place them on the Northern line in their transit for the interior.

Fourth, the road is wanted, as furnishing to the citizens of that section of New Orleans a route to the Lake, for excursions of pleasure to the gardens and other places of resort on the shores of the Lake and on the Metairie Ridge.

In a speech delivered before the citizens of the 4th District of New Orleans, by Col. S. H. Peck, the cost of construction from the river to the Lake complete, is estimated at $10,000 per mile, seven miles $70,000
Cost of three locomotives 15,000
Two depots, one at the lake and the other at the river 30,000
Wharf at the lake landing 20,000
Freight, funeral and passenger cars 20,000
Right of way and contingencies 15,000

$170,000

The number of passengers is estimated at 1,000 per day each way.

The amount per annum would be $73,000
Amount of freight is estimated at 27,000

Total $100,000
Expenses 33,000

$67,000

A further deduction of 23 per cent may be made, for using horse cars from the river to Nayades st 23,000

Net gain $44,000

A profit of more than 26 per cent on an investment of $170,000.

The Northern and Southern Routes.

Under the influence of railroads and their extension over the entire face of the country, all the products of the soil and of national industry will be borne to a market by the shortest, or rather cheapest route, introducing time, risk, and all other circumstances into the element of expense. When the roads now in progress in the west and the south are completed, and the roads stretching from the Atlantic cities are in communication with them, a line may be drawn with almost mathematical nicety, giving to each city its limits both of reception and distribution, and measured by the cost of transportation to and from these territorial depots, and their relative attractive power, according as they are farther from or nearer to the spot of final consumption or manufacture. Each of the great cities distributes what it receives either at once to the place where it is used, or sends it forward to another depot still nearer the final point. If New Orleans is obliged to forward to New York what she receives, then her lines of attraction will all be diminished in length by a distance, the expense of carriage along which shall just be equal to the freight between the two cities, the interest on any additional time consumed and the payments to be made at the intermediate point for handling and transhipment. The question of choice of route is one of dollars and cents, including all the economic conditions of time, risk, deterioration, etc.; State and city pride have nothing to do with it—the cheapest avenue is the one that will at last be taken without appeal. The trunks of what may be called the northern route are the canals and railroads of the eastern cities, Boston, New York, Philadelphia and Baltimore, and their sources the valleys of the St. Lawrence and the Ohio—a route to a vast extent artificial, and having invested in its formation many millions of dollars. The southern artery is the Mississippi, and it has been fed by the entire valley of that stream and the Ohio, the most extensive internal navigation that nature ever donated to any civilized people. The position of New Orleans, seated at the mouth of the Mississippi, has appeared hitherto inexpugnable, commercially considered. But a rivalry has already commenced, in which the northern cities have, as it is claimed, a vantage ground, in draining the great valley of its products, even up to the course of the Tennessee river and the mouth of the Ohio. Louisville, once the tributary of New Orleans, claims to offer facilities as a depot for the reception of goods and forwarding them to market, superior to those of New Orleans. It is a question altogether of figures and of the most tangible facts, an appeal to the pocket irresistible in its nature. If it is now decided that the northern route, composed mostly of railroads, can compete in transportation with the descending current of the Mississippi, and can draw cotton, the staple of the southern part of the valley, up the Ohio, and send it over the Alleghanies, and divide among the northern seaports a part of that trade of which New Orleans was so long the mart, we may indeed wonder at the result. That city will find in this a new reason why she should hurry to completion the railroads by means of which alone she can hope reasonably to retain her fair share of the traffic. The course of trade moves along by its own laws just as surely as that of gravitation, the cotton threads its way to the market, for there alone it has any value, and no motives, except those of self interest, can have any weight as to the channel of its transmission. The manufacturers of the east are vitally interested in this question, as well as the merchants and factors of New Orleans and the Atlantic cities. Steamboats laden with cotton will hardly course along the Ohio, or cars freighted with it whirl over the railroads of Indiana and Ohio without leading to the establishment of cotton manufactories in those great food-producing states. They will hardly permit the transit of this material through their borders without trying the experiment to relieve the channels of trade of their burden. These railroads will lead inevitably to further development, by affording the means to vary industrial pursuits, a most important step in the national advance. The eastern states sent out, during previous years, agricultural settlers to the rich and fertile fields of the states bordering the Ohio and the lakes, they will send manufacturing emigrants when the cotton is directed northward, and can be transported more cheaply into Ohio from Vicksburg and Memphis than to Massachusetts, and when the eastern home markets require from an economical necessity its transmission by the same route. It may be thought that by bringing about more early than otherwise a diversity of pursuits, railroads will be the means of diminishing their own traffic, but the effect will be merely to shorten the distance carried, while the total amounts must be more than proportionably increased. We cannot readily conceive of any increase of population or change in employment that would diminish the surplus of agricultural products of such a state as Ohio below their present standard, and the opening of a new market there for cotton would produce no worse influence on New England manufactures than to force them to seek purchasers elsewhere in regions accessible to her ships, and now opening the prospect of an almost illimitable demand. But as we said before, this is a matter of fact, rather than suggestive of speculation. In a previous article published in this Journal on the 25th of September last, we embodied certain estimates made by Mr. Webb, of Louisville, showing that an equal quantity of tobacco could be shipped more cheaply from Louisville, by the northern route, to Liverpool, via New York, than from New Orleans. This was sufficiently startling, but it becomes still more so when we find that cotton at Memphis, and all points above, can be carried more cheaply to Louisville than to New Orleans, and that a further saving is effected to the northern or foreign manufacturer by purchasing at the former place. The following estimates are taken from the circular of Messrs. E. Webb, Rowland & Co, of Louisville.

Sales "Pro Forma" Louisville.

100 bales cotton, 50,000 lbs. at 10c $5,000

CHARGES.

Freight from Tennessee river, Nashville or Memphis $100
Marine insurance, ½ per ct 25
Fire insurance per month, ½ per ct 25
Storage, labor, drayage, etc 50
Commissions, 2½ per ct 125

——	325
	$4,675
New Orleans proceeds deducted	4,550
	125

"Sales Pro Forma New Orleans."

100 bales cotton, 50,000 lbs., at 10c	$5,000
CHARGES.	
Freight from Tennessee river	$200
Marine insurance, 1 per ct	50
Fire insurance per month, ¼ per ct	25
Storage, labor, drayage, etc	50
Commissions, 2½ per ct	125
	450
	$4,560
Proceeds in excess favor of Louisville	125

The above tables show fairly that a shipper on the Tennessee river realises one hundred and twenty five dollars on a sale of 100 bales cotton, made in Louisville, over New Orleans, at same rate—adopting the same commissions and incidental charges. This gain, it will be perceived, is in freight and river insurance.

Let us next show the dealers and manufacturers of western New York, Pennsylvania, together with those of Baltimore, Philadelphia and New England, upon what grounds we advocate Louisville as a cotton market, to draw at least a part of their supplies from, and in making this exhibit the shipper to this market can see at the same time *why* this is to be his best "home market." We make a "pro forma" invoice of 100 bales purchased in Louisville and New Orleans, at 10c, for account of say a manufacturer in Baltimore:

Invoice of 100 *bales Cotton Purchased in Louisville.*

100 bales, 50,000 lbs., at 10c	$5,000 00
Drayage	6 25
Insurance to Baltimore, ¼th per ct	31 25
Discount on draft at 60 days, $5,500, to pay for same, 1 per ct	55 00
Freight from Louisville to Baltimore via Wheeling and Louisville line, and the Baltimore and Ohio railroad, 50c per 100 lbs	250 00
Loss in interest from the day purchased to the day delivered in Baltimore, 10 days	9 17
Commission for purchasing, negotiating and shipping, 50c	50 00
	$5,401 67
Difference in favor of Louisville	223 95
	$5,625 62

Invoice of 100 *bales Cotton Purchased in New Orleans.*

100 bales 50,000 lbs., at 10c	$5,000 00
Drayage and shipping	25 00
Marine insurance 1¼ per ct	62 50
Discount on draft 60 days $5,500, to pay for same, 2¼ per ct	121 25
Freight, ½c	250 00
Commission, purchasing, negotiating, etc., 2½ per ct	125 00
Loss in interest from the day purchased to the day delivered in Baltimore, ¼ per cent	41 87
	$5,625 62

Thus it will be seen that the northern or Baltimore manufacturer saves by buying here, in place of purchasing in New Orleans, $223 95 on 100 bales, while at the same time the shipper obtains here $125 more on his 100 bales than he realises in the great southern market.

Similar estimates show the advantage of this channel for goods destined for a foreign port, for example Liverpool. The freight from Louisville, via Baltimore, to Liverpool, and that from New Orleans to Liverpool, is set down at the same sum, while the saving in insurance, discount, etc., saves on an invoice of 100 bales, $165 73, or about 3½ per cent on $5,000 prime cost. This is a very important subject, and there can be no doubt that the relative expenses on the two routes are accurately stated. It gives a choice of routes, and exhibits a preponderance in favor of the northern, but at the same time in justice to the southern emporium, there is a limit to the capacity of these railroads, while they develope a trade nearer their terminations, to an extent that shall operate as a glut in these channels, and so prevent the transmission of distant products like cotton, with the regularity assumed in the above estimates. Before the Philadelphia and Baltimore routes are completed so as to be effective, New Orleans will probably have her Northern railroad in operation, and we doubt if the competition of trade may not be more powerful than that of routes and that all these roads will find their cars and locomotives tasked to their utmost extent, leaving no time to enter on any rivalry with other means of transit. We have not yet supplied means adequate for the wants of the trade of the west and south, and we doubt whether it is possible for us to catch it up by the construction of works for its accommodation.

Journal of Railroad Law.

THE LIABILITIES OF SUBSCRIBERS TO THE STOCK OF CORPORATIONS.

The subscribers to the stock of incorporated companies, mutually accept the *charters* of such companies, and assent to all their provisions; prudence, therefore, dictates an examination of the charter of a company before subscribing to its stock,—so that we may understand the position in which we shall, by so doing, be placed.

The prevailing practice of inserting in the charters of railroad companies a clause authorising the legislature to repeal or alter those charters at pleasure, may to some seem alarming. But it must be considered that legislative power is wisely restrained by certain insurmountable barriers. No person can be deprived of his property without due process of law; nor can private property be taken for public use without due compensation. The New York Court of Appeals lately decided that an act of the legislature authorising trustees, who under a valid will are seized of the title of an estate in lands, which they held in trust for one person for life, with remainder over to others, to sell the *whole* estate, without the consent of those entitled to the remainder, was *null and void.*

The following points decided in the case of the *Northern railroad company vs. Miller*, 10 *Barbour's Supreme Court Reports* 260, will be found worthy the attention of those who are interested in joint-stock corporations.

A subscription to the capital stock of a railroad corporation, whereby the subscriber promises to take five shares of the stock, subject to the conditions, requirements, liabilities and benefits of the act of incorporation, is equivalent to an express promise to pay for the stock, as it shall be called for by the directors.

If that form of words be not an *express* promise, it raises an *implied* promise to pay, equally efficacious with an express promise.

The only difference between an express and an implied promise, is in the mode of proof. The latter is proved by circumstantial—the former by positive evidence. The legal consequences are the same in both.

The 4th section of the charter of the Northern railroad company, authorising the directors to exact a forfeiture of the stock and previous payments, as a penalty for the non-payment of the installments, does not, before any forfeiture has been declared, impair the remedy of the directors to enforce paying by an action at common law.

The statute remedy of forfeiture is merely an *additional* remedy which does not impair that furnished by the common law.

When the charter of a railroad company contains a clause authorising the legislature to repeal or alter it, the alteration of the charter by the legislature, made on the application of the directors, without consulting the stock subscribers, does not absolve the latter from their subscription. When the legislature acts within the scope of its legitimate authority, it is entirely immaterial whether they have acted of their own free will, or upon the suggestions of others.

Railroad Items.

The bridge over the Ocmulgee, connecting the railroads centering at Macon, Georgia, is now in full use. The laying down of the track was completed on the 9th Nov. inst.

The Mobile and Ohio railroad company has made a very favorable contract for about 7,000 tons of iron, sufficient to lay fifty-five miles more of the road. It is to be delivered in the course of the coming spring and summer; a portion of it indeed is now on the way. This will reach some miles beyond Winchester, in Mississippi. The grading on this portion of the line is progressing, we are pleased to learn, rapidly, and the track will be laid as soon as it is complete; so that we may expect to have eighty-eight miles of the road finished within the next twelve months. From Winchester on through Wayne, Clarke and Lauderdale counties the contractors are at work with good forces, chiefly negroes. The work, therefore, without doubt, will be completed within the time stipulated.

The fifty miles of the Muscogee railroad belonging to Columbus have been completed, and the connection from Fort Valley will doubtless be completed by the 1st of March next. The iron is all received, and ere long the staging will be reduced to ten or twelve miles by another route.

Three large car loads of good coal from the Cumberland mountain reached Nashville on the 27th ult., over the railroad. This is the first imported from that quarter, and dates the commencement of a new era in the history of Nashville.

The receipts of the Ohio and Pennsylvania railroad for October were $44,741, an increase of $7,220 over September. The number of passengers carried was 27,161. In addition to the sum of $44,741, the sum of $6,805 was received for other companies, making the gross receipts over $54,000.—The net receipts of the month amount to about nine per cent per annum on the cost of the road in use.

The road between Wooster and Crestline is in a great state of forwardness, and it is expected that the cars will run to Crestline in all the month of January next. The success of the road exceeds the expectations of its most sanguine friends.

The earnings of the Milwaukee and Mississippi railroad since the road reached Whitewater, shows a very large gain on the previous weeks. The business of the first sixteen days in October was,

Passengers	$3,466 61
Freight	5,477 06
Total	$8,943 67

The entire earnings for September were only $9,000 and of August about $5,000. This road promises to be one of the best roads in the west.

The number of tunnels on the Baltimore and Ohio road is twelve, and their aggregate length is about two miles. The shortest is one hundred and five feet, and the longest four thousand one hundred feet long. They are all completed exeept two. The only two items of unfinished work left behind the track in its progress west are the Monongahela viaduct and the Board Tree tunnel.

We learn from the Daily Wisconsin, of Milwaukee, that since the completion of the Mississippi and Milwaukee railroad to Whitewater, (51 miles) the receipts have averaged about $700 per day. Twenty-one miles more will reach to Janesville, which will be finished by the latter part of December next at farthest. This will make 72 miles of road at a cost of about $1,200,000.

Tennessee.

Rabun Gap Railroad.—On Saturday evening last we had a brief interview with Mr. Corry, who had just returned from a tour of reconnoisance through that portion of Tennessee extending from this place to the North Carolina line, in which it is proposed to locate the Rabun Gap railroad. He reports the route as extending through a valuable section of country, and offering few impediments to a speedy and permanent construction of the road. He also confirms the announcement made in our paper of Thursday, that Stump House Mountain had been passed at a maximum grade of 53 feet to the mile. Mr. Corry will organize immediately a corps of engineers for the purpose of making an instrumental survey as far as the North Carolina line. The proposed route leaves North Carolina at the valley of the Little Tennessee, and follows that river to its junction with the main river, pursuing the most direct course to this point.

These facts give a new aspect to the Rabun Gap enterprise, and inspire us with the fullest confidence in its early completion. South Carolina is resolved upon making the connection with the Northwest by this route, and will build her portion of the road. The old Rip Van Winkle State will arouse from the lethargy that has so long crippled her energies, and will build *her* portion of the road, and can we doubt as to Tennessee? Our Legislature has already contributed nearly one-half of the amount required. Nashville capital will now reciprocate the aid rendered by Charleston in building the N. & C. railroad, and thus the means is provided, and the work will go on. This done, and Chattanooga is indeed the local center of a vast system of connecting roads.—*Chattanooga Advertiser.*

Ohio.

The Greenville and Miami Railway.—This road was opened in June last, and since that time has been in successful operation. The business upon the road has exceeded by far, the estimates of its sanguine friends. The receipts for passengers alone average more than $100 per day, and for freight the receipts greatly exceed that amount.—This is far beyond what was ever claimed for the road by its friends, and gives promise of a profitable investment to those who have made investments in its stock. The road is being rapidly improved by ballast, and will soon be in first-rate running order. When fully ballasted and stocked, we are informed that it will cost less than $15,000 per mile.

The "Extension" from Greenville to Union is progressing rapidly to completion, and there seems to be no longer a doubt that the "iron horse" will reach Union, at the Ohio State Line, by the first day of December. The company commenced laying track on Monday, and the grading is in such a state of forwardness that there can be no delay on that account. About nine of the eleven miles of the extension are graded; and the residue will be finished in thirty days, without any hindrance to the track layers, as the work to be done is all near the State Line.

The business of the road, after it is completed through to Union, where it connects with the Indianapolis and Bellefontaine railroad, must be immense. The average number of passengers now passing daily between Indianapolis and Cincinnati is not less than 200 each way, and by the time this connection is made, the road from LaFayette to Indianapolis will be finished, which will bring the whole travel of the Upper Wabash Valley, going to Indianapolis, and thence over this.

We have no doubt of the truth of the statement of the Indiana State Journal, that the "passenger business on this line will be much heavier than upon the other road touching Indianapolis." The whole of the Eastern and Cincinnati travel from the Terra Haute, LaFayette and Peru railroads must be concentrated upon this line. In view of this increased travel, we are informed that the company are providing themselves with five first class and two second class passenger cars for the regular express train; which is to run in connection with the Western roads above named. The running time between Cincinnati and Indianapolis by this new line will be nine hours, and between LaFayette and Terra Haute and Cincinnati twelve and a half hours. The shortest time at present is 24 hours between Indianapolis and Cincinnati. With all of these feeders there cannot be less than 300 passengers over this line daily each way. Railroad men put the number much higher.

Railroad Car Trimmings.
DOREMUS & NIXON,
NO. 21 PARK PLACE,
AND
18 MURRAY STREET,
IMPORTERS

OF Plain and Figured MOHAIR PLUSH; *Printed* and *uncut* Mohair Plush, entirely new designs—also, GERMAN OIL CLOTH, for Head Linings, Enameled with Gold and Silver, and Velvet Printed. These Headings are the most beautiful ever shown—having been made expressly for AMERICAN CARS. D. & N. are sole Agents. Also, PATENT PARTS COTTON FELT, for Stuffing Cushions—this is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin. It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair. Also, Brocatelles and Moquetts. Also, Curled Hair.

N.B.—D. & N. have the Plush and Linings *in bond for exportation.*

November 15, 1852. 1y

Change of Hours.

MONTREAL & NEW YORK
AND
Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜

FALL AND WINTER ARRANGEMENT.

ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A. M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P.M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3·50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M.

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad, and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

To Railroad Contractors.

PROPOSALS will be received at the office of the New York and Boston Railroad Co., in the city of Middletown, until the 20th inst., for the grading and masonry for the road bed for a double track of the N. Y. and Boston Railroad.

Proposals are invited for the first, second, and third divisions, commencing at New Haven, and extending easterly about 71 miles. Also, for the fourth divisions if prepared in time.

Profiles may be examined and specifications of the work can be had by applying at the Company's Office.

CHAS. R. ALSOP, President.

City of Middletown, Nov. 1, 1852.

NOTICE.

IN Consequence of the Accident at Windsor Locks, by which Gen. Palmer, Chief Engineer of the New York and Boston Railroad, was severely injured, and is still unable to attend to business, the time limited for receiving Proposals for the Grading and Masonry of 71 miles of the New York and Boston Railroad is extended to December 5th, 1852. CHAS. R. ALSOP, President.

Middletown, November 16, 1852. 1t

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

The Cold Spring Iron Works,
INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—
John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wethereli, Car Builder. " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry, Timber Bridging, and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 30th November.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY, CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN, ROBERT M. STRATTON, NATHANIEL CONKLING, of New York.
D. K. MINOR, JOB S. HEARN, SUMNER WHITNEY, BENJAMIN C. DONNELLAN, JAMES CLOWDSLEY, JAMES ALLEN, of California.

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.
Sept. 11, 1852. 1y*

Railroad Iron.

1400 TONS Railroad Iron, weighing about 55 lbs. per yard, of an approved pattern, now in bond, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Huger, T. P.,

Northeastern Railroad, Charleston, S. C.

Mississippi and Atlantic Railroad, from Terre Haute to St Louis.

BOOKS OF SUBSCRIPTION TO THE CAPITAL STOCK OF THE MISSISSIPPI & ATLANTIC RAILROAD COMPANY, an organization under the General Railroad Law of the State of Illinois, for the construction of a Railroad from Terre Haute, Indiana, to St. Louis, Missouri, will be opened under the direction of Messrs. WINSLOW, LANIER & CO., at their office, No. 52 Wall street, in the city of New York, on SATURDAY, the 6th day of November, 1852, and remain open until the stock of said company shall be subscribed.

The Capital Stock of said Company is TWO MILLIONS OF DOLLARS, of which Four Hundred and Seventy Thousand Dollars has been taken, leaving the sum of One Million Five Hundred and Thirty Thousand Dollars open to present subscription.

This stock has been divided into shares of FIFTY DOLLARS each.

TEN DOLLARS per share will be required to be paid at the time of subscription, and the remainder will probably be called through the whole of the year 1853.

Stock payments will draw seven per cent interest—payable on the first days of each July and January in the city of New York, until the completion of the work, when regular dividends will be made from the earnings of the road.

The first payment of interest will be made on the first day of July, 1853.

Books for the transfer of the stock will be opened and permanently kept in the city of New York, upon which the stock will be transferable after the payment of the first instalment.

This road is 170 miles in length, of which over 165 miles is straight line.

On over two thirds of the line the grades are under twenty feet to the mile, and the maximum grade is less than forty feet.

It is the last uncompleted link in the great chain of railroads from New York, Boston, Philadelphia and Baltimore to the city of St. Louis.

It is the most direct route, and must be a valuable road, and its stock a good investment.

It is designed to complete the road within eighteen months to two years; and it will be built under the personal supervision of the President, JNO. BROUGH, Esq.

Messrs. Winslow, Lanier & Co. will furnish maps of the connections, profits of the route, and the prospectus of the company, containing full particulars as to the organization and prospects of the work, upon application at their office.

SALMON A. PHELPS,
MICHAEL G. DALE,
NATH. M. McCURDY,
DEAN ANDREWS,
Commissioners.

WINSLOW, LANIER & CO., Agents.
New York, November 1st, 1852. 2t

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.
WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK,

Notice to Contractors.

ERIE AND KALAMAZOO RAILROAD.
NEW STATION AT TOLEDO.

SEALED PROPOSALS will be received at the office of the Company, at Adrian, until the 15th of November next, at noon, for the proposed Station, embracing about

250,000 cubic yards of earth work,
40,000 cubic feet square timber in Docking,
70,000 lineal feet round timber in Docking,
Piling, Capping and Planking for wharf, floor and foundation for buildings,
Two Draw bridges—wood on piles,
1,500 to 2,000 cubic yards Hydraulic Stone Masonry in Aqueduct.

Maps and plans may be examined at the Engineer's Office, Adrian, after the 10th of November next.

Satisfactory security will be required for the faithful performance of work.

To be completed one year from the first of June next.

The Company reserve the right to accept or reject proposals, as their interest may require.

JOHN B. JERVIS, Chief Engineer.
Adrian, Michigan, October 25, 1852.

Notice to Contractors.

SEALED PROPOSALS will be received at the Office of the New Orleans, Jackson and Great Northern Railroad Company, in the city of New Orleans, until the 30th of November next, for the grading, masonry, piling and bridging of that part of their road from Lake Maurepas, to the line of the State of Mississippi, a distance of 51 miles.

Also, for the masonry required on the first 36 miles of road from the city of New Orleans to the Lake, at the South Pass Manchac.

The first 9 miles of the section to the State Line, is through the Lake swamp, and includes the piling and bridging (with one draw) of the South and North Passes, the remainder is through a healthy fine country, which, with the contemplated lettings of the remaining 100 miles to Jackson, Mississippi, render this work well worthy the attention of Northern Contractors.

Payments will be made in cash, with 20 per cent retained until the completion and acceptance of the work.

Satisfactory evidence of ability will be required with the proposals.

Plans and profiles will be ready for examination ten days before the letting.

JAMES CLARK, Chief Engineer.
New Orleans, October 16th, 1852.

Railroad Iron.

400 TONS of best English Railway Iron, 57 lbs. per lineal yard, in port and to arrive.
For sale by
DAVIS, BROOKS & CO.,
28 Beaver street.
November 1, 1852. 1t

Railroad Iron.

1500 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Railroad Iron.

1600 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 3S

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sheet Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

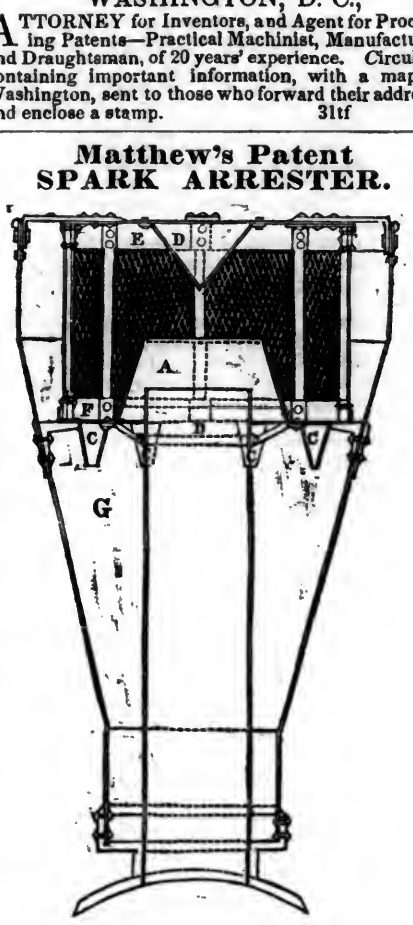
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:
1st. The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MI. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respecttully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state,that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

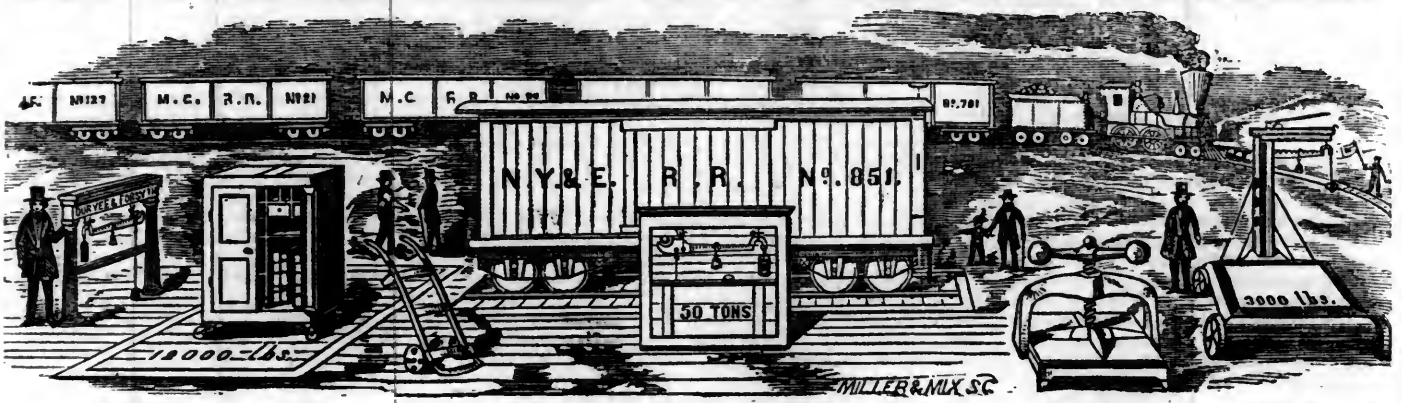
NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity. and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852 -6m*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practical mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as '*Durable and Accurate*' as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.	Michigan Southern, American Express Co.,

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 48] SATURDAY, NOVEMBER 27, 1852 [WHOLE No. 867, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

London Correspondence.....753
Commercial Cities of the Seaboard.....754
Railroads in Ohio.....758
Comparative Speed of R. R. in the U. S.....758
Baltimore and Ohio Railroad.....759
Fencing Railways.....760
Railway Car Trimmings.....760
Northeastern Railroad, S. C.....760
Chicago and Rock Island Railroad.....760
Louisville and Covington Railroad.....761
Stock and Money Market.....761
Houston and Texas Railroad.....762
Scioto and Hocking Valley Railroad.....763
Journal of Railroad Law.....763
Albany and Susquehanna Railroad.....763

American Railroad Journal.

Saturday, November 27, 1852.

No. 21 TOKENHOUSE YARD, LONDON, *November* 1, 1852.

Dear Sir: In reply to your enquiry respecting the late, the present and the probable future price of iron and other articles, which have risen so much in this country, I beg to state as follows, viz:

Pig iron, free on board in Cardiff and Newport—the great shipping ports in Wales for this article, is now at.....£3 7 6 per ton.
The price in April last before any advance took place, was..... 2 5 0 "
Welch merchant bar iron, free on board is now at..... 7 2 6 "
In April, before any advance, it was at..... 4 5 0 "
Railway bar iron was in April, before any advance..... 4 5 0 "
Now it is very firm for cash free on board*..... 7 15 0 "

In London, the price of bar iron is usually £1 per ton higher than in the shipping ports of Wales, to pay the expenses of freight, insurance and other charges. The iron from Staffordshire and other Midland counties being of better quality for many purposes, though, not for rails, is usually £1 per ton higher than Welch merchant bar iron.

In Glasgow, which is the great market for Scotch pig iron, the price in May last, before any advance took place, was.....£1 16 0 per ton.
The present price of this article is 3 0 0 "

This article being smelted with *hot* blast, is very fluid and easily melted, and is considered too tender and too frangible for heavy castings, but when intended for light castings it answers perfectly well, and, when mingled with the tough pig iron of Wales and other parts of England and the United States, it does very well for strong castings. The production of Glasgow pig iron is got up to the enormous amount of 700,000 tons since 30 years.—About 1820 the production did not exceed 25,000 or 30,000 tons. Before the advance in railway bars, in April last, the Welch iron masters were glad to take American railway bonds in payment for rails—they took a great deal of trash—and I fear will regret it hereafter, but since the great advance in price nothing but cash, no matter how respectable the railway bonds may be, will be now taken, and some of the sellers require a deposit of £1 or £1,-10 per ton at the time of taking the order. There is a wonderful change. In the first 4 months of this year it was a great favor to *get* an order for rails, *now* it is a great favor to accept one. The iron masters lately so eager for orders, are now indifferent, and most exacting in their terms of payment, delivery and other conditions. "You enquire the cause of the great advance in iron. There are several causes. 1st, The late low price continued for several years has stimulated consumption. 2nd, The great abundance of the American Cotton crop, added to the very low price of food, and to the extraordinary influx of gold from California and Australia, have unitedly given an impetus to trade and enterprises of every description, which causes a most extraordinary demand for iron, which is the article latest in feeling any depression in trade, and always the first to feel the advantage of improvements in trade, and continues the longest to profit by the activity of general trade. This is naturally to be supposed, from the fact, that iron is the article most promotive of the civilization and progress of modern Nations, and is the most indispensable article after clothing and food. The objects for which the greatest consumption of iron has recently taken place are in ship building, house building and railways.

I am sorry to say that Great Britain has a decided advantage over France and the United States in the cheapness of iron and coal, which enables her to construct and navigate steamers, principally screw propellers, with an economy that will throw our two nations into the shade, unless we in America can improve our manufacture of iron so as to bring it down to nearly the same level in price as in England. As evidence of the increase of iron in ship building, I will mention one or two facts. In April last I was offered ship (iron) plates at £6,-10 per ton. To-day, the same article cannot be bought under £10,5 per ton. In the Clyde (say at Dumbarton, Greenock, and Glasgow,) there were 247 steamers built in the last 7 years, of which only 14 were of *wood hulls*, whilst 233 were of iron hulls. Out of the 247 there were 141 *side wheel* steamers, and 106 screw propellers. The tonnage of wooden was 18,331 tons; of the iron steamers it was 129,273 tons. The above facts related to the time up to the 31st December, 1851, but since the 1st of January, 1852, there were 73 steamers built or now building in the Clyde, of which only 4 are of wood, and 69 are of iron, whilst the proportion of screws to *side wheel* steamers is as 43 to 30. Wooden hulls irrespective of cost of engines, boilers and machinery, and of all furnishings which are the same for both wood and iron, cost £14 per ton. Iron hulls, as above, cost £12 per ton. The port of Sunderland launched 87 vessels, of 33,765 tons, in the last six months, most of which were *iron hulls*, whilst New York launched only 33 vessels, of 22,245 tons, and probably not one of them was of iron. This fact will tell against American navigation before long. *Iron hulls* are much lighter, and consequently more buoyant and draw less water, they are more capacious, more strong, more durable as well as less in first cost. Lately there is a mode of preparing the iron adopted, which prevents barnacles and sea weeds from growing to the bottoms of *iron hulls*.—This greatest of difficulties in regard to iron ships being overcome, there is no question that iron (in England) will supersede timber ships, and I dread the supremacy it will give England over America.*

Next, as regards the consumption of iron in the construction of houses. The use of girders, columns, posts, of cast iron, and of iron window sills and frames, stairs, railings, etc., and of iron for other

* This article, rails, cannot be bought under £8 per ton to day, for cash, against bill of lading, and the manufacturers talk of its getting up to £10 per ton, before a great while.—November 5, 1852.

* I know timber ships can be built cheaper in America than timber ships can be built in England, but still the very great superiority of iron ships over timber ships will give them a preference.

parts of houses, as well as corrugated iron for roofs, etc., is becoming very general. Indeed, in large buildings of every description iron is almost superseding wood, being preferred on account of its lightness, durability and non-combustible nature.

But the grand consumption of iron is for railways.

In Great Britain, besides the rails required for new roads, it is estimated that at least 400 tons *per diem* are required to replace the old rails which are taken up and superseded by much heavier rails.—The original rails on the Liverpool and Manchester railway were of 40 lbs. per yard, now they are about 90 lbs. per yard, and all the rails now being laid down will be upwards of 85 lbs. per yard, and on towards 112 lbs. per yard, and even 149 lbs. per yard for saddle rail, as a maximum. Instead of wooden sleepers and cross-ties, those of iron are substituted. In the United States for the 2,500 miles of railway building the present year, at 200 tons per mile, there ought to be an export of 500,000 tons of rails, to say nothing of the iron required for locomotives, tenders, wheels, axles, and other parts which is generally made in the United States. From Russia a single order, viz: for the St. Petersburgh and Warsaw railway, for 153,000 tons, has been given out. Of this quantity 140,000 tons will be of rails, and 13,000 tons of chairs, spikes, etc.—For Germany, Italy, Spain, Denmark, Sweden, Norway, Russia, Hindostan, Chili, Peru and Brazil, the orders for rails as well as locomotives, tenders and all other furniture for railways, must be executed in this country, and the demand for iron from these countries has increased wonderfully within 6 months, and likely to be very much extended.—With these facts before us, I may say there is no prospect of an early decline in the price of iron, but on the contrary, a further advance is expected.—Besides, wages are advancing and workmen are diminishing. No less than 6,000 of the best iron men of Monmouth and Glamorganshires, left for America and Australia in the last 12 months. The best workmen—the most sober—the most industrious—the most enterprising are generally the emigrants, and their fellow workmen contribute the means to their going abroad, with the view of diminishing the competition in the labor markets, and when down in the Welch iron region the other day, I was told that laborers and great numbers of good iron workmen were wanted, but could not be procured. There is always a great evil attending high wages—they are the means of diminishing production instead of increasing it. Having the ability to indulge in the national vice of intemperance, to a greater degree, when wages are high the workmen instead of devoting only Sunday and "St. Monday" to drinking and dissipation, now add Tuesday and sometimes Wednesday to their holidays. The greatest production of iron is when wages are low and demand good and steady. Then the workmen can only indulge in drinking on Sunday and Monday, and many of them not even the latter day, and of course they produce more work, have better health, and everything goes on more respectably. The only reason for expecting a diminution in the price of iron, is the present high price, and its probable advance, which invariably, in time, checks consumption in the same way as cheapness always stimulates consumption.

You enquire about the quality of the iron sent to America, the Americans neglect the best article, and for cheapness send for an inferior quality.—The English always buy the best article for themselves—our countrymen generally do the reverse. But the rails made for America in Wales, though not considered good enough for English railways, are generally speaking very tough, difficult to be broken, and are good enough, but every individual rail ought to be inspected before it goes on board of ship. The American iron masters make good rails, because they generally use Charcoal iron, and the American railway companies could get the best rails here, if they would only pay for them. The make of iron (pigs) in Great Britain, in 1852, will be about 3¼ millions of tons. I hope in the United States it will get up this year to 500,000 tons of pigs, and next year that it will be as high as it ever was—say 700,000 tons of pigs.

You enquire of other articles that have risen in price in England. There are several articles which have advanced exceedingly. An American article, turpentine, has advanced £9 per ton, within a few months. Oil, tallow, rice, timber, lead—all American articles have advanced very much. I am sorry to see that lead, which was formerly an export from our country, has been sent into the United States from England and Spain in large quantities. This is owing to the lead miners of the north west having gone off to the "gold diggins" of California. Copper, an interesting article for America because of the Lake Superior copper mines, claims more notice, copper has advanced from £88 per ton in April last, to £105 per ton to-day. The consumption is increasing exceedingly. Every narrow guage (4 feet 8½ inch) railway locomotive ought to have nearly 5 tons of copper and brass about it.—Every broad guage (7 feet) railway locomotive ought to have fully 5 tons of copper and brass about it. There are about 4,000 locomotives in Europe and the United States, and they are all daily and constantly consuming copper by burning out fire boxes, etc. So in all the steam engines and steamers, the consumption of copper and brass is very great. On board of the "Prince Albert" (Government propeller) of 120 guns, the consumption of copper and brass ought to be at least 100 tons; for her propeller ought to be made of copper. The use of copper and brass for machinery for the textile fabrics, as well as for engineering purposes is very great, and immensely increasing. A great reduction in price would increase the consumption amazingly.

You enquire the cause of the advance in price of the other articles as well as iron. I think the same reason may be given as I have stated above, viz: The general prosperity of the country arising from cotton, food and clothing, being in great abundance.

You enquire also if wages have risen generally. I reply yes, and throughout all branches of business and all parts of the country,* even down to that hitherto almost hopeless being, the agricultural laborer. Emigration to America, Cape of Good Hope and Australia, is the principal cause for this advance—a blessed thing for the workmen and poor laborers if they would only be guided by the precepts of Father Mathew.

You enquire lastly "at what price for British iron would it be better for the manufacturers of the article in the United States to prepare it for themselves." In reply, I say that American iron is every way superior as a general rule, to British iron, because it is usually made with charcoal fuel, (and latterly, but partially with anthracite,) instead of coke of bituminous coal, and besides the ores used in America are generally better than the British ores, and for merchant bars and the higher qualities of iron, and especially for steel, I should say that if English common iron can be sold in the United States at $40 per ton, that for general purposes American consumers ought to pay $60 per ton in preference for American iron. I repeat that my remark applies particularly to the best sorts of iron, and not to railroad iron, for I believe the well made—the properly made—Welch rails—are as good for railroads as they need be, and it would be an extravagance to have rails made of the best American charcoal iron. The Americans ought to prevent the Swedes and Russians from sending their charcoal iron to our country—by making the same qualities as come from these distant countries, (paying excessively high freights and mercantile charges, as well as duty, and as regards Russia on inland transportation of iron from Siberia to St. Petersburg, of from 2,000 to 3,000 versts) so cheaply as to discourage importations of charcoal iron, all of which ought to be made within our own territories, which have far superior facilities and all the elements for the iron manufacture over both Sweden and Russia, but particularly the latter.—The United States ought to make the best iron in the world, and so cheaply as to exclude foreign importations. But my country, I am sorry to say, cannot yet compete with Great Britain in making *common iron as cheaply as she can*, and as the requirements of civilization and progress (particularly as connected with railways) demand. Railroad iron ought in America to be as cheap as possible, and then the American iron master will have an unlimited demand for his charcoal iron. The American iron master ought to say "*let there be no duty on English rails.*"

AN AMERICAN.

* The North British Advertiser, a great advertising paper of Edinburgh, had last week, advertisements for 80 situations vacant, whilst there were only 7 persons advertising for situations. This was never heard of before!

The Commercial Cities of the Seaboard.

Cities are congregations of men drawn together artificially—dependent for existence upon the existence of others without the city. They have been denominated sores upon the body politic; yet they perform great uses. They return value received to the country for its supplies. Being dependent upon circumstances, cities cannot be built and go on prosperously for many years without favorable locations. They demand situations contiguous to fine agricultural regions; if commercial cities, they must have water facilities for harbors of shelter, for the erection of docks and warehouses, for manufacturing purposes, and for the free use of the inhabitants. Fuel must also be found in abundance at a convenient distance, from whence it may be transported at will to supply all varieties of demand, and at trifling cost. That the food necessary to support life may find easy transport from the rural districts, channels of communication, which will afford cheap and rapid transit from country to city, are highly important. In short, as it is upon the interior of the country that commercial cities must look for the traffic which sustains them, an easy communication with it is indispensable to their prosperity. For it is obvious that cities must be built up either by commerce or manufactures, or both combined. The word commerce is here used in its most comprehensive sense, and combines all kinds of sale, exchange, trade and transport. The city, then, which has the best communications with the great heart of the country upon which it must rely for customers in these branches of business, and which, besides, possesses great

natural facilities in the way of harbors and oceanic communications, must get the best of the race for commercial greatness.

In the *Journal* of last week, there appeared an article giving some account of the inland commerce of the great interior country lying between the Rocky and Allegheny ridges, and its routes to the seaboard, together with some general statements of the amount and value of the "total movement" on some of the more important internal channels. It is the object of this article to follow up the effects of this internal trade upon the cities of the seaboard, to define in some measure the relative importance of the interior to the coast, and to look a little to the future and its requirements, in order that a continuance of past success may be secured. It may be said, and with a great deal of plausibility, perhaps, that the future will take care of itself; that the more freely trade and commerce are allowed to flow, the better it will be for all parties in the end; that each place and country will find its appropriate sphere and level, sooner or later, and therefore it were better left untrammelled and free—without training or speculation. Notwithstanding all this, however, we desire to examine a little into the past of our commercial cities, tracing their progress to the present, and discover if possible whether the results are the effects of a natural and free course of trade, or whether they may be partly attributed to the influences emanating from artificial channels constructed through the efforts and at the instance of farseeing and enlightened, though prudent, statesmen and capitalists.

Our principal commercial cities on the seaboard are New York, Boston, Philadelphia and Baltimore. These *have been* the great commercial centres of the past in this country. New Orleans and Mobile on the Gulf of Mexico, Savannah and Charleston on the Atlantic, and Montreal and Quebec on the St. Lawrence, will all deal largely with the futurity of commerce, as they have no slight effect upon its present. All the cities mentioned share largely in natural advantages. They have harbor facilities equal to their wants present and prospective. All are surrounded with lands, rich in soils, minerals and whilom forests. They are integral portions of a country in which popular institutions prevail; in which the voice of the people rules: where civil and religious liberty, and a protection of life and property are guaranteed to every inhabitant. The lands, rich in everything which attracts the eye and admiration of the agriculturist, have always been offered the purchaser at a mere nominal rate. It is not strange that with all these natural and political advantages, our country should have attracted from the old world a large population, which has assisted to develop the resources of the country, build up towns, cities and villages, and encourage both foreign and internal commerce more rapidly than ever before in any other nation. Labor was here promised a better reward than it received in Europe. Earth was cheap, and its products could at least sustain life, which was more than could always be done there. If, therefore, the United States had not grown as rapidly as they have done under all the circumstances, it would have been more cause for wonder than is their present prosperity and greatness. Her cities on the Atlantic, Boston, New York, Philadelphia and Baltimore, could scarcely have avoided becoming great, even had their efforts been exerted to such an end.

These four cities are nearly as old as the country in which they are situated. They were all among the first settlements of the colonies, and have continued steadily to advance in population and wealth from the period of their commencement to the present time. Each is situated upon a bay or river capable of furnishing anchorage for the fleets of the world, and all have more or less of natural channels of communication with the surrounding country. How have they grown, and why some more rapidly than others, is a natural question. It will be found that those have grown most rapidly which have had the best internal communication with the greatest extent of inland country.

For the present we will take them in point of population only from 1800 to 1850.

A writer in *Hunt's Merchants' Magazine*, J. W. Scott, Esq., of Toledo, Ohio, assumes that the population of these cities and their suburbs in 1800 and 1850 was as follows:

	1800.	1850.
New York	63,000	650,000
Philadelphia	73,000	450,000
Boston	38,000	42,000
Baltimore	26,614	190,000

This would show an average period of duplication for New York of 14¼ years; for Philadelphia of 20 years; Boston 23 years; and for Baltimore of 21 years.

The same writer gives the following average periods of duplication during a series of census embracing a period of 60 years previous to 1850.:

	Average for last 60 years.	last 50 do.	last 40 do.	last 30 do.	last 20 do.	last 10 do.
New York	15	14¼	15	13	15	12
Philadelphia	18	20	18¼	16	17	12½
Boston	21	23	18½	15	20	12
Baltimore	15	21	21	25	10	13¼

By these figures it will appear that although N. York still leads the rest and far exceeds any one of them in numbers, yet, Boston which, twenty years since was the farthest in the rear, in point of her period of duplication, has now arrived to an equality. During the ten years previous to 1840, we find her period of duplication twenty years, while during the ten years succeeding that time it is shown to have been but twelve. New York, therefore reduced her period of duplication in the ten years Preceding 1850 only three years, Philadelphia four and one half, Boston eight, and Baltimore five and one half. There must have been causes for these reductions during that particular period, as distinguished from previous periods in the first place, and in the second there must have been causes for the differences of reduction at the several points. It is also a matter of interest to ascertain what these causes were; whether they were local or general, results of natural influences, or the results of combined organizations of men, formed to divert the business which supports a city population from one point to another by the powers of attraction most conducive to those ends.

We have already seen that the requisites to the rapid and healthy growth of a commercial and manufacturing city are cheap food, cheap rent, cheap fuel, cheap timber, and a good harbor and anchorage of great capacity. These involve, among other things, easy and rapid communication with a large, well wooded, well watered and fertile country, which shall supply the food and lumber, the same communication with coal beds which shall furnish the fuel. Now, how are our four Atlantic cities situated in these respects?—Similarly or variously. They all have good and capacious harbors, but, considering all things, perhaps New York has the most attractive one, on account of its perfect safety, immense capacity, and great depth of water, united with its immediate connection with the ocean at a distance of only a few miles from her dock. Boston is probably next in these respects, while both Philadelphia and Baltimore, besides being farther south are situated on deep inlets or bays and rivers whose outlets to the ocean and by which sea-going craft must enter, are many miles farther south than the respective cities. This, it will be seen, causes a vessel bound to northern or commercial Europe, first, to sail considerably south of its starting point to get outside when it must retrace its steps, its destination being several degrees to the northward. In these latter days of steam and electricity, of clipper ships and caloric engines, time is an important item. In point of connection with the inland country, New York and Philadelphia not only had the best natural communications with the most extended tracts, but also the best artificial, till the actual commencement of the railroad era, when Boston led all the rest, as has been seen, in the developements of the last ten years. The Hudson and Mohawk were to New York what the Delaware was to Philadelphia and the Susquehanna to Baltimore, and the Merrimack in some measure to Boston. Besides these principal ones were smaller streams making other districts of country tributary to each of these cities. Previous to the construction of canals, it is most probable that Philadelphia had more internal navigation tributary to her commerce than New York even. Below we give a table showing the census of the four cities as far back as we have the figures at hand.

Years	City and Co. of New York.	City & Co. of Philadelphia.	Boston.	Baltimore.
1790	33,131	54,391	18,038	13,503
1800	60,489	81,009	24,297	26,515
1810	96,373	111,210	35,250	46,455
1820	123,706	137,097	43,298	62,738
1830	203,007	188,961	61,392	80,625
1840	312,710	258,037	98,383	102,313
1850	517,849	409,045	138,788	189,038

We had partially prepared tables to follow this, showing the foreign imports at the several ports, during the same periods of ten years, but owing to lack of the requisite data to fill them out properly, we are obliged to omit them as well as others exhibiting the value of real and personal property in the several cities at different dates. These tables, however, are not absolutely necessary to our purpose. They would only serve to show the changes in foreign import commerce. After the opening of the Erie canal, the foreign imports at New York advanced rapidly, while those of Philadelphia remained nearly stationary, fluctuating from year to year as in other portions of the country.

In reference to the table of population, let us remark, that the city and county of New York comprises Manhattan Island only; while the business of the city has built up Brooklyn, Williamsburgh, Jersey City, Hoboken, and numerous villas on Staten Island, besides contributing largely to the population of Newark, Elizabethtown, Rahway, Paterson and New Brunswick, in New Jersey, Jamaica, Bushwick, and Flushing, Long Island, Morisania, New Rochelle, and numerous other villages in the States of New York, New Jersey and Connecticut. These places being accessible by railways and steamers in a few minutes or hours, they are selected as cheaper residences by business men and laborers than can be found within the limits of the city. The same may apply to the

suburbs of Boston, and partially to Philadelphia, though the latter city and county comprises very nearly all her inhabitants. At this date, therefore, the number of people, properly inhabitants of New York and suburbs, who obtain a livelihood from the business of that great commercial centre, is not less than 800,000; of Philadelphia 550,000; of Boston 265,000; and of Baltimore 228,000. It has been urged that there were discrepancies in the census of 1850, because New York did not poll as many votes in proportion to its population, as Philadelphia, Boston and Baltimore. The statistics of emigration and naturalization account for these discrepancies satisfactorily. When it is considered that New York has a very large foreign population not intending to become citizens, their residence being merely a business one; that three-fourths to seven-eighths of all the vast emigration into the entire country land there and remain for a longer or shorter period; and finally that thousands are naturalized every year, who have had a preparatory residence previous, this idea becomes extinct.

It will also be observed in reference to this table, that from the National census of 1790 to that of 1830, Philadelphia had exceeded New York in numbers. It had also done so for many years previous to 1790. The amount of the foreign commerce of Philadelphia in those early days both before and after the Revolution, was greater than that of New York. She had by natural channels access to a greater extent of country. She was settled by a class of English, more enterprising than the Dutch settlers of New York. These facts told on her prosperity more rapidly than on New York till 1825, when the completion of the Erie canal opened to the latter city the immense forest country bordering the canal and lakes. From this moment, New York grew more rapidly; she had been gaining some since 1790, but it was not till this roadway for transportation was opened, that she made rapid strides ahead. This channel gave her the key ts the great west, and she at once became the distributor of the foreign commerce to the west. Philadelphia could go to the Alleghanies—she could not go through or over them with heavy goods. New York could go around them and thus send merchandise to, and receive the products from, the vallies of the Hudson, Mohawk, Black, Genesee, and even the Alleghany. The genius of CLINTON triumphed.—But it is very questionable whether New York would have obtained the ascendancy, even, with her superior oceanic connection, had not nature favored her vastly to the prejudice of her rival.—Even now, it was not that Philadelphia grew the less, but New York the more rapidly; not a diversion, so much as an accession, of trade.

In regard to foreign importations. allow us to remark, that in 1823 the importations to Philadelphia were $13,696,000; in 1836, $16,116,000; in 1839, $14,753,000; and in 1847, $12,145,000. New York importations though fluctuating with the general imports of the country have greatly inereased, till finally she has become the great entrepot of the whole country, the new inland country we mean, known as the St. Lawrence Basin and Mississippi Valley. The importations of Boston and Baltimore have kept pace with the wants of the surrounding country, Boston having threaded a great portion of New England with railways, imports goods to supply the increased trade developed by them. Baltimore imports the staple goods for her inland trade, but fancy goods of which she requires a smaller quantity, though a full assortment she finds it cheaper to import through New York; or which is still better, purchase in that market, of importers in quantities and styles to suit. So, in some measure, of Philadelphia, Charleston, Savannah, Mobile and New Orleans. Thus we see that for some years New York has enjoyed almost a monopoly of the foreign import trade. With the export trade, however, it is not so much the case. This she has had to divide with all the above named ports, and with Quebec and Montreal also. This brings us to the railway era—say 1850 and 1851. Let us see if we can discover what is to be the effect of this new mode of travel and transportation on the great commercial cities of the seaboard.

It cannot be said that a thorough system of railways had been constructed, penetrating the west by an organized combination of continuous lines so as to affect the trade and population of the cities of the seaboard at all till after 1840, and none of them very perceptibly except Boston until after 1850. Boston, unquestionably, led all other American cities in railway enterprizes. Necessity, with her, was the mother of invention. She wanted an interest in the trade of the west to supply cheap food for her manufactories. She constructed railways to every agricultural portion of New England. She had a line of sailing packets from Albany to bring her flour, provisions and grain. She wanted more speedy transit—more reliable receipts. She constructed the Western railroad, and thereby enjoyed both land and water carriage. At Albany she connected with the New York canals. What was the consequence? Why, she gained five years on New York's period of duplication from 1840 to 1850 and placed herself on the same average ratio of duplication with New York. This was the result of adding to water facilities the system of railways. What was New York doing? Comparatively nothing. She had no finished railways except one or two to Philadelphia. She demanded more speedy means of communication with every portion of the adjacent country. She had suffered the enlargement of the canal to be stopped in 1842, apparently for the very purpose of encouraging Boston to build the Ogdensburg or Northern road.

That road stood ready to take its proportion of the surplus western trade which the New York canals could not transact more cheaply than other routes. The St. Lawrence canals were also ready to take the balance which could be taken neither by the canals of New York or the Erie railroad. Hence the increase of trade by the St. Lawrence. It was thought better by New York politicians to make the enlargement a political question, and on its appeal to the sectional prejudices of the people living at a distance from it, than to make it a question above all partics and decide it upon its merits; and New York city decided to cut her own throat by blocking the enlargement. Well, it was all right for her to be magnanimous. She could afford it. Boston was thankful and showed her gratitude by immediately placing herself in the course of the succeeding eight years upon the same ratio of duplication with New York. Since the census of 1850, Boston has opened her railway connections to Ogdensburg and Montreal, tapping the lake trade at both places; and she can carry flour cheaper from the upper lakes by either of these routes to Boston, than it can be done by the New York canals, time and insurance being considered. But, if the canals had been enlarged, the difference of cost would have been more than one half in their favor.

Their capacity would have been increased more than three fold by the enlargement. Steam could have been used for a propelling power making an addition of at least one hundted per cent to the capacity of every ton. Both of these would have reduced the cost of transportation on a barrel of flour from Buffalo to New York to 25 cents. It is clear to see that no railway route could compete with such a channel. The time required to make the trip with a steam propulsion of say six miles the hour, would be at most four days, whereas it now requires ten and a half. Boats of double the tonnage of the present class could navigate the enlarged canal. However, it seems the fortunes of men are of more account than the interest of the State. The question of enlargement is one of cost of transportation. It is argued by some that the Erie canal can do all that is to be done—that its tonnage increases year after year. Admit it: what then. If New York can, by enlarging her canals, do the present business for half the present cost, and obtain all the surplus, or rather increase as it accrues, and do that cheaper than any or all the other routes, is it not manifestly for the interest of the State, as well as city, to do it? Be this as it may, the people of either city or state seem in no particular hurry to secure that end. Since the census of 1850, New York has also opened the New York and Erie route to Lake Erie; or at least it has commenced actual operations since that date. Two or three cross routes have also been opened from the Erie to the Central lines, and to Buffalo. The Hudson River and Harlem have been opened, together with northern and western roads, which, combined, give New York no less than ten different connections by railway with the northern route. They are as follows: one at Dunkirk, four at Buffalo, one at Niagara Falls, one at Oswego, one at Watertown or Cape Vincent, one at Ogdensburgh, and one at Montreal. From these points, traversing a portion of the distance separate routes, they reach New York by only four termini. At the commencement of 1850, New York had no continuous line of railway to the lakes, except via the New Haven and Housatonic lines, while Boston had enjoyed such a connection some four or five years. Now, New York has as many connections with the west as Boston, though the latter holds more stock and influence in *finished* western roads than the former, and thereby can influence some business, which might otherwise prefer a New York market. Both have now continuous lines to Cincinnati, Cleveland, and Sandusky, Ohio. Before the 1st of January, 1853, their connections will be formed with Chicago, and thence by two other lines with the great heart of Illinois. The effect of these connections, and others in rapid progress, upon these cities, cannot be foretold with accuracy.

Philadelphia has opened canals and railways to her mineral regions, and one state work has by railway and canal combined, climbed the Alleghanies and opened communication with the Ohio. These mountains, however, seem to divide the state into two parts; the commerce of the western flowing toward the Ohio and the lakes, and of the eastern toward the seaboard. The former finds its depot at Pittsburg and the latter at Philadelphia. But the state east of the Alleghany ridge possesses enough of mineral and agricultral wealth to constitute Philadelphia the greatest manufacturing city in the world. She has iron and coal to her hand in untold quantities. She has also all the lumber required, and what produce she cannot raise, she can easily procure from other states which are less fortunate in mineral wealth. Philadelphia has ad-

vantages in regard to cheap fuel for manufacturing purposes which her northern compeers can never have. For instance, coal is an article which can be transported from Pennsylvanian mines to Philadelphia cheaper by railway than by water, and it is the only article of heavy weight, except perhaps, stone and ores possibly, of which this is true. Cars may be laden at the mines, and without transhipment or handling be dumped in a city yard. They may be laden by machinery and unladen in a moment by dumping. As handling is the principal expense put on coal as well as all other minerals; this is an important item. New York and Boston cannot avail themselves of this saving. They must use water carriage, unload their craft by handling, and cart to yards, or otherwise establish dock-yards, which might be still more expensive. Besides this, the coal must first be carted or carried from the mines to the landing. This explains why the Reading railway can carry more tonnage of coal than her rival canals.

As we have before remarked, this principle applies to nothing else than those heavy substances which are quarried, and are handled in bulk instead of in packages; and besides which do not require transhipments if sent by railway, till arrival at destination.

We demonstrated last week to our own satisfaction, that for the transportation of bulky products, or merchandize over long distances, railways cannot compete with water carriage. It is only necessary now, therefore, to state this general reason, why the products of the west can never go east by railway, while water routes exist. Besides, being a more expensive mode of transportation to start with, a continuous line of railway between the west and east must necessarily be owned by several different companies, which will involve a great number of transhipments and cartages from one depot to another. It will be urged that they will have their depots together, their tracks of the same width and allow their cars to run "through." We have never seen this tried with success, but we believe in progress, and it may yet be accomplished. Heretofore, cars have become mixed up, or huddled together at one extreme end of the route, while at the other end they sometimes have no cars at all, at others none of their own; and again, have never been able to recover their own property during the whole season; so the whole thing ended in the breaking up of the entire arrangement. Numerous transhipments from car to car add greatly to the expense, and injure the order of the property. In order to partake largely of the commerce of the west, therefore, Philadelphia must tunnel her mountains for a spacious canal. The grades of her railways are too heavy to admit of even a comparatively large freighting being done over the mountains upon them. We incline to the opinion that Philadelphia will soon turn her attention to the full development of her iron interests, and cease striving after a commerce between which and her, nature has interposed so many barriers.

For becoming the most noted, and largest manufactory of the best quality of iron at the cheapest rates, when durability is considered, in this or any other country, we believe Philadelphia has advantages and facilities unsurpassed in the known world. In the improvement of these advantages and the full development of these resources, lies her truest and surest road to wealth. There is no other place in the explored world where water-power, iron, coal and wood, are so intimately associated with the finest agricultural regions as in Pennsylvania. We believe the mills now established in that State are capable of paying present rates for labor, and then turn out a rail at prices, which *in the end* will be found vastly cheaper than English rails at prices now asked in London. If this be so, is it not the best thing Pennsylvania can do to oraganize iron companies? is it not the best thing counties or towns in which mines are situated can do to lend their credit to such companies? and thus assist in the development of resources which contain their lasting wealth? would not such business be as legitimate as lending bonds and making subscriptions to railroad enterprizes. An immense effort should be made by Philadelphia and all Pennsylvania, in favor of their iron interests *now*, while prices are so high; so as to get them fairly before the public and have the merit of their iron tested before prices recede again. Such an effort properly started and harmoniously sustained and carried forward, could hardly fail of success.

New York, Boston, in short all the United States, are deeply interested in its success. England even now cannot supply our demands for iron, in addition to those of her other customers, and soon our vessels, houses, and nearly all our fences, must be made of iron. Pennsylvania has the means for furnishing that material cheaper than any other State, and to her first must they look to supply their wants. Other States may have plenty of iron ore, but they must have coal to smelt and work it, and this they can get no where else cheaper or of better quality than in Pennsylvania. In all these things Philadelphia as the great city of capital, most deeply interested, must take the lead. The influence and necessary action on the part of the State and National Governments, for the encouragement of such projects, cannot be secured till she throws her whole weight into the scale. The successful management of her iron interests are of more value to her than thousands of mints, for the mere stamping of coin. Labor bestowed on the former creates wealth; the latter only its representative.

Baltimore is very similar in its situation to Philadelphia, both with regard to its outlet to the ocean and its connections with the country west of the mountains. It is eminently a manufacturing city, and like all such when eligibly situated, it is growing rapidly. It will soon have a railway to the Ohio completed. Another railway connection with Lake Erie, via Sunbury and Erie is anticipated, by which Baltimore as well as Philadelphia is expected to profit. The important trade of Baltimore, however, has been with Maryland and Virginia east of the mountains. It has been to this trade that she has been indebted for her rapid growth—she has supplied this section of country with merchandize and manufactures in return for its tobacco and cotton. But Baltimore has a railway connection with the mines of iron and coal in Pennsylvania, and avails herself of it to the great benefit of her manufactures. Though she must continue for all time the great seaport town of Maryland and Northern Virginia, it is hardly reasonable to suppose that her foreign trade will increase very rapidly for reasons given heretofore. As a manufacturing city, however, she has the facilities for ranking next to Philadelphia in works of iron.

Upon the whole then we must conclude, that of the four Atlantic cities, New York has the natural endowments for becoming, and maintaining her position, as the leviathan of foreign commerce. That as a commercial city, Boston ranks next to her, Philadelphia third, and Baltimore fourth. In manufactures, Philadelphia has the means at her command to make her the mistress of the world; Baltimore may ably second her; while New York and Boston will both always be large manufacturers, either within their limits or in the suburbs. In this respect, we might say now that nearly all the cities of New England are suburbs of Boston; built by her capital, and manufacturing for her market. Now the question arises: Will these cities make use of the means we find in their hands for these several destinies? Will New York play her cards so as to maintain her commercial supremacy, or will she throw up her hand just at the most critical juncture in her existence? Will Philadelphia devote herself to her mines, or continue to strive for something really of less value to her, and from which nature has, seemingly, purposely debarred her? These are questions full of moment for the cities themselves to answer.

New York has her most formidible rivals for the vast increase which is annually accruing in the trade of the west, in Montreal, Quebec, Portland and Boston. The local business of the southern lines of railway terminating at Philadelphia, Baltimore, Charleston and Savannah, will give them nearly all they can do without diverting the western trade.

The excellent system of Canadian canals, however, opening the sea to lake craft, so that they may load at Chicago and discharge at Liverpool, is another matter. A line of screw steamers will shortly be put on between northern Europe and Portland during the winter months, and Quebec or Montreal during the summer. The Portland and Montreal railway will be used as a connecting link between the Canadian cities and the seaboard in the winter. But suppose lake craft do not choose to go to sea, but tranship at Quebec, they have only one transhipment, and an advantage in distance as follows: From Quebec to Liverpool via Cape Race is 2,863 miles, from Halifax to Liverpool via Cape Race is 2,466 miles, from Boston by same route it is 2,824 miles, and from New York it is 3,013 miles. With a line of good sea-going steamers from Quebec, and this difference in her favor in distance, how long will it take her to pick up from the annual increase of business which the New York canals cannot transact with as much facility and cheapness as it can be done by the St. Lawrence route on account of their limited dimensions, sufficient to sustain it triumphantly; and having obtained a foot-hold on the trade, to what extent might it not make reprisals. The St. Lawrence is a route of great capacity. The following shows the total movement of the St. Lawrence canals for a series of years:

	1848.	1849.	1850.	1851.
Tons...	164,267	213,153	288,103	450,400

This only shows the property which passes the locks below Ogdensburgh, and is supposed to be a fair representation of the business going to Montreal and Quebec from the lakes. Here is shown a percentage of increase never equalled by the New York canals in their palmiest days. Considering the many mites which all the various routes may be able to divert, unless some method is soon adopted to cheapen transportation on the New York canals, it would not be at all surprising to see New York increase in commerce less rapidly than for sometime past, while her less favored compeers by superior enterprise and energy, raise their ratio of increase to an equality with hers.

But if, by enlarging her canals, she reduces the cost of transportation from the lakes to the sea-

board fifty per cent, we shall see an entirely different state of things. Even the St. Lawrence route could not compete with her in such an event. The following statement will show the exports of a few of the principle articles of food to foreign ports from the first of January last till about the first of November prox., during the years 1851 and 1852:

		New York.		Philadelphia.		Baltimore.		Boston.		New Orleans.	
		1851.	1852.	1851.	1852.	1851.	1852.	1851.	1852.	1851.	1852.
Flour, bbls	1,025,108	1,136,305	223,303	287,541	326,627	420,962	129,686	190,530	235,901	189,524	
Pork, bbls	39,027	34,946	5,097	4,748	22,527	6,117	12,723	12,542	14,617	6,861	
Bacon, hhds	4,067	2,121	867	954	472	223	1,958	3,536	1,870	731	
Lard, kegs	111,282	87,001	55,353	26,280	11,147	11,305	67,549	32,238	149,650	235,918	
Cheese, boxes	133,043	31,517	4,059	8,906	4,652	4,135	7,120	9,954	.....	.....	

After all, it is not the foreign trade that creates the wealth of our cities. We trade with foreigners with our surplus, and procure luxuries and comforts in return, but for our sustenance we exchange among each other the fruits of our labors. A manufacturing city is therefore far more independent of foreign powers than a commercial one.

Such are some of the statements of facts in relation to the situation, progress and facilities of our Atlantic cities, and our views of their prospects and destinies. The views are entirely our own, and the *Journal* is in no way responsible for them.

N.

Ohio.

Cleveland, Columbus and Cincinnati Railroad.—The receipts for October 1852..... $95,990 96
" " " 1851..... 66,029 10

Increase..... $29,961 86

or about 46 per cent.

Sandusky and Mansfield Railroad.—The receipts for October 1852..... $37,255 35
" " 1851..... 27,890 33

Increase..... $9,365 02

Lake Shore Road.

The track has been completed between Erie and Cleveland. Cincinnati is, therefore, now in complete railroad communication with New York.

Table of Comparative Speed on the principal Railroads of the United States.

(THE SPEED BEING THAT OF THE SWIFTEST TRAINS.)

	LENGTH MILES.	TIME H. M.	SPEED P. H. MILES.
Albany and Buffalo route	328	10 15	32 00
Androscoggin and Kennebec	82	3 30	23 43
Atlantic and St. Lawrence	122	6 00	20 33
Baltimore and Susquehanna	82	4 30	18 22
Baltimore and Ohio	282	13 45	20 51
Boston, Concord & Montreal	71	2 50	25 00
Boston and Maine	74	3 00	24 66
Boston and Providence	43	1 15	30 44
Boston and Worcester	45	1 25	31 77
Buffalo, Corning and N. Y.	45	2 15	20 00
Buffalo and N. York City	60	2 00	20 00
Buffalo and State line	69	3 20	20 72
Camden and Amboy	62	2 15	20 65
Canandaigua and Elmira	67	2 30	26 80
Central Georgia	191	9 15	27 55
Central Ohio	59	3 30	16 86
Champlain and St. Lawrence	47	2 30	18 80
Cheshire	64	2 30	25 60
Cin. Cleve. and Columbus	135	5 45	23 48
Cin., Hamilton and Dayton	60	2 30	24 00
Cincinnati and Hillsboro'	60	3 35	16 74
Cleveland and Pittsburg	100	5 05	19 97
Columbia and Philadelphia	82	4 15	19 29
Concord	35	1 10	29 99
Connecticut River	50	2 00	25 00
Conn. and Passumpsic R.	61	2 15	27 11
Dayton and Greenville	35	2 00	17 50
Eastern	54	2 30	21 60
East Tenn. and Georgia	82	4 00	20 50
Erie	469	17 00	27 59
Fall River	42	1 25	29 66
Fitchburg	50	1 40	30 12
Fitchburg and Worcester	26	1 00	26 00
Galena & Chicago Union	92	5 20	17 26
Georgia	171	10 30	16 28
Greenville and Columbia	94	6 00	15 66
Harlem	130	6 10	21 07
Housatonic	110	5 15	20 95
Hudson River	144	4 05	35 59
Hudson and Berkshire	34	1 40	20 36
Jeffersonville	51	4 00	12 75
Kennebec and Portland	60	2 50	21 20
Lackawana and Western	50	2 00	25 00
Little Miami	65	2 55	22 33
Long Island	95	4 30	21 11
Louisville and Frankfort	65	3 40	17 46
Macon and Western	101	5 15	19 24
Madison and Indianapolis	86	4 15	20 23
Mad River and L. Erie	158	9 30	16 63
Michigan Central	278	11 05	25 27
Mich. South. and Nor. Ind.	247	12 00	20 58
Milwaukee and Miss.	43	2 00	21 50
Montgomery and West Point	88	6 30	13 54
Morris and Essex	44	2 38	18 48
Nashville and Chattanooga	77	3 50	20 10
Naugatuck	62	2 55	21 26
New Albany and Salem	65	3 30	18 56
New Hampshire Central	26	1 15	20 80
New Haven and N. London	50	2 10	23 15
New Jersey	87	4 00	21 75
New Jersey Central	78	4 00	19 50
New York and N. Haven	76	3 00	25 33
N. Haven and Northampton	45	2 10	20 79
New Haven, Hartford and Springfield	62	1 55	32 34
New London and Palmer	66	3 00	22 00
Norfolk County	35	1 30	23 33
Northern New Hampshire	69	2 50	24 34
Norwich and Worcester	66	2 22	27 89
Northern (Ogdensburg)	118	4 20	27 22
Ohio and Pennsylvania	134	7 30	17 86
Old Colony	37	1 45	21 15
Oswego and Syracuse	35	1 45	20 00
Peru and Indianapolis	22	1 45	12 59
Petersburg	64	3 30	18 28
Philadelphia and Reading	93	3 45	24 80
Phila. Wilmington and Balt.	98	4 00	24 50
Portland, Saco and Portsmouth	51	2 15	22 26
Portsmouth and Concord	47	2 00	23 50
Providence and Worcester	43	1 50	23 46
Providence, Hart. and Fishkill	50	2 45	18 18
Rensellaer and Saratoga	32	1 05	19 63
Richmond, Fred. and Potomac	75	5 20	14 07
Richmond and Danville	65	3 30	18 57
Richmond and Petersburg	22	1 45	12 59
Roch., Lockport and Niagara Falls	76	2 37	29 05
Rutland and Burlington	120	4 15	28 02
Rutland and Washington	62	1 55	32 34
Sandusky, Mans. & Newark	117	6 30	18 00
Sangamon and Morgan	54	6 00	9 00
Saratoga and Schenectady	22	45	29 33
Saratoga and Washington	52	1 55	27 23
Schenectady and Troy	20	50	24 00
Seaboard and Roanoke	80	3 30	22 86
South Carolina	137	5 30	24 72
South Western	50	4 00	12 50
Stonington	50	2 00	25 00
St. Lawrence and Atlantic	96	4 30	21 33
Sullivan	25	1 00	25 00
Terre Haute and Richmond	73	4 25	16 60
Vermont Central	162	5 50	27 74
Vermont and Massachusetts	56	2 25	23 17
Vermont Valley	24	55	26 18
Virginia Central	104	7 10	14 51
Vicksburg, Brand. and Jackson	60	3 45	16 00
Washington Branch	38	1 40	22 72
Watertown and Rome	97	4 25	21 94
Western	200	7 30	26 66
Western Vermont	52	1 40	31 26
Western and Atlantic	140	10 00	14 00
Wilmington and Weldon	162	10 30	15 42
Wilmington and Manchester	44	2 45	16 00
Winchester and Potomac	32	2 00	16 00
Worcester and Nashua	45	1 52	24 06

NOTE.—In the compilation of the above table, the time set down is that spent by trains moving along the whole length of the road, and includes all the stoppages on the routes. The absolute running time would of course be less; but to give tables founded on such, would not exhibit the speed of through travel, which is that most interesting to the travelling public, and that which the compiler of the table has intended should be done.

The above table is taken from the "*American Railway Guide*," a work favorably known and eagerly prized by travellers, and, next to a current bill, the only passport required for a comfortable journey by railroad in all directions through the United States. We have examined many ingenious contrivances designed to acquaint forgetful passengers of their whereabouts; but the best reminder we know of for this purpose is the last edition of the Guide.

Iron Bridges.

We announced last week that the new iron bridge across the Nashua river, near the Jackson company's Mills, was open to travel. The bridge was built by M. M. White, Esq., New York Iron Bridge company—whose business office is at No. 39 Wall street, Jauncey Court. The plan is that invented and patented by Col. Long of the Topographical Engineers. One of the bridges of Mr. White's construction received the prize medal at the World's Fair, where he had one on exhibition, fifty feet in length, adapted to railroad travel. The clear span of this bridge is 140 feet, and the entire length 150. The width is 19 feet clear of roadway, and a sidewalk upon each side 6 feet wide. The entire weight of iron is about 40 tons, all of which is wrought excepting the upper stringers, and the upright posts, upon which there is no strain, but only resistance of pressure. The braces, (which alone sustain the weight, and every one of which has been tested with the weight of 12 tons to the inch,) and the lower stringers are of wrought iron. Mathematically calculated, the bridge is capable of sustaining 100 tons equally distributed, or 50 tons in the centre. To guard against contraction and expansion by cold and heat, the bridge is set upon the masonry with a space of two or three inches at each end, to allow for expansion. Then the stringers at each end rest in four iron shoes, upon a piece of India rubber like that used for railroad car springs, half an inch thick. This, by its elasticity, allows the free play of the stringer, whatever may be the occasion, whether from ordinary travel, or expansion and contraction, without the possibility of springing out laterally, and so weakening

the structure. The whole work being of iron and acted upon uniformly, it is apparent that there can be no difficulty from this cause.

Of the elegance of the bridge, we spoke briefly last week. At an elevation of 22 feet above the bed of the river, its slight and graceful arch, with its light, gossamer-like appearance, compared with the bridges which we are in the habit of seeing, presents a most pleasing effect.

With regard to the quality of these bridges, they have been fully tested elsewhere. Upon the Harlem railroad, in New York, there is one which was built in 1847, over which there is a double track, and some 60 trains pass over it every day—sometimes the weight upon one side and sometimes upon the other, and sometimes trains meet upon it—and yet with this severe trial, it has never cost the corporation anything to keep it in repair, excepting to paint it. Another one built at Buffalo in 1849, of 160 feet span, has been equally successful.—Many other bridges have been built since then, the experiments with which abundantly demontrate their ability to stand under everything that can be brought upon them in the legitimate way of business, whether for railroads or high roads. There is also a bridge upon the Nashua and Lowell railroad, at Middlesex village, which has been in use several years.—*Nashua Telegraph.*

Baltimore and Ohio Railroad.

In little over a month this work will be completed to the Ohio, and in anticipation of this event, the board of directors have adopted a rate of tolls to go in operation when the road is opened to Wheeling. A special meeting of the directors was held on the 13th inst, and the following remarks made by the President, Mr. Swann, on the occasion, were ordered by the board to be published.—The subject is one exciting much interest among the mercantile community of Baltimore, and the views of Mr. Swann will be regarded attentively by the railroad class in the other eastern cities.

Mr. Swann said that before the final vote was taken, he deemed it due to himself, as well as the committee with whom he had acted in the preparation of the important details upon which the board were called upon to vote, to submit one or two remarks.

The subject was one of the utmost gravity. It was not surprising to him that it should have excited a deep interest in this community. Communications had appeared in the daily papers of this city, under anonymous signatures, well calculated to mislead those who had no means of knowing the facts and policy on which the committee had acted in the graduation of the toll sheet which had been submitted. He had been pained to find that in one of these a most ungenerous attack of a personal character had been made upon one of the members of this board.

All this, the President said, he sincerely regretted. If a desire prevailed in any quarter to influence the action of this board, the mode which had been resorted to, it seemed to him, was the least likely to accomplish the object.

If there were those who desired to modify the existing rates of the tariff, by the submission of facts not in the possession of the company, why not make their appeals directly to this board? Was it necessary to go into the papers for the purpose of exciting prejudice and inflaming the public mind?

The President said that he valued the good sense and intelligence of the mercantile classes of the city of Baltimore too highly to believe that they would countenance any such attempt to take the management of this road out of the hands of those to whom it had been entrusted. Suppose the board should decide to refer the whole subject of the tariff to those who are now finding fault with the report of the committee, could they hope to satisfy all?—Some had claimed that the rates upon third class articles should be reduced as low as 20 cents. Not a few had assumed that the existing rate on coal should be taken as the prevailing standard. What sort of a toll sheet would this board be able to adopt? What would become of the millions of stock represented in this road? Were not the great interests to whom it owed its existence entitled to *some* consideration?

But it seemed to be entirely overlooked, said the President, that this was a *new road*, just about to be opened to the public. It had been pressed forward with a rapidity that must in the nature of things subject it to many drawbacks for some time to come. Six weeks might elapse after its opening before they could dispense with the heavy grade at the Pettibone tunnel. Did gentlemen know the expense of working a road in such a condition?

Would it not be the height of imprudence, with these facts staring them in the face, for the board to put down their tolls to a limit which might entail upon them in the very outset the most serious consequences? Admitting that the road, when in a proper condition for business, could work at one-half the rates which have been recommended, would gentlemen take the responsibility of incurring the risk of such an experiment? For himself he had been surprised to see gentlemen taking up this tariff as a mere abstract question, without any reference whatever to the condition of the road.

The President said that the committee had been laboriously engaged, for some time past, in making up the details of this important tariff. He was willing to take his full share of the responsibility. He believed it to be for the present a good tariff; and if official documents were to be relied upon, it placed the city of Baltimore upon a better footing than any other city on the seaboard. The committee had no object in view but the protection of *all* the great interests entrusted to their charge, and he should be degrading the honorable gentlemen who composed it, if he undertook to defend them against charges or insinuations of personal bias in the discharge of their responsible duties.

The President said that the committee understood the interest of the city of Baltimore as well as the road. They had not acted without due consideration, and a minute comparison of the rates charged upon other roads which were likely hereafter to come into direct competition with their own for the trade of the West.

They had carefully examined the toll sheet of the New York and Erie, and Central Pennsylvania roads; and they had freely conferred with those in whose judgment they were authorized to repose confidence, in graduating the various classes and rates of toll, which would be found inserted in the toll sheet submitted to the board.

The President said that he had been entirely aware that in the discharge of the duty assigned them, they would encounter the opposition of some who in their eagerness to force down rates, might overlook the fact that they were not at liberty, apart from the condition of the road, wholly to disregard their obligations to the State, the city and the stockholders, to whose generous aid the road was indebted for its existence and its ability to be useful hereafter.

The President said that whatever modifications might take place in the rates recommended by the committee, and he was ready to act whenever the experience and condition of the road would justify it, he was not one of those who would be the first to invite a deadly competition with rival works, by the adoption of mere nominal rates on this road.—He thought that the great trunk lines connecting with the West would commit a cardinal error if they adopted any such policy with a view to an exclusive monopoly at any one point. New York, Philadelphia, and Baltimore had all their local advantages. A deadly warfare of this sort could be attended with no other result than injury to these great lines. He sincerely believed that there was trade enough and more than enough for them all. He had never been the advocate of high charges on railroads. He believed that the Baltimore and Ohio railroad could maintain as low a tariff as any other road; and he was satisfied that the road had nothing to fear from rivalry. He would, however, claim a fair remuneration in the graduation of his toll sheet for those who had built the road. This he deemed to be no more than just and reasonable.

The tariff which had been recommended by the committee gave to the Baltimore market an advantage, both as to trade and travel, over any other point on the seaboard. This has been the leading object of the committee. If it did not he was willing to satisfy the mercantile classes on this point as soon as the condition of the road would justify it. He would be sorry to see any portion of the trade of the west, which we might reasonably expect to control going to any other city. Taking Cincinnati as the starting point, *the through rates* which could be made with this road, upon the basis of the present tariff, would be lower than those of any other road.

In making this assertion, the president said he was justified by the official data on which the committee had acted.

If in some of the exhibits made to the public, it was urged that by certain combinations, with canals, lakes, etc. etc., the rates charged showed an occasional advantage over those which had been recommended, it would be borne in mind that this road was not making a toll-sheet to compete *directly* with lines dissimilar in character; but with the roads which were parallel to, or immediately in contact with them, and *whose greater despatch and convenience* had heretofore enabled them to exercise a controlling influence.

In the adoption of the toll sheet submitted to the board, the committee had been compelled to move with caution, from what they knew to be the contingencies incident to all new roads. In many of its leading features the present tariff must be, to a considerable extent, *an experimental tariff.*

The working of the high grades west of Cumberland, the president said, is yet to be tested; and the general rates upon a new road for a few months after its opening, might be less advantageous than experience would justify the board in assuming at a latter period. To have prepared a tariff for this road, at the present time, without reference to these considerations, would have been unwise, and it might be highly prejudicial to the interests of the work.

The president said, in conclusion, that it was the intention and would be the duty of the board to make the facilities of the Baltimore and Ohio railroad such, in connection with her natural position, as to give the city of Baltimore an advantage over any other market. The committee claim to have done this in the tariff which they have recommended for their unfinished road; but if experience should prove hereafter that this was not the case, and that it would be necessary to make this advantage still more marked than it now is, this board, he was satisfied, would not be slow to unite in any line of policy which might be reasonably expected on the part of the mercantile community, provided they could do so, without violating their obligations to the great interests entrusted to their charge. He was the last man in this community to see any trade passing away from the city of Baltimore which *the road had the power to control.* He knew the facilities which this board would be able to offer, and it should never be said, so far as his influence extended, that the interests of the city of Baltimore had suffered in his hands. He trusted that he was sufficiently awake to promise this.

New Jersey.

Camden and Cape May Railroad.—The projected railroad from Camden to Cape May, N. J., is likely to become a reality. A meeting was held on Monday in Camden, for the purpose of considering the subject, and much interest was taken in the proceedings by all present. The attendance was quite large, and the greatest unanimity prevailed. After the meeting was organised, an able report on the construction and cost of the proposed road was read and ordered to be printed. This report, made by Gen. William Cook, Engineer, sets forth three distinct routes, each and all of which are practicable. The first is the shortest, and will pass through Woodbury, Glassboro' and Millville, a distance of 78 miles, with five miles of turnouts; and will cost $775,280. The second, by Glassboro and Carlburg, 85 miles, and the same distance of turnouts as the first, will cost $880,000. The third, by Salem, the largest town on the line, will be the most expensive—the estimated cost being $1,181,840. The engines, cars, locomotives, depots, tanks, stations on main routes, etc., will cost $120,000. From some interesting statistics given, there is every reason to suppose the road will pay, and be a profitable line. The meeting unanimously resolved to petition the Legislature of New Jersey for a charter for the road, and from the known

energy of those who take such an active part in the undertaking, there is every prospect of the road being begun at an early day.—*Philadelphia Com-Register.*

American Railroad Journal.

Saturday, November 27, 1852.

Fencing Railways.

It hardly seems that it should be necessary to *compel* corporations to fence in such valuable property as a good railway. Perhaps there is no sort of property more liable to damage, from exposure, damage always entailing heavy pecuniary losses—and yet, in this and Western States it is almost as rare to see a railway track enclosed by a good substantial fence, excluding both men and animals, as it is to find any body to blame when an accident occurs. How many engines is it necessary to ruin—how many cars to smash, engineers, firemen, brakemen and passengers to kill; or maim and pay for, to run up losses which, had the money been expended in that manner, would have furnished an elegant and durable enclosure. We think the statistics will show that more than three-fourths of the accidents resulting from trains running off the track; or from collisions are occasioned, either directly or indirectly, by obstructions getting upon the track which would be kept off by a fence. If this is so, it is clearly the dictate of good policy, in a pecuniary view, to fence in the railways. A train is usually impedded by some obstruction on the track, and thrown behind its time before a collision occurs. A good fence, therefore, and consistent watch, would do much to save life and property. And, if an eye to their own interests will not urge corporations into this step, why not get a legislative enactment to accomplish the object. Taking this policy would place railway companies on the defensive. If cattle got through the enclosure and caused damage, their owner would be liable to the company. If men got on the track and became disabled or killed, they could not be made to pay annuities or damages.—On the whole, is it not only practicable, but a highly proper policy?

Railway Car Trimmings.

America is deservedly noted for the magnificence and luxury of her travelling conveniences. The saloons of her steamers, the drawing rooms of her hotels, and the interior of her railway cars, are the subject of the highest commendation by travellers from all parts of the world. Other countries may boast of more magnificent private residences, which are furnished in a more luxurious and attractive style; but when the comfort of the traveller is concerned, the Americans exceed all others in the gratification of every reasonable wish—and it pays too. Americans, and strangers in America, will travel by the best conveyance, the most popular, the most magnificent, the most expensive, the most comfortable.

DOREMUS & NIXON, No. 21 Park Place, as will be seen by their advertisement, are offering a style of head linings for cars, of a variety of patterns, unsurpassed in beauty and durability by any in the market. Also, Paris Cotton Felt, for stuffing cushions, which is said to be superior to hair, and free from vermin, while it does not cost as much by one-half. These are patented articles, and D. & N. are sole agents. Car makers and omnibus builders are invited to examine their stock before purchising elsewhere.

South Carolina.

Northeastern Railroad.—The reports of the president and chief engineer of this road to the board of directors, shows the necessity of its construction to the commercial importance of Charleston, and the developement of the northeastern section of South Carolina.

The report of the president, D. L. McKay, presents the following details of the road and its objects. The line surveyed, commences at the South Carolina railroad, near Charleston, thence running by the straightest course to a point on the Santee canal, crossing the Santee river near Maltessee lake, passing within a mile of Kingstree in Williamsburgh district, and thence by a straight line to the terminus on the Wilmington and Manchester railroad, two miles east of James' Station on the land granted to the company. The length of the road is 103 miles, and the estimated cost, including depots and equipments ready for operation $1,240,337.

The importance of the Northeastern railroad to Charleston, demands prompt action. At every point she is threatened with diversion of her trade and travel, which, unless counteracted by this, the only means within her power, must prove disastrous in the extreme. The Wilmington and Manchester road will soon be completed, when the boat line to Wilmington will discontinued. The Metropolitan mail will then be transferred to the Wilmington and Manchester road, pass from Wilmington, via Branchville to Augusta; leaving Charleston out of the great national mail route, and carrying with it the valuable and inseparable attendant—the travel. From that moment Charleston ceases to be the thoroughfare between the north and south, and becomes a mere way-mail station. It may not be amiss here to refer to the road from Pensacola to Brunswick, in Georgia—a work which has suddenly risen to our view, and is destined to control the whole southern seaboard travel, the course of which being through Savannah, will pass thence, by the railroad to Augusta, (now nearly completed) where the traveller will meet the continuous line of railroad, via Branchville to Wilmington—leaving Charleston entirely out of his route. But I proceed to considerations of a more direct and immediate concern. The Cheraw and Darlington road which is designed to connect Cheraw and its tributaries in North and South Carolina with the seaboard, will very soon be commenced, having its terminus at the Darlington depot, on the Wilmington and Manchester road—the distance from which to Wilmington is 110 miles, with grades of fifteen feet and less to the mile. While from the same point to Charleston, via the Camden, Columbia and Hamburg road, is 165 miles, with some grades as high as 30 feet. It follows then, obviously, that the trade of the Pee Dee section of the state must be lost to Charleston; for it could not bear the charges and delays of this circuitous transportation. That 40,000 bales of cotton, at least, and every thing else that the country may produce, will go to Wilmington, while, for the same reason, the comparative cheapness of transportation, Wilmington will furnish all their supplies. To the argument that the bar off the Cape Fear is an insuperable obstacle to the advancement of Wilmington, and that she never can interfere with the trade of Charleston, we reply—that altho' large vessels cannot enter the river, the passage is perfectly safe, as is well known, for vessels of sufficient burthen to make her a formidable rival in many branches of commerce.

The value of the real and personal estate interested in its construction, is estimated at 90 millions of dollars.

The aggregate population at 210,400 and both increasing rapidly,

The number of bales of cotton produced, is 78,000.

The number of barrels of naval stores may fairly be estimated at 100,000.

The following is the estimate of income:

The average number of passengers daily on the South Carolina railroad	370
Georgia road	304
Central Road, Ga.	127
Raleigh and Wilmington road	167
We therefore conclude that we shall have 100 daily, at an average of $2 each, equal to	$73,000
Sixty thousand bales of cotton at $1	60,000
Naval stores	20,000
Up freights	50,000
The mails	12,000
Total gross receipts	$213,000
Deduct current expenses, rated at 47 per cent	100,000
	$113,000

The benefits of the road to the section of country traversed by the Cheraw and Darlington road will, it is stated in the report, depend much on the two roads terminating at the same point on the Wilmington and Manchester, thus securing a choice of markets without an additional charge for freight, or the trouble and expense of unlading and relading.

We learn the following details from the report of the chief engineer, T. Pinckney Huger Esq.

Average grubbing, grading, trestling and cross-ties per mile, $2535—103 miles	$261,104
Crossing Santee river and swamp	130,000
103 miles of iron and chairs	473,182
Laying down rails	36 050
Twelve wood and water stations	18,000
Station at upper terminus	4,000
Outfit, including 8 locomotives, 8 passenger, 8 mail and baggage, 50 platform cars for cotton, and 50 box cars for dry goods, etc.	138,000
Depot in Charleston	150,000
Engineering and salaries	30,000
	$1,240,337

Average cost per mile $12,042.

The chief engineer strongly insists, as an indispensable element in the stability and endurance of the rails, that their quality should be unexceptionable. The following remarks are to the point.

The generality of iron used on our roads, is of a very inferior quality, and it matters not how heavy or of what pattern your rail may be, if the iron is of bad quality, the expense of repairs to road and machinery will be correspondingly great. The English iron as ordinarily imported by our merchants, is frequently very inferior; and it is impossible to detect its inferiority by its appearance; but on being used its defects are seen. In giving orders for iron, especial particularity in regard to quality is necessary. I have heard great complaints made against the English iron, and that of American manufacture preferred.

Illinois.

Chicago and Rock Island Railroad.—The Chicago and Rock Island railroad is completed from Chicago to Joliet, and commenced operations on the 18th. At Joliet the cars connect with the morning and evening line of packets to La Salle and Peru, also with various lines of stages to Dixon, Peoria, Rock Island, etc., etc., and with the river boats at St. Louis. By the 1st of January the road will be open to La Salle, the head of navigation on the Illinois river, and to Rock Island by the first of July. Should this be accomplished, it will be one of the greatest achievements in railroad construction on record—180 miles in 18 months! Mr. Addison B. Gilmore, the former efficient agent of the New Haven road, and who was connected with it from the commencement, is now the superintendent of the Chicago road.

Peoria and Oquawka Railroad.—This road is progressing favorably. Some hundred hands are employed on the eastern and western divisions. A contract has been made for a large amount of railroad iron at low prices, and the president, Judge Mason, of Burlington, Iowa, expects to have the road in running order from opposite Burlington to Galesburg, where it will interseet the Military

Tract Central road sometime during 1853. About twenty-five miles of the eastern end of the Peoria and Oquawka road will be completed next year.

Illinois.

Naples and Decatur Railroad.—The Morgan (Ill.) Journal states that in seven months of the last year, during which almost the entire business of this road for the year was done, the net profits were $29,000, It is stated that the Illinois Central railroad company have bought this road with its privileges, and intend this fall to replace the flat with the T rail, a large amount of which is now on its way from Chicago.

Chicago Dry Dock.

The dry dock of the city of Chicago is just completed. It was commenced in July last and was built under the supervision of Francis Jordan, Esq., at a cost of $25,000. It is 306 feet in length, fifty-six feet wide at the top, and 37 at the bottom. It can be filled in two hours and three quarters, and emptied in three quarters of an hour. The size is sufficiently large to accommodate the largest class propellers and sailing vessels. The water on the blocks stands at about eight and a half feet.

New Iron Project.

It is stated that Shoenberger, the oldest iron maker in Pennsylvania, Rhey, Matthews, and Co., of Pittsburg, and a number of enterprising capitalists in New York, Boston, and Philadelphia, are organizing a company, with $1,000,000 capital, to embark very extensively in the manufacture of iron rails at Johnstown, Cambria county, Pa.

Maryland.

Mount Savage Railroad.—The Mt. Savage Iron company have an efficient force engaged in making the necessary excavations and embankments for laying alongside of their present railroad another track, from Cumberland to the western end of the "Narrows," where this railroad is intersected by that of the Cumberland Coal and Iron Co.

Kentucky.

Louisville and Covington Railroad.—The board have unanimously elected P. S. Bush, Esq., of Covington, a director, to fill a vacancy, and Isham Henderson was at the same time elected president for the ensuing year. The board stand pledged thoroughly to survey *all* routes between the termini by disinterested engineers, and to publish the plans, profiles, and reports for general distribution.

Mississippi.

Mississippi Central Railroad.—Holmes county, Mississippi, by an almost unanimous vote has approved of a subscription of $200,000 to this important work.

Not less than one and a half million of dollars has already been subscribed, and assurances, of a reliable character given, that half a million more will soon be realized.

Missouri.

St. Louis and Iron Mountain Railroad.—There was a meeting of the corporators of this road on the 4th inst. at St. Louis. Books are to be opened for subscription on the 22nd inst. The Intelligencer says:—The charter of this road is a valuable one. It not only extends to the building of a road to the Iron Mountain, but the privilege is given to extend to any point in the south or south-western portions of the state. Thus it may be extended to Cape Girardeau, or to the borders of Arkansas on the south-west. The charter is a liberal one, and we look upon the franchise as very valuable.

Kentucky.

Lexington and Frankfort Railroad.—The earnings of the Lexington and Frankfort railroad for the six months ending Oct. 31st, were $40,276 74, an increase of about 11 per cent over the corresponding period in 1851.

Michigan.

Detroit, Monroe, and Toledo Railroad.—Parties are now engaged in the location of this road, preparatory to the commencement of the work as soon as possible after the meeting of the Legislature of Michigan, and the passage of a law under which the road can be built.

Stock and Money Market.

Money continuss in great abundance. and speculation in stocks has reached a high pitch. Our tables show a large advance upon the prices of last week. The speculative feeling which exists, though to be regretted, indicates plethora in the money market, favorable to our railroad projects, that are seeking to borrow money. There never was a time in which the wants of our companies have been supplied more liberally.

The principal public sale during the week has been of the bonds of the city of Rochester, issued to the Genesee Valley railroad. The amount offered was $100,000, for which there were bids to the amount of $455,000, averaging from 100 to 104¼.—The loan was taken at a range of 102 16-100 to 104¼.

Several new Banks have been started within the last few days, giving a slight addition to our banking capital. Though we may have none too much capital for the proper transaction of business, the tendency of such accessions is to farther speculation.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, NOVEMBER 27, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102¼
U. S. 6's, 1856	110½
U. S. 6's, 1862	115½
U. S. 6's, 1862—coupon	116
U. S. 6's, 1867	119½
U. S. 6's, 1868	120¼
U. S. 6's, 1868—coupon	120½
Indiana 5's	101½
Indiana 2½	61½
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	97
Illinois 6's, 1847	83½
Illinois 6's—interest	55
Kentucky 6's, 1871	111½
Maryland 6's	108½
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	116
New York 6's, 1864-'65	120
New York 6's, 1 y., 1866	122
New York 5½'s, 1860-'61	114
New York 5½'s, 1865	112
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	106½
Ohio 6's, 1860	111½
Ohio 6's, 1870	116½
Ohio 6's, 1875	117
Ohio 5's, 1865	105
Ohio 7's, 1851	105½
Pennsylvania 5's	98½
Pennsylvania 6's, 1847,-'53	91
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	109
Virginia 6's, 1886	112

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	104
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	103
New York 7's, 1857	108
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	103½
New York 5's, 1890	106
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	109½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	100
Erie convertible bonds, 7's, 1871	109½
Hudson River 1st mort., 7's, 1869	108
Hudson River 2d mort., 7's, 1860	103½
New York and New Haven 7's, 1861	106
Reading 6's, 1870	92½
Reading mortgage, 6's, 1860	99½
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	122
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	106
Ohio Central 7's, 1861	96½

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Nov. 25.	Nov. 18.
Albany and Schenectady	114½	112
Boston and Maine	107½	107½
Boston and Lowell	109	109
Boston and Worcester	105	105
Boston and Providence	89½	89½
Baltimore and Ohio	93½	91½
Baltimore and Susquehanna	30½	30
Cleveland and Columbus	127	127½
Columbus and Xenia	—	—
Camden and Amboy	150	—
Delaware and Hudson canal)	128	130
Eastern	98½	98
Erie	95	91
Fall River	—	—
Fitchburgh	104½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	73½	73½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	79	76½
Little Miami	—	—
Long Island	46	40
Mad River	—	99
Madison and Indianapolis	108½	110½
Michigan Central	114	111½
Michigan Southern	133½	128
New York and New Haven	115	115
New Jersey	131	130
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53	52½
Ogdensburgh	27½	26½
Pennsylvania	48	46½
Philadelphia, Wilm'gton & Balt.	37	37
Petersburg	—	—
Richmond and Fredericksburg	105	97½
Richmond and Petersburg	35	35
Reading	100½	101½
Rochester and Syracuse	126½	124½
Stonington	57½	56
South Carolina	—	122½
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	143½	142
Vermont Central	17½	17
Vermont and Massachusetts	19½	22½
Virginia Central	—	40
Western	105½	104½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

Texas.

Houston and Austin Railroad.—The people of Texas seem awake to the importance of developing by the only practicable means, that of internal improvements, the vast and fertile domain, they possess. An association has been formed having for its object the construction of a road from the city of Houston to that of Austin. The first step they propose, is to urge the completion of a line from Houston to the Brazos river. The association appointed a committee for the purpose of examining into the route and what means can be obtained for the accomplishment of the work. The report presented by the committee is sufficiently encouraging. The cost of construction is shown to be extremely light. The entire distance from Houston to the Brazos is 53 miles, this distance according to the report is almost graded by the hand of Nature.

For the first 27 miles the prairie is nearly a perfect level, the differences in general altitude not averaging twelve inches to the mile and so general as to be entirely imperceptible to the eye. In the next 16 miles, it is estimated that the ascending grade, which is also gradual, will average a little over three feet to the mile, and in the remaining 10 miles, the descending grade is the same. The highest point of elevation, near the property of Mrs. Stevenson, is about 50 feet above the lower prairie, attained by a gradual ascent for 16 miles, from which the road again gradually descends about 30 feet to the level of the banks of the Brazos, at the rate before stated, of about three feet to the mile.

The cost of grading and preparing the road bed to receive the superstructure will not exceed $6000 per mile, or $30,800 for the whole road. The bridges and culverts must be constructed of wood until the road is completed, and stone can be transported thereon.

The cost of these is estimated as follows: Bridge across Big Cypress $5,000; bridge across Little Cypress $2,000; across Willow creek $3,000; temporary bridges across the ravines $5,000. The cost of cross-ties, chairs, spikes, etc., $113,473, or $2,141 per mile.

The following is the gross estimate:

Earth work	$30,800
Bridges and Culverts	15,000
Iron rails	199,280
Cros-ties, chairs, spikes and laying of track	113,472
Depots	15,000
3 Locomotives and tenders	25,000
3 Passenger cars	6,000
20 freight do.	6,000
10 Cattle do.	3,500
Machine shop and machinery	10,000
Engineering and agencies	10,000
Total	$464,053

It must be remarked that in the above estimate, the rails are estimated at a cost of $40 per ton, the cost of that item must be increased so as to meet the present prices of that article. The estimated cost of the New Orleans and Opelousas road is $10,000 per mile, and the report states that the Texas route is far better adapted to the construction of roads than the Opelousas. The Texas road passes over no lagoon, river, lake nor swamp, and over no creeks or ravines of consequence.

The business operations of the road at the time of its probable completion, about the 1st of January, 1854, are approximately stated from the following data. The cotton received at Houston of last years crop, which was fully one third short, was 23,000 bales, an average crop would have reached 32,666, of which one half or 16,333 would have passed over the whole length of the road, while an amount of 16,500 bales which went down the rivers Brazos and Colorado, and to Port Lavaca by wagons, must be added, making an aggregate of nearly 33,000 bales. It is supposed that half the cotton shipped from the Gulf ports of Texas is tributary to this road, and the estimated shipment for the coming year is set down at 125,000 bales. Taking 50,000 bales to be transported at $1 per bale it would yield $50,000, being from 100 to 200 per cent lower than the present prices of transportation.

The amount of merchandize paying wharfage at Houson last year ending 1st July last, was 150,000 barrels, allowing the articles free of wharfage to equal the consumption of the city, this would amount to 10,000 wagon loads averaging $40 per load, or $400,000 paid for outward freight from the city. The revenue of the road if built, from this source, is estimated for last year, at $66,000, and at the ratio of increase as exhibited by the wharfmasters returns, would be for the year 1854 $130,000. The committee have set it down at $100,000.

The pine lumber used in Washington and Austin counties, for building, is now hauled at an expense of from $15 to $30 per thousand. It is estimated that the demand in 1854 in the neighborhood of the Brazos at the upper terminus of the road will reach 7 million of feet. This at $5 per thousand would yield $35,000.

The transportation of corn, oats, potatoes, hides and other agricultural products of the upper counties is set down at $10,000. The way freights on merchandize, cotton and other articles is estimated at $50,000.

The present travel of passengers, exclusive of emigrants, is believed to reach 5,000 each way per annum, with an increase yearly of 25 per cent.—The committee assume that the present number will be quadrupled by the increased facilities and cheapness of travel consequent on the opening of the road. 20,000 passengers each way at $1 would be $20,000.

The European emigration to the State is estimated at 10,000 yearly—the receipts from this source is estimated at $10,000 for freight and passage.—The American emigration would not fall short of 20,000, which, at $1,50 each way is $30,000. The receipts for way passengers is estimated at $10,000. The mail service it is supposed will yield $15,000 per annum. The total gross revenue from all these sources amount to $320,000 per annum. The committee propose the following plan for obtaining the required capital:

"They believe that three hundred thousand dollars can be raised by subscription in Houston and parts of the country interested, payable in instalments, within 12 months after the 1st of January next. But suppose individual subscriptions should not exceed two hundred thousand dollars, they propose that the city of Houston subscribe to 200,000 dollars of the stock, and issue her bonds for the amount, payable in 15 years, with interest at the rate of 6 per cent. per annum, payable semi-annually at the city of New York. That the City Council provide in advance for the payment of the interest and the final redemption of the principal, thus:—pledge $12,000 per annum of the wharfage revenue, (now exceeding that sum, and annually absorbed in the construction and repair of the city's turnpike, on the route of the proposed railroad, and which will cease when this work is commenced,) to be set apart and remitted on 1st January, and 1st July, to meet the interest; let it also provide that the dividends on the stock be annually invested as a sinking fund in good State or Government stocks, and accumulate for the redemption of the principal and further authorize the railroad company to negotiate the bonds and pledge them to the purchasers as an additional security for the redemption of the principal and interest as aforesaid. With such a basis these bonds would be negotiable in New York, or any other market where money is abundant."

Ohio.

Scioto and Hocking Valley Railroad.—The completion of this road has now become a fixed fact. From Portsmouth, on the Ohio river, to Jackson, the track is prepared for the rails, and the cars are already running about one-third of the way. In a few days more it will reach a point where it will accommodate several iron furnaces, and carry down their product and bring up their supplies. When completed to Oak Hill, about 36 miles from Portsmouth, its tonnage will probably be—

Pig Iron, 10,000 tons, at $1 75	$17,500
Merchandise, and supplies for furnaces, 2500 tons, at $1 75	3,750
Coal, 40,000 tons, at 80c	32,000
Other articles of every kind	5,000
Passengers and mail	5,000
	$63,250

When completed to Jackson, of course these earnings will be materially increased. The distance from Portsmouth to Jackson is 45 miles.

From Jackson to Newark the distance will not materially vary from 90 miles. The whole country from Oak Hill to Newark, in point of fertility, is above the average in the State of Ohio. Though sparsely settled as yet, it is capable of sustaining a very dense population, and offers more inducements to the enterprising capitalist than any other part of the west.

In addition to a productive soil and healthy climate, its mineral resources are incalculable. For iron ore and bituminous coal, it will compare with the most favored country on the globe. Several of these coal beds are found to be 15 to 30 feet in thickness. The beds of ore from 8 inches to 7 feet in thickness. The line of road traverses the axis of this great mineral region, nearly 100 miles.

As to quality, I believe there is no better bituminous coal in the world than is to be found on the line of this road. In every large vein there is a portion entirely free from sulphur, with little bitumen, that burns freely and leaves but a small residuum, in a fine ash. This, it is supposed by those having experience, will answer in its raw state for smelting iron.

Large quantities of Cannel coal are found on this line, perfectly pure, which has been used for smelting iron, mixed with charcoal, with success.

To smelt with coal requires furnaces properly constructed, and when the structure is adapted to the use, the number of furnaces will be increased vastly. Probably 100 furnaces will be operated along or near the line of this road, producing 200,000 tons of pig iron annually.

Of course in a country so extensive, the quality of the ores differ in richness and kind of product; but a fair average of calcined ore, ready for the furnace, is not far from 60 per cent.

As to quantity, it may be said to be exhaustless. In 1837, Prof. Briggs, of the Geological corps, under authority of the State, examined this country, and in his report to the General Assembly of 1837, and 1838, (p. 93,) he says: "At a very low calculation of the amount of good iron ore in the region which has this season been explored, it is equal to a solid unbroken stratum, 60 miles in length, 6 miles in width, and 3 feet in thickness. A square mile of this layer being equivalent in round numbers to 3,000,000 cubic yards—when smelted will yield as many tons of pig iron. This number mul-

tiplied by the number of miles contained in the stratum, will give 1,080,000,000 tons, which from these counties alone, will yield annually for 2,700 years, 400,000 tons of iron, equal to the greatest amount made in England previous to the year 1829.

From this estimate, which it is believed is much too low, it appears that the iron ores of this portion of the State are sufficient to supply, not only all domestic demands for ages, but to form an important article of commerce with other States."

In 1838, when this country was examined by Prof. Briggs, a large portion of it was an unbroken wilderness. Now, thorough and more recent examinations of the country have not only confirmed the facts stated by him, but extended the iron region far beyond the limits mentioned by him, and developed veins or beds which to him were unknown.

The first iron furnace established in that region, was in 1826. Since when, in Ohio, Kentucky and Virginia, within 40 miles of the southern terminus of this road, nearly 60 furnaces have been erected, and are in operation.

The agricultural resources of Jackson, Hocking, Vinton and Perry counties, are of no mean character. Vinton is well adapted to grazing, and large herds of cattle are annually driven from this county. Wheat, corn and hay are abundant here, but remote as it is from any commercial facilities, they have no market to encourage these productions beyond the demand for home consumption.

This road is an extension of the Sandusky City and Newark railroad; and when the chain is complete, will be one of the most important commercial thoroughfares in the Union. North of Newark there is no mineral coal; and as the forests are rapidly disappearing, this fuel must come in to supply the demand of nearly one million of people. The south will probably require 250,000 tons of this coal, to used at Portsmouth, and along the course of the Ohio river, and even down to New Orleans. An equal quantity will be required to the north and northwest, for the supply of the country intermediate from the coal region, to the lakes, and for the towns and cities along the lake shores. The port of Huron, one of the lake termini of the Mansfield and Sandusky railroad, has remarkable facilities for transhipping coals and freights to vessels and boats navigating Lake Erie.

Within a very short time, the tonnage of iron produced along the line of this road will be immense. If the price of iron continues remunerative, within five years the quantity will probably approximate 100,000 tons. Add to this the agricultural products from the country south of Newark, and the traffic of this road will be swelled to an amount scarcely paralleled by any other road in America.

The passenger receipts will be no small element of its earnings. So large a traffic will bring a great number of persons with their property over the road; and a country so abundant in resources will soon have a large and active population drawn hither, who will transact their business along the line.

At Portsmouth the road connects with the Maysville and Big Sandy railroad, which will introduce it to the great system of southern railways leading to the Gulf of Mexico and to the southeastern Atlantic cities. The distance from New Orleans, by this line, to Lake Erie, will be shortened more than one hundred miles over any other line in contemplation. All this great chain of southern railways is now in progress. Some of the links are nearly completed, others under contract, and I believe every one is located and the means provided for construction, from Portsmouth to Mobile, New Orleans, Savannah, Charleston and Norfolk.

Such are the prospects of the Scioto and Hocking Valley railroad, and such the country it proposes to occupy. D.

Newark, Ohio, November 18, 1853.

Journal of Railroad Law.

THE TIME TABLE.

It has recently been decided in Englaud, by the County court of Hull, in the case of *Raikes vs. the York and North Midland Railway Co.*, that if a railway company, through negligence, fail to comply with the undertakings of their time table, they become liable to passengers for such damages as they may have incurred in consequence of their being delayed in reaching their points of destination.

A like decision has also recently been rendered in Scotland.

What would be the decision in case a railway company should fail to fulfil their undertaking, not from negligence, but from the *impossibility* of so do the train of another company sooner than any engine could enable them to do. In such a case, a railway company may be no less liable than in case of negligence, for a party should only promise to do what they can do.

The charge of the judge in the case first above mentioned, is in substance as follows:

"This is a complaint entered by Mr. Raikes to recover such damages as you may say he has sustained in consequence of the breach by the defending? As, for example, if they should promise to meet ants of a contract in which they engaged, as he says to take him from Hull to London; and I am of opinion such a contract was entered into; for I don't think that their liability ends at Milford. It is impossible to know what arrangements different railway companies may have entered into between themselves; you can only know by their acts. These defendants advertise that passengers can proceed by the train leaving Hull at 8 45 to London, arriving there at 3 20 P. M. It is for you to say whether Mr. Raikes by paying his money and receiving in return a piece of pasteboard, entered into contract, and therefore made it binding on the company that they should fulfil the terms of the offer in their advertisement, namely, to convey him and his son to London for £1 14s. 6d. He paid £1 14s. 6d. and received one and a half pieces of pasteboard, and you will have no difficulty in finding that that was a contract to carry him to London. But, I musi tell you, that if they had not put in that time bill, we could not have proved the extent of this contract, which is, that they will use their best endeavors to carry out what they have advertised; that is to say, that the contract shall not fail from any neglect or mismanagement on their part. I am of opinion that there was a contract between Mr. Raikes and the York and North Midland railway company to carry him to London by the train leaving Hull at 8 45 A. M. and reaching King's Cross station at 3 20 P. M. A variety of accidents might inevitably prevent the arrival of the train in London at the stipulated time. The true question is, whether or not the railway company have been guilty of negligence; therefore, it will be for you to say whether there is any evidence of negligence on their part."

The Judge then went over the evidence in order to see if there was any unnecessary delay in making stops. If no negligence on the part of the defendants should be discovered, he directed a verdict to be entered for defendants.

Verdict for plaintiff—for £5.

NEGLIGENCE.

The question as to what constitutes negligence is closely dependent upon the circumstances of each particular case.

In the case of *Hanny vs. New York and Erie R. R. Company.* The New York Superior court has recently again decided that where the carelessness and imprudence of the person injured by a collision on a railway, contributes to the injury, an action for damages cannot be sustained against the company. The plaintiff was driving at a rapid rate across the track of a railroad, and it appeared that near the point of intersection a high embankment between the railroad and highway rendered it impossible for a person on the highway to see the cars coming until he gets upon the track, and it was held that such rapid driving at such a place constitutes a degree of negligence that defeated any right of recovery for damages in consequence of collision.

The court also held that where there is no conflicting evidence on the question of negligence, or where the proofs are such as show beyond a doubt that plaintiff has been negligent, the judge is under no necessity of submitting the matter to a jury. It is the duty of the court to withdraw the question from the jury and to non suit the plaintiff.

DELIVERY.

Delivery to a carrier may be *actual* or it may be constructive. *Merrick vs. Hartford and N. H. railroad Co.*, 20 *Conn.* 35.

Where goods were delivered in the *usual manner* for transportation by a common carrier, by being deposited upon his private dock, which was in his exclusive use for the purpose of receiving goods to be transported by him, it was held in the above mentioned case that such delivery was a good delivery to the carrier and sufficient to make him liable for the loss of the goods, although neither he nor his agent received any express notice of the fact of the goods having been so deposited. The carrier, virtually, by his wonted course of business, agreed that goods might be so deposited, without special notice.

Albany and Susquehanna Railroad.

The subscribers, the Albany directors of the Susquehanna railroad company, beg to state to their fellow citizens the fact of the road having been so far located as to be ready for contract, and that bids for its construction have been invited. The confidence of the directors in the value of the stock of this road, as well as in the great and wide-spread benefits that will accrue to Albany from its construction, is unabated.

As yet, but a small proportion of our fellow-citizens to be benefitted by this enterprise have been called upon. Most of those seen have responded to our appeals in the most liberal manner, which has greatly encouraged us to persevere in this arduous undertaking. The country has about made up the sum expected from that source. About $75,000 is yet required to make up the amount allotted to Albany. This sum we want to secure by the first of December, the day the bids for the construction of the road are to be opened, so that contracts may be immediately made. We have faith to believe, should Albany *now* promptly respond to this our last appeal, the road can be placed in running order during the year 1854.

We trust no citizen, real estate owner or engaged in business, having made up his mind that this great work is to benefit his estate or business, will desire to evade his responsibilities in this matter, or permit his neighbor to assume responsibilities for his benefit.

The farmers on the line, almost to a man, have

taken stock; let all classes in Albany, according to their ability, do the same, and an extensive copartnership between the country and Albany will be formed that will, it cannot be doubted, be of great advantage to both.

EDWARD C. DELEVAN, JOHN N. WILDER,
WM. V. MANY, FRANKLIN TOWNSEND,
ROBERT H. PRUYN, JAMES KIDD.
E. CORNING, JR.

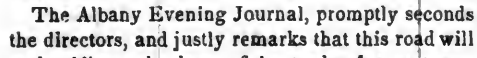
The above appeal puts the connection between real estate and its value as affected by railroads in the true light. It is almost a piece of dishonesty on the part of the owners of property to shirk their fair quota to a contribution towards these works, when a larger profit than that derived from the roads themselves, ensure to the proprietors of the houses and lots of the cities to which they lead. Of course there are instances where a subscription is impossible, but the meanness is akin to dishonesty of large holders of real estate, who will not subscribe to the building of a railroad when they know that the appreciation is certain, and will be secured to them from the outlay of a neighbor's capital. To be sure there is no law but that of public opinion, and we are glad to see an appeal made to shame this class.

The Albany Evening Journal, promptly seconds the directors, and justly remarks that this road will make Albany the depot of the trade of a vast section of country of great agricultural and mineral wealth, dotted with thriving villages and thickly interspersed with manufacturing establishments. It will not merely enable Albany to hold her own against the heavy drafts which have been made upon her trade by the opening of other avenues, but it will secure a business ten fold greater than that which has been diverted from her, and keep the population on the advance in numbers and prosperity.

Alabama and Tennessee River Railroad.

The grading of this road between Selma and Montevallo is completed, and the laying of the track is progressing rapidly.

Notice to Contractors.



SEALED PROPOSALS will be received at the Office of the New Orleans, Jackson and Great Northern Railroad Company, in the city of New Orleans, until the 30th of November next, for the grading, masonry, piling and bridging of that part of their road from Lake Maurepas, to the line of the State of Mississippi, a distance of 51 miles.

Also, for the masonry required on the first 36 miles of road from the city of New Orleans to the Lake, at the South Pass Manchac.

The first 9 miles of the section to the State Line, is through the Lake swamp, and includes the piling and bridging (with one draw) of the South and North Passes, the remainder is through a healthy fine country, which, with the contemplated lettings of the remaining 100 miles to Jackson, Mississippi, render this work well worthy the attention of Northern Contractors.

Payments will be made in cash, with 20 per cent retained until the completion and acceptance of the work.

Satisfactory evidence of ability will be required with the proposals.

Plans and profiles will be ready for examination ten days before the letting.

JAMES CLARK, Chief Engineer.
New Orleans, October 16th, 1852.

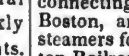
A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Change of Hours.

MONTREAL & NEW YORK AND Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜



FALL AND WINTER ARRANGEMENT.



ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A. M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P.M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3·50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M.

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad, and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

RAILROAD CAR TRIMMINGS.
DOREMUS & NIXON,
No. 21 PARK PLACE,
AND
18 MURRAY STREET,
IMPORTERS
OF PLAIN AND FIGURED MOHAIR PLUSH;
Printed and Uncut do. do. entirely new designs;
ALSO GERMAN OIL CLOTHS FOR HEAD LININGS
Enameled with Gold and Silver and Velvet Printed.

☞ These Headings are the most beautiful ever shown having been made expressly for **American Cars.** D. & N. are sole Agents.

ALSO, PATENT PARIS COTTON FELT.

☞ This is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin.

It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair.

ALSO, BROCATELLES and MOQUETTS
ALSO, CURLED HAIR.

N. B.—D. & N. have the Plush and Linings *in bono for exportation.* November, 1852.

Railroad Iron.

1500 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

Railroad Iron.

1600 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
November 4, 1852. 4t

To Railroad Contractors.

PROPOSALS will be received at the office of the New York and Boston Railroad Co., in the city of Middletown, until the 20th inst., for the grading and masonry for the road bed for a double track of the N. Y. and Boston Railroad.

Proposals are invited for the first, second, and third divisions, commencing at New Haven, and extending easterly about 71 miles. Also, for the fourth divisions if prepared in time.

Profiles may be examined and specifications of the work can be had by applying at the Company's Office.

CHAS. R. ALSOP, President.
City of Middletown, Nov. 1, 1852.

NOTICE.

IN Consequence of the Accident at Windsor Locks, by which Gen. Palmer, Chief Engineer of the New York and Boston Railroad, was severely injured, and is still unable to attend to business, the time limited for receiving Proposals for the Grading and Masonry of 71 miles of the New York and Boston Railroad is extended to December 5th, 1852. CHAS. R. ALSOP, President.
Middletown, November 16, 1852. 1t

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

The Cold Spring Iron Works,
INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—
John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder. " "
Address HENRY MELLUS, Agent,
Boston, Mass
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.
November, 12, 1852. 1y

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry, Timber Bridging, and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 8th December.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY,
CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR,
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY
JAMES ALLEN,

of New York.
of California.

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels, made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

Railroad Iron.

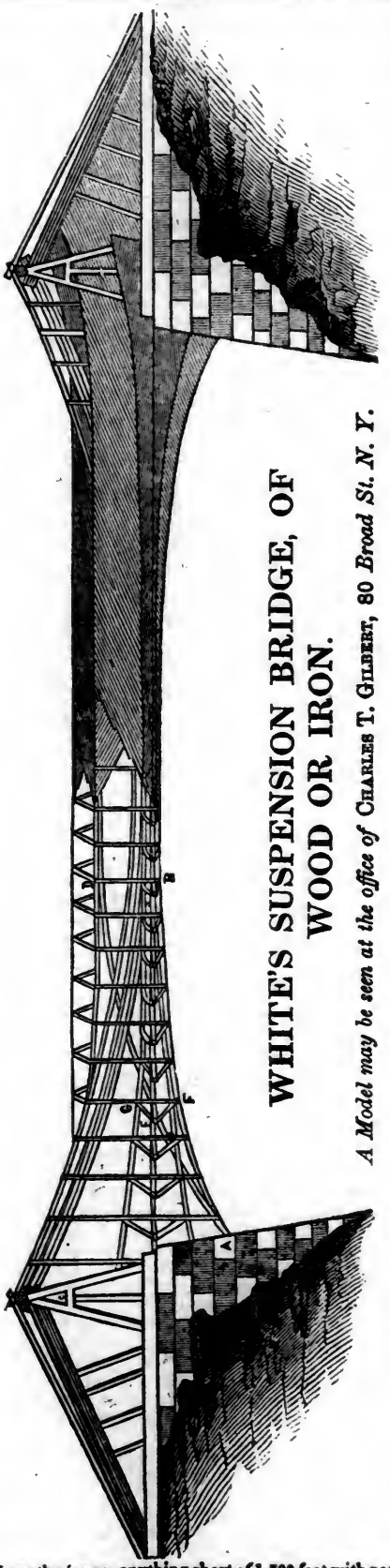
1400 TONS Railroad Iron, weighing about 55 lbs. per yard, of an approved pattern, now in bond, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

November 4, 1852. 4t

Huger, T. P.,

Northeastern Railroad, Charleston, S. C.



WHITE'S SUSPENSION BRIDGE, OF WOOD OR IRON.

A Model may be seen at the office of CHARLES T. GILBERT, *80 Broad St. N. Y.*

Length of span, anything short of 1,500 feet with perfect safety for every kind of travel. The above cut represents a Wooden Bridge with a roof. The arrangement for the Iron Bridge is such as to avoid all the bad effects of changes of Temperature. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, Proprietors,

Cambridgeport, Mass.

Office next door to the Athenæum.

Mississippi and Atlantic Railroad, from Terre Haute to St Louis.

BOOKS OF SUBSCRIPTION TO THE CAPITAL STOCK OF THE MISSISSIPPI & ATLANTIC RAILROAD COMPANY, an organization under the General Railroad Law of the State of Illinois, for the construction of a Railroad from Terre Haute, Indiana, to St. Louis, Missouri, will be opened under the direction of Messrs. WINSLOW, LANIER & CO., at their office, No. 52 Wall street, in the city of New York, on SATURDAY, the 6th day of November, 1852, and remain open until the stock of said company shall be subscribed.

The Capital Stock of said Company is TWO MILLIONS OF DOLLARS, of which Four Hundred and Seventy Thousand Dollars has been taken, leaving the sum of One Million Five Hundred and Thirty Thousand Dollars open to present subscription.

This stock has been divided into shares of FIFTY DOLLARS each.

TEN DOLLARS per share will be required to be paid at the time of subscription, and the remainder will probably be called through the whole of the year 1853.

Stock payments will draw seven per cent interest —payable on the first days of each July and January in the city of New York, until the completion of the work, when regular dividends will be made from the earnings of the road.

The first payment of interest will be made on the first day of July, 1853.

Books for the transfer of the stock will be opened and permanently kept in the city of New York, upon which the stock will be transferable after the payment of the first instalment.

This road is 170 miles in length, of which over 165 miles is straight line.

On over two thirds of the line the grades are under twenty feet to the mile, and the maximum grade is less than forty feet.

It is the last uncompleted link in the great chain of railroads from New York, Boston, Philadelphia and Baltimore to the city of St. Louis.

It is the most direct route, and must be a valuable road, and its stock a good investment.

It is designed to complete the road within eighteen months to two years; and it will be built under the personal supervision of the President, JNO. BROUGH, Esq.

Messrs. Winslow, Lanier & Co. will furnish maps of the connections, profits of the route, and the prospectus of the company, containing full particulars as to the organization and prospects of the work, upon application at their office.

SALMON A. PHELPS,
MICHAEL G. DALE,
NATH. M. McCURDY,
DEAN ANDREWS,
Commissioners.

WINSLOW, LANIER & CO., Agents.
New York, November 1st, 1852. 2t

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.

WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 33

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

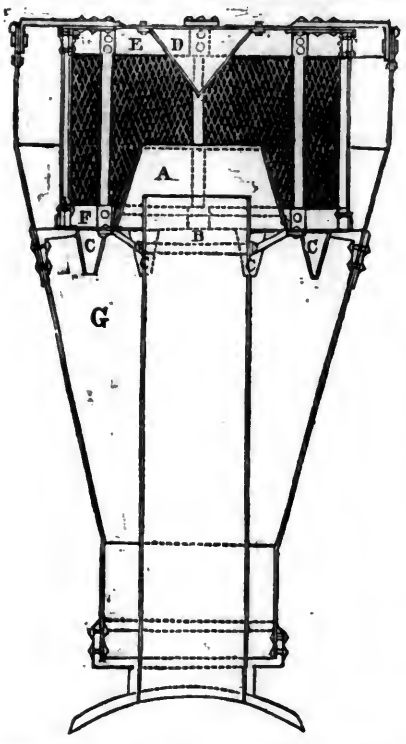
NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:
1st. The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MI. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others.

Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respecttully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them.

J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is.

JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq., has this day conveyed to this company the right to use his Spark Arrester patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester.

HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

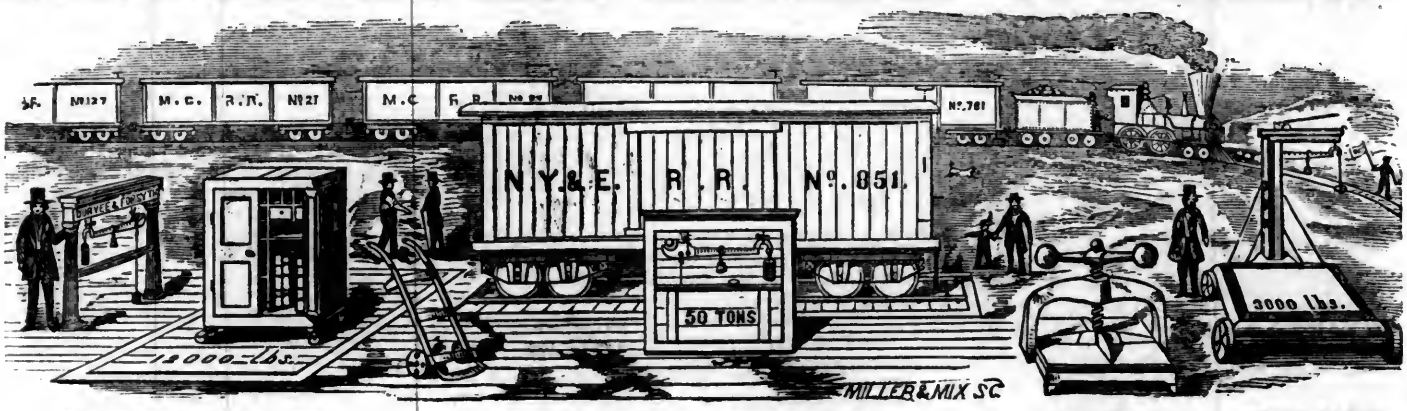
NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852 -6m*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. TRACK SCALE, 100,000 LBS. RAILROAD MANIFEST PRESS. IRON SCALE, 1 1-2 TONS.

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practical mechanic, of long experience in the manufacture of weighing machinery, and can be relied upon as being as '*Durable and Accurate*' as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent, 166 Pearl st., N.Y.
Raymond, Ward & Co.,	" Chicago, Ill.
Mumford & Hosken,	" Lafayette, Ind.
Crawford & Reynolds,	" Cleveland, Ohio.
Joseph E. Elder,	" St. Louis, Mo.
Byram, Millier & Shreve,	" Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the Iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 49] SATURDAY, DECEMBER 4, 1852 [WHOLE No. 868, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Virginia and Tennessee Railroad.....776, 769
Panama Railroad.....770
Terre Haute and Alton Railroad.....771
Cleveland, Ohio.....772
Cincinnati and Marietta Railroad.....772
Western and Atlantic Railroad.....772
New Orleans and Opelousas Railroad.....772
Chicago and Fort Wayne Railroad.....773
Albany and Susquehanna Railroad.....773
Catawissa Railroad.....773
Mineral Point Railroad.....773
North Missouri Convention.....774
Ohio and Mississippi Railroad.....774
Evansville and Illinois Railroad.....774
Susquehanna Railroad.....774
Central Ohio Railroad.....774
Maysville and Big Sandy Railroad.....775
Rock River Valley Railroad.....775
Delaware Railroad.....775
Savannah and Albany Railroad.....775
Lake Shore Railroad and its Connections.....776
Stock and Money Market.....776
London Correspondence.....776
Journal of Railroad Law.....776

American Railroad Journal.

Saturday, December 4, 1852.

LYNCHBURG, Nov. 18, 1852.

Dear Sir: You have requested me to state to you briefly the condition of the Virginia and Tennessee railroad company, and other matters concerning the value of their road.

The present capital of the company is $3,000,000, of which the State takes three-fifths, being three dollars for every two taken by individual stockholders, and there are only $75,000 wanted to complete the capital. The sum necessary to complete and equip the road is $4,500,000, and the excess above the capital is to be provided for as follows.

The stockholders, at their recent annual meeting authorised the board of directors to issue six per cent. coupon bonds, redeemable in twenty years, the interest to be paid in New York and the principal payable in Lynchburg. To secure the punctual payment of the principal and interest of any bonds issued under this authority, the stockholders have agreed to mortgage the entire road and property of the company costing $4,500,000, and the net profits of the road are pledged for the payment of the six per cent. interest, and for laying aside one per cent. on the debt, as a sinking fund. The board of directors have also the power to make these bonds convertible into stock within a limited period. Already contracts have been made with responsible parties for completing the entire graduation of the road, laying the superstructure and furnishing the cars which are deemed necessary in addition to those already in use and ordered. These contracts amount to half a million of dollars, and are payable in the above mentioned bonds at fair cash prices, the same prices heretofore paid in cash to the same parties. There is now nothing wanted to complete and equip the road fully but 13,000 tons of iron rails.

To purchase these, application will be made to the Legislature to loan the company $1,000,000; and there is every reason to feel confident of this being done, as the most ample and undoubted security will be given to insure the State against all possibility of loss. This will (together with the contracts already mentioned) make the $1,500,000 of loan authorised by the stockholders.

The whole length of the road will be 204 miles, and although it crosses the Blue Ridge and Alleghany Mountains, it is more direct (with very few exceptions) than any road in the Union. It is only 29 miles longer than an air line, being a loss of distance of only 14 21-100 per cent.

There are 110 58-100 miles of straight line, and there are 65 35-100 miles of curvature of large radii; never less than 1432 feet—there is no very objectionable curvature on the road. The maximum grades are 60 feet per mile, ascending in the direction of the heaviest tonnage, and 68 feet per mile descending in that direction.

All the heavy work is finished. The grading of the first 72 miles is completed, and of the next 63 miles, four-fifths of the grading is done. In a few months the entire road bed will be ready to receive the superstructure as far as Wytheville, 135 miles from Lynchburg. Much work has been done beyond Wytheville, and the whole is under contract. If the iron, which is now wanted, can be purchased at once, so that the delivery may commence in March, there will be no difficulty in putting the whole road in operation to Wytheville in all of 1853—and to its southwestern terminus in all of 1854. The iron now purchased is only sufficient to complete 73 miles.

The superstructure is now laid, and the cars are running 58½ miles; and the road will be opened to Salem, 61 miles, on the 10th day of December next.

The superstructure consists of a U rail, of 60 lbs. per yard, laid on the very best white oak, post oak, chestnut or locust cross ties, nine feet long, averaging 9 by 6½ inches, and placed 2½ feet apart from centre to centre.

The entire road runs through a country of unexampled fertility; and the climate, as well as the soil, is admirably adapted to the raising of live stock, and the growth of wheat, corn and tobacco. Indeed no part of the Union is capable of producing a greater variety of crops. Iron ore of superior quality, coal and lead are found on the line.

The iron ore particularly is very abundant, and there are found inexhaustible deposits of salt and gypsum of unusual purity. The productions of the soil and the mineral productions along the line of the road, would of themselves, make the stock valuable. But there is now under construction, a line of railroad, leading to Memphis, which with the Virginia and Tennessee road, will form a part of the nearest possible line between that city and New York. From the terminus of this road, on the Tennessee line, to Memphis, is 565 miles. 1st, the East Tennessee and Virginia road, 130 miles to Knoxville, to the construction of which the State contributed $1,180,000 at the last session of its legislature, is now under rapid progress. Then, the Georgia and East Tennessee railroad is now in actual operation, with the exception of 26 miles next to Knoxville, and that is under contract.

The line to Memphis will go 85 miles on this road to Cleveland, where it is contemplated to leave this road and run direct to Chattanooga 30 miles. This plan saves 40 miles over the route now travelled, by Dalton to Chattanooga, over portions of the Georgia and East Tennessee, and the Western and Atlantic railroads, in actual operation. Next comes the Nashville and Chattanooga road, 40 miles of which lie in the line to Memphis. This 40 miles is under contract and nearly completed. Then comes the Memphis and Charleston railroad, 280 Miles to Memphis, which is under construction with ample means to secure its success. Thus we have, in rapid course of construction, the shortest line which the mountain ranges will permit, of 769 miles, from Lynchburg to Memphis. It is a circumstance almost without precedent to see a line of 769 miles thro' land of such extraordinary fertility—it may be said, with truth, there are not 100 miles of this entire line running through even indifferent

land. As yet but a small portion of these rich lands is in cultivation, and their present production would be but a very inadequate criterion of their future yield, when cheap transportation shall have brought them within the influence of the great Atlantic markets.

At Lynchburg the railroad connects with a canal, of dimensions larger than the original Erie canal, which leads to tide water at Richmond. It is 140 miles long, and has 500 feet of lockage. When the tidewater connection at Richmond is finished, as it certainly will be in the year 1854, boats loaded at Lynchburg, may pass to the shipping at Norfolk. There is now a railroad being constructed from Lynchburg, with branches to Richmond and Petersburg, being 122 miles to the former, and 120 miles to the latter. From Petersburg to Norfolk a railroad 80 miles long is chartered. Petersburg is connected with City Point, her present shipping port for foreign vessels, by a railroad nine miles in length.

By the canal and river, a charge of $2 50 per ton, will carry tonnage from Lynchburg to the capes of Virginia.

Let us now return to Cleveland, Tennessee, follow the Georgia and East Tennessee railroad down to its terminus at Dalton, then follow the Western and Atlantic road to Atlantic in Georgia. At this point we strike the great stream of travel from New Orleans to the north east. From Atlantic to Richmond, Virginia is 44 miles less through Lynchburg than by the present route through Augusta and Charleston. By the Lynchburg route the traveller will pass through scenery of unsurpassed beauty and within 60 miles of the white sulphur springs, and all the other celebrated watering places of Virginia, while the southern route carries him through a level Pine barren. The completion of the Alabama and Tennessee river railroad, from Selma to Rome and Dalton, gives the Lynchburg route a still more decided advantage over the other routes between the south-west and north-east. Indeed this line will then be as near as possible to an air line between Washington city and N. Orleans. At a point on the Virginia and Tennessee railroad, eighty-four and one half miles from Lynchburg, it is contemplated to make a road down the New river and Kanawha to the Ohio. At 40 miles from Point Pleasant, this line will branch to that place and to Guyandotte. From Point Pleasant to Christiansburg, where this line leaves the Virginia and Tennessee railroad, is 230 miles, and a railroad may be made (as shown by actual survey) from the former place to within six miles of Christiansburg with grades not exeeeding 20 feet per mile, and more than half the distance would be level.

On the six miles next to Christiansburg, grades of 60 feet per mile would be required. Indeed, starting from Cincinnati, and following the south bank of the river, through Maysville to Guyandotte, and then crossing to the valley of Kanawha, at a point forty miles from Guyandotte—then pursuing that valley to Christiansburg, a distance of 390 miles, no grade exceeding 20 feet per mile is required, with the exception above stated, and the additional exception of a short distance between Guyandotte and the valley of the Kanawha, where grades of 40 and fifty feet per mile are necessary.

Such a line through a mountainous or even an elevated country is no where else to be found. This line would make the distance from Cincinnati to Richmond 596¼ miles, or to Petersburg 594¼ miles. Louisville will also connect with this line through Frankfort and Lexington, forming a line to Richmond of 656¼ miles, being the nearest route from that city to the Atlantic.

This Ohio connection was not contemplated originally, nor is it considered at all essential to the value of the Virginia and Tennessee railroad. The most important view to be taken of this road is, as a line from Memphis through Lynchburg, to tide water on the James river.

This line, as a whole, is the shortest which the mountain ranges will permit, and it is impossible that there should ever be any competing route, particularly with that portion of it embracing the Virginia and Tennessee railroad, and the greater part of the East Tennessee and Virginia railroad.

It is defended from competition by these natural barriers. The Virginia and Tennessee railroad is in the commercial centre of this long line, and must be the most profitable link in it.

A map will accompany this, showing the principal lines in the system of roads herein described.

To form some idea of the probable revenue of the Virginia and Tennessee railroad, it is sufficient to examine the statistics of the counties along the line.

In order to make the proper application of these tables, it will be assumed that, the amount exported from this country when the railroad furnishes facilities for transportation will equal the amount of wheat, corn and tobacco now produced. This has been true of the counties traversed by the New York and Erie railroad, and also the counties traversed by the Georgia railroad. The agricultural tonnage now transported on those roads is fully equal to the whole agricultural production of the counties tributary to those roads before the roads were made.

The wheat, corn and tobacco, raised in the counties of Virginia tributary to this road, according to the census of 1850, was equal to 144,989 tons, of 2,000 lbs. We will assume that the import trade is equal to the fourth part of the export trade, or 36,292 tons, and euppose it to be transported over 100 miles.

Of the road, the whole length of which is 204 miles, placing it at the lowest rate of two cents per ton per mile, we have for 181,000 tons the sum of $362,000.

Applying the same principles to the counties of Tennessee, but supposing their tonnage to pass over 200 miles of road, we have 221,000 tons, producing $884,000.

RECAPITULATION.

181,000 tons from counties of Virginia at $2 per ton	$352,000
221,000 tons from counties of Tennessee at $4 per ton	$884,000
	$1,246,000

If this calculation shall appear too large, let it be remembered that this vast country, of unrivalled fertility, is comparatively unsettled, as may be seen by comparing the area and population. So completely is a large proportion of this country without all means of access to market, that nothing is produced for export except horses and cattle—grain has not yet become a staple. Although this country is thus uncultivated and its resources undeveloped, it is a feature of the greatest importance to the railroad that there is a margin of highly improved country immediately on the borders of the road. The existence of an important line of travel, over the entire route traversed by the railroad, for nearly a century, has created a belt of improvements, through which the railroad passes. The development of the country must take place by extending this improvement laterally from the line of road.

It is deemed sufficient to rely on the tonnage without reference to the vast amount of travel which may be expected over this road, as a large portion of the Southwestern States will find this the nearest route to the northeast. A gross revenue of $900,000 will be sufficient to divide 10 per cent on the capital of $4,500,000, and such a revenue may be confidently expected.

Thus it has been shown that a sufficient revenue may be derived from freights alone. But it may also be shown that a large revenue may be expected from the transportation of the mail and passengers. The local travel must be very great in a country so productive. In March last, before the opening of the road, one stage coach running three times a week did not run full. For some time past the railroad has carried over 50 miles, in use, an average of 40 passengers each way daily. When the whole 204 miles are completed, the local travel alone cannot be less than 100 each way daily, which, for 300 days will be 60,000 passengers and at $6—each would yield $360,000. The through travel may be safely stated at as much more—when this road is connected, as above shown, with the whole south and southwest, embracing a sweep of country from Memphis to the Savannah river.

The foregoing facts have been most carefully examined and every reliance may be placed on their accuracy, the reasoning is merely what was necessary to illustrate the facts.

I am very respectfully, your obd't servant,

CHARLES F. M. GARNETT,

Chief Engineer Virginia and Tennessee R. R.

Panama Railroad.

The preparations now making for pushing on the work during the coming season are very extensive and evidently in good hands. The laying of the bridge at Gorgona has not yet been commenced, having been deferred in consequence of the high water on the Chagres river. The materials, however, are almost all on the ground. A great deal of work has been completed between Gorgona and San Pueblo, and a large force is now at work there. The road is completed to within two miles of Gorgona on this side of the river.

As we have heretofore stated, the calculation is to have over *seven thousand* laborers at work within three months. All the buildings necessary for the use of the company, for a considerable time to come, are under way, and they will all be in readiness before they have need of them. The most knowing ones seem to have expectations that the contractors will not be compelled to ask more than three months' extension beyond their present contract, to finish in August 1853.—A large torce is engaged at different points, solely for the purpose of seeking out defects, keeping the road in repair and permanently strengthening it. The reports of the business which has been done up to this time upon the road are very flattering, and when the road is completed to Gorgona, where the cars will certainly run by March, the passengers who come by the river, preferring the Cruces road, will change for the Gorgona route.

The freight and passenger business, even in the present condition of the road, has not only been large, but profitable, notwithstanding the frequent and heavy repairs for some time necessary. The arrangements for transporting passengers, though not so comfortable as they might be, are secure to the baggage, and lives and limbs, of the passengers. The baggage is all ticketed and duly entered on way bills, and the company is responsible for every thing. For these arrangements they charge a good price, but not too much. The ride is twenty-three miles, two hours long, at an expense of $8.—The freight charges are 60c. to $1 per 100 lbs., according to bulk and value of the articles, being divided into three classes, 60c., 80., and $1.—*Echo of Oct. 20.*

Exhibit of the Terre Haute and Alton Railroad Company.

The Terre Haute and Alton railroad company is organized under special charters granted by the states of Illinois and Indiana, in 1851, with authority to construct a railroad from Terre Haute, in Indiana, to the Mississippi river, at Alton, in Illinois.

Alton is favorably situated upon the Mississippi river, about twenty miles above St. Louis; it is particularly well adapted for the terminus of the great lines of railroads which are now nearly completed from the Atlantic cities to Terre Haute, and which will soon be continued to the Mississippi. At all times, the same class of steamboats which can reach St. Louis, can also reach Alton; steamers of the first class pass from Alton to St. Louis in less than an hour, while a branch railroad extending to St. Louis, would require but half an hour. This line, therefore, affords all that is essential for the connection of St. Louis with the eastern cities; and no road can be constructed which can combine so many advantages as this; it unites the trade and traffic which the developements of Illinois interests are concentrating upon Alton, as the only great shipping port on the Mississippi in the state, with those which have already made St. Louis so wealthy and flourishing. This road answers equally the purpose of uniting both of these important points with the east.

Another line extends from Alton to Springfield, and is now being extended to, and will ere long reach Chicago. The Ohio and Mississippi railroad extends from St. Louis via Vincennes to Cincinnati, and affords in that direction a desirable route for travel, and the transportation of produce and merchandise. The Terre Haute and Alton railroad supplies the only remaining line of railway that can be desired in this direction, or that is likely to be authorized.

The city of Alton has been made a port of delivery, and contains, including upper Alton, about 8,000 inhabitants. Under a wise decision of the state of Illinois, it has been determined to make Alton the terminus of the great line of railway extending to the eastern cities; and by the influence of this decision she is destined to increase rapidly in wealth and population: and the admirable facilities which she enjoys from her fine location upon the bank of the Mississippi, for all the purposes of shipping, equal in all respects to those of St. Louis, will create within the state on her western boundary, a city which may correspond to that which she possesses in Chicago upon her eastern border.

The Terre Haute and Alton railroad forms the final and concluding link in the great chain of railroads, which extend from the Atlantic cities to the Mississippi river. This chain extends through the states of Illinois, Indiana, Ohio, Pennsylvania and New York, and the New England states. Boston, New York, Philadelphia and Baltimore, are all placed in this connecting line. It is entirely unnecessary to enlarge upon the importance of a line of railway so situated. The bare inspection of the map is sufficient to suggest an idea of the immense traffic which may be auticipated upon it. It is located through a region of unsurpassed fertility and offers to the constantly increasing throng of travel, the shortest and most convenient route from the east to the west, and the outlet for the unlimited production of the west to the seaboard.

Illinois is remarkable for its extensive and fertile prairies, consisting probably, of the richest lands in the world. The Terre Haute and Alton railroad passes through its whole course, over a succession of the finest prairie lands in the state. Nothing can exceed the power of its production, while the general level character of the country enables a line of railway to be built at a reduced cost; at the same time it is very direct, consisting of long straight lines of 25 and 30 miles in length. The maximum grade is not over 40 feet per mile; but the greater portions of the line consist of gradients varying from level to 15 and 20 feet per mile.

The line terminates at the city of Alton, upon the bank of the Mississippi river, in the most favorable manner for the transhipment of produce and merchandise. The most ample accommodations have been secured for any extent of business, permitting the most favorable arrangements for the convenience of forwarding and receiving goods. The facility of access to St. Louis is also an advantage which cannot fail to be appreciated. It is well known that from the city of Alton, extending some fifty or sixty miles down the Mississippi, the land is low, subject to overflow, and entirely unfit for the terminus of a railway. At the city of Alton occurs the first elevated land, which is adapted to the purposes of building and suitable for shipping, above St. Louis; and this circumstance renders it extremely valuable as a point for the terminus of a great and important line of railway. For all practical business purposes, the city of St. Louis may be regarded as being situated on the Mississippi, opposite to the city of Alton.

DESCRIPTION OF THE ROAD.

The road as located runs from Terre Haute, in Indiana, to Paris, in Edgar county, Illinois; and thence by Grandview to Charleston, in Coles county; to Shelbyville in Shelby county; to Hillsboro', in Montgomery county; to Bunker Hill, in Macoupin county; and to Alton, in Madison county. It will be about 170 miles in length, and over 150 miles will be straight; the curvature is easy, the curves being of large radii; the grades are mostly from level to 15 feet per mile, the maximum grades are 40 feet. The road will be thoroughly and substantially built; the track will consist of a heavy T rail, weighing about 60lbs. per lineal yard, spiked to sleepers of white oak and locust, and placed about two feet apart from centre to centre.

The locomotives, cars and equipments are designed to be suited to a first class railway, and nothing will be wanting which such a railroad will require.

A contract has been made for the grading, masonry, bridging and equipment of the road, and a large force is now actively employed upon the line, with the view of completing the entire road at the earliest practicable period.

THE COST OF THE ROAD.

The entire road will cost about $3,000,000, or about $18,000 per mile, exclusive of the right of way but including the equipment necessary for the business of the road. This is a low cost, but the favorable character of the country sufficiently explains the fact. The quantity of bridging is remarkably small for a line of the extent of this, being not more than a thousand feet in length for the whole line.

CAPITAL.

The capital stock has been fixed at $2,000,000; it is proposed to have this amount extended to such an amount as may be necessary to complete the road, which will be not far from $3,000,000.

WAYS AND MEANS.

The expenditure covering the cost of the road is to be met by the following means:

(For the law authorising city and county subscriptions, see appendix.)

Individual subscriptions, including stock to be issued to contractors	$1,100,000
City of Alton 6 per cent. bonds	100,000
County of Montgomery 7 per cent bonds	50,000
" Shelby " "	75,000
" Coles " "	100,000
" Edgar " "	100,000
	$1,525,000
Issue of 1st mortgage 7 per cent. bonds	1,000,000
	$2,525,000

For the balance further subscriptions are anticipated as the work progresses, or if any deficiency is necessary to be supplied, recourse may be had upon the completion of the line to an increase of bonds, to be secured by a second mortgage. It has been considered desirable to leave this amount subject to this contingency. The securities of the company will in either case be of undoubted value.

SECURITY FOR THE BONDS.

The bonds, which it is proposed to issue to the amount of $1,000,000, are secured by a first and only mortgage upon the entire road, property, income and franchises of the company. For this purpose a deed of trust has been executed, conveying to Edward Whitehouse, John F. A. Sandford and Charles N. Fearing, Esquires, of the city of New York, all the property and franchises of the company acquired and to be acquired, in trust for the holders of these bonds. These bonds are for $1,000 each, with interest, payable semi-annually at the Bank of Commerce in the city of New York, at the rate of seven per cent per annum, on the first day of each February and August until maturity. Two hundred of them are redeemable in ten years, four hundred in fifteen years, and four hundred in twenty years. They are convertible into the stock of the company at par at any time before their maturity. Interest warrants are attached for the semi-annual payment of interest. The security must be regarded as ample, and the power to convert the bonds into stock at any time before maturity is a valuable privilege, which will no doubt be appreciated.

ESTIMATES OF BUSINESS.

This line traverses a region of great fertility; its powers of production are unlimited. The extensive prairies are capable of being brought at once into a high state of cultivation. The ordinary and laborious process of clearing the land is rendered in this section unnecessary, as the prairie needs nothing but the plough to prepare it at once for cultivation. This circumstance renders the lands of Illinois among the most desirable in the country.—The great development of railroad facilities, now in progress in Illinois, is bringing forward the resources of the country to an unexampled degree.—The great Central railroad, traversing the State from north to south, with its Chicago branch; the Ohio and Mississippi road, which lies in the State of Illinois, between St. Louis and Vincennes; the Alton and Chicago road, completed to Springfield, and now being extended to Bloomington, and ere long to be extended to Chicago; the Terre Haute and Alton railroad; the Chicago and Rock river, are among the roads now being vigorously urged to completion within the state, covering an aggregate capital of over thirty millions of dollars. The effect of these lines can with difficulty be computed in a country so unlimited in its productive powers as Illinois. The great tide of emigration is rapidly setting in this direction, and the result can hardly be estimated. Whatever conclusion may be drawn from the existing state of things must be rendered entirely useless when the actual results are experienced.

If we make, however, but an approximate estimate, drawn from the actual state of things, without reference to what is likely to be the case within a very short period, we shall be satisfied, so far as the Terre Haute and Alton railroad is concerned, that no road can be more advantageously situated in respect to its present or prospective advantages.

The population of the line of the road is now over a hundred and seven thousand; and the taxable property, usually assessed at about half its value, is over eighteen millions of dollars. There is scarcely a single acre of waste land upon the whole extent of the line. The city of Alton is one of the most extensive markets for lumber, an article of the first necessity upon the prairies, in the western country; it is brought down the Mississippi and Illinois rivers in immense quantities, and will be transported upon the railroad as an important article of freight. The most extensive supplies of the best quality of lime are furnished by inexhaustible quarries in her immediate vicinity. The most extensive coal fields are underlying her soil, capable of supplying fuel of the best quality for manufacturing and domestic use. These articles alone are of great importance, and will supply a large amo't of local business. Immense herds of cattle and other stock are pastured upon the almost boundless prairies, furnishing a superior quality of beef, pork and other important and essential supplies for the great southern and eastern markets.

From estimates carefully prepared, the receipts of the road, from freight, may be taken to be	$450,000
And from passengers, through and local	695,000
Express mails, etc	75,000
	$1,220,000

Deducting from this amount 50 per cent for expenses, which from the level and direct character of the road will be probably much less, we have a

net result of $610.000—or, say twenty per cent upon the cost of the road.

If this result should appear to be too large, we may take into consideration the increased business arising from the causes which have been partially alluded to above, and it may be fairly anticipated. The computation, however, as it is presented, is made after a fair comparison of the existing resources of the country with those of other western roads, and without any attempt to exaggerate the results. In comparing these results with roads in other sections of the country, the difference in cost per mile must be constantly borne in mind. It is their low cost which renders the returns from western roads in general so satisfactory to their proprietors.

PROGRESS OF THE WORK.

The construction of the work has begun during the summer just past, (1852,) and has been steadily progressing, and about thirty miles have been graded and made ready for the rails. A large force is now employed upon the work, with the view of completing the entire line within two years; and the whole line may be in operation by that time.—No efforts will be spared to effect this object by the earliest practicable period. Large numbers of the cross-ties are now contracted for, and being delivered, and a large amount of iron rails, sufficient for a hundred miles of the track, have been secured by the contractors, The most ample accommodations have also been secured for the terminus at Alton, where everything will be arranged in the most convenient manner.

For any further information in relation to the road, its prospects, the value of its securities, etc., reference is made to Messrs. Cammann, White house & Co., No. 56 Wall st., agents of the company, to Messrs. P. Chouteau, Jr., Sanford & Co., and to Messrs. Wadsworth & Sheldon, who will furnish any desired information relative to the affairs of the company.

SIMEON RYDER,
President of the Terre Haute and Alton R.R. Co.

Cleveland, Ohio.

The Cleveland Herald contains an interesting article upon the progress of that city, which will illustrate the rapid growth of our western cities.

The population of the city at different periods was as follows:

1796	3
1798	16
1825	500
1831	1,100
1835	5,008
1840	6,107
1845	9,573
1850	17,600
1851	21,940
1852	25,570

The village of Brooklyn, upon the opposite bank of the Cuyahoga river, containing 7,000 inhabitants, is in fact a part of the city, though under a different municipal organization. The two united make the total population of Cleveland 33,000.

The first movement in favor of railroads was made in 1845, when the city voted $200,000 for the construction of a railroad which connects Cleveland with Columbus and Cincinnati. This road was in due time built, and the cars ran over the entire track on the 22d of February, 1851. The city also voted to loan $100,000 to the Cleveland and Pittsburg, and a similar sum to the Cleveland, Painesville and Ashtabula road, all of which are now completed, opening avenues in all directions.

The amount of produce received at Cleveland by the Ohio canal during the years 1850, 1851 and 1852, exhibits an increase of fully 20 per cent per annum. For instance: the amount of wheat received by canal in 1850, was 1,192,559 bushels; in 1851, 2,529,699; and the amount received in 1852, will be over 3,000,000. The number of tons of coal bought to Cleveland by canal in 1850 was 82,379; in 1851, 103,233; in 1852, the number will exceed 140,000.

There is another source of wealth and numbers says the Herald, of which Cleveland has but just begun to avail herself, and yet one which is, perhaps, destined to exert as great an influence upon her prosperity, as her unequalled commercial facilities—and that is manufactures. We have, it is true, on the two sides of the Cuyahoga, some industrial establishments, which are quite creditable to us, but the capital employed in manufactures is small, when compared with the wants of the population surrounding the place of its investment, and entirely disproportionate to the capabilities of this location for sustaining manufactures.

Cleveland has special qualifications for becoming a great manufacturing city; with her geographical position, her facilities for the transport of the raw material or the manufactured article, her proximity to beds of excellent coal, her relations to the mineral regions of Lake Superior, she can hardly fail to become celebrated for her manufactures, and her wealth and population are greatly to be increased by them.

What, then, is to limit the progress of the Forest City? Her beautiful situation, her healthful air, her wide and handsome streets, her countless trees, and tasteful architecture, can never be taken from her. Her great commercial facilities will only change to become greater. The agricultural resources of the country, of which she is the market, are not yet half developed. Manufactures must lend their mighty aid for her advancement. What then shall retard or limit her prosperity?

Ohio.

Cincinnati and Marietta Railroad.—Mr. Kennedy, the chief engineer of the Marietta road, has just completed a reconnoisance of the country between Marietta and Wheeling: Capt. K. emphatically says that the route is the *very best*, for railway construction, that he ever saw. All the way the grades are easy and regular, and there are no curves whatever, which will act as an obstruction to speed. Capt. K. is confident that the distance from Wheeling to Marietta may be easily run over such a road as he is building between Cincinnati and Marietta in *ninety minutes*. He avers that the entire line is susceptible of the best of construction, at the lowest prices, as it lies mainly along the Ohio river, so that materials of all sorts can be cheaply and readily brought to the ground.

Junction Railroad Company.—The Junction railroad company fortunately purchased five thousand five hundred tons of iron rail, just before the last rise of prices. This makes the whole quantity ten thousand eight hundred tons.

We learn that the contractors, Messrs. Howard & Beach, are pressing forward the work under their respective contracts, with great energy, and that the whole line between Cleveland and the Maumee river, will be finished next summer. The company has not a debt which is due and unpaid, and has lately obtained such additional facilities as place its finances entirely at ease, for future operations.—*Sandusky Reg.*

Clinton Line Railroad.—The Hudson Visitor states that every obstacle in the way of the Ohio section of this road is at last removed. The matter of a six foot track road through Pennsylvania has been satisfactorily arranged, and the means necessary for prosecuting the work with the utmost energy has been secured. The surveys are in progress, and all the difficult points in the proposed line have been passed. A route is found with no grade exceeding thirty feet to the mile; with no curve of a radius less than three thousand five hundred feet; eighty per cent of it straight line; no heavy work in excavation or embankment, and less than two hundred lineal feet of bridging. The officers of the company are H. N. Day, S. Butler, A. A. Brewster, and H. Ellsworth of Hudson; H. W. Clarke, of Cleveland; H. A. Miller, of Cuyahoga Falls; and Dr. D. Allen, of Kinsman, directors. H. N. Day, president; L. V. Coe, secretary, and M. Messer, treasurer. The principal office of the company is at Hudson.

Western and Atlantic Railroad.

From the late report of the superintendent of this road, Wm. M. Wadley, to the Executive, we have the following statement of receipts and expenditures from first of February, (the date at which he took charge of the road, to the 30th of Sept.

Receipts	$278,229 38
Expenses	136,695 79
Net profits on operations for eight months	111,533 59
Increase over corresponding months last year	78,726 17

This is a very flattering exhibit of the operations of the road, since it has been under the superintendence of Mr. Wadley. The following is a statement of the business of the road for the last year, embracing four months prior to the time at which Mr, Wadley's connection with it began.

The total amount of earnings during the year, have been	$375,176 62
The total amount of expenses, for maintaining and working the road, during the same period have been	326,505 63
Leaving a balance, as net profit, of	$ 48,670 99
And an increase in the gross receipts of the road, over the previous year, of	$ 90,148 18

In the item of expenses above, is embraced a large amount of indebtedness, incurred prior to the 1st of February, 1852, much of which is legitimately chargeable to previous years. The total indebtedness of the road, on the 1st of February. 1852, is ascertained to have been nearly $450,000, $304,227 12, of which (as we understand the report) has been paid since that date.

New Orleans and Opelousas Railroad.

The New Orleans Commercial Bulletin gives the following encouraging account of the condition and prospects of the above road.

We have been favored by Colonel Buckner H. Payne, the indefatigable and efficient general superintendent of this road, with the following data, which we take the earliest opportunity of laying before the public. The figures sum up promisingly, and augur a speedy construction of this magnificent scheme of internal improvement.

The following parishes have voted the following sums to aid in the work:—Natchitoches, $250,000; St. Landry, $116,000; Lafayette, $36,000; St. Martin, $104,000; Terrebonne, $140,000; Lafourche Interior, $100,000. Total, $746,000.

The following parishes are expected to vote the following sums, and there is little doubt they will: St. Mary, $157,000; Avoyelles, (private,) $75,000; DeSoto, $100,000; Rapides, $260,000. Total, $582,000. Parish of Orleans, (right bank,) $75,000; the city of New Orleans has voted $1,500,000; private subscriptions, after deducting tax subscription, $600,000. Grand total, $3,503,000.

A little over three millions and a half of dollars voted and subscribed. This, it is desired to increase to four millions. It is proposed, also, to increase the capital stock of the company to $5,000,000, and application will be made to the State to take one-fifth, or one million of dollars. Such an amount will enable the directory to construct the main trunk road to Logansport, on the Sabine river, a distance of 324 miles, and to build the branch to the Arkansas line, on its way to St. Louis.

We look upon the building of this road as fully as necessary to the city as the Northern road. It will pass through a country of unrivalled natural advantages, and will open and foster a trade, the vastness and value of which, to this city, cannot now be calculated. We hail the progress made with unaffected gratification, and say, with all our heart, push on the good work, so auspiciously commenced and under way.

The branch road to the Arkansas line will commend itself to our St. Louis friends, some of whom had chid us as neglectful of their favorite road, west

of the Mississippi. They will see that our people have not been unmindful of their arguments or requests.

Coal Statistics.

A series of articles, published in the North American, gives an estimate of the probable increase of the coal trade for the next nine years, based upon the amount annually brought to market.

All calculators are agreed upon fixing the ratio of annual increase at about 20 per cent. The increase in 1851 was considerably greater than this. But putting the ratio of increase at only 15 per ct., would give an annual production for the next ten years, as follows:

	Tons.
1851	4,383,730
1852	5,041,289
1853	5,797,481
1854	6,667,103
1855	7,667,168
1856	8,817,243
1857	10,139,820
1858	11,660,802
1859	13,409,922
1860	15,420,400
1861	17,734,621

The fact that the annual consumption of coal in England and Wales is over 34,000,000 of tons, shows there is at least nothing incredible in the results here shadowed.

The general distribution of the coal trade at the present time is in nearly the following ratio:—Delaware and Hudson, 1,000,000; Lehigh 1,100,000; Schuylkill, 900,000; Reading, 2,000,000—Total, 5,000,000.

Taking this ratio of distribution, the writer makes the following calculation upon the business of the next ten years, assuming that the companies named increased their capacity for carrying the amounts here set down to them.

	D. & Hnd.	Lehigh.	Sch. Nav.
1853	1,159,496	1,275,446	1,043,547
1854	1,333,421	1,466,762	1,209,078
1855	1,533,433	1,686,777	1,380,091
1856	1,763,449	1,939,783	1,587,103
1857	2,027,966	5,230,762	1,225,169
1858	2,332,160	2,565,277	2,098,944
1859	2,681,985	2,950,182	2,413,786
1860	3,084,282	3,392,711	2,775,853
1861	3,546,513	3,901,177	3,191,872

	Reading.	Total.
1853	2,318,992	5,787,481
1854	2,666,842	6,667,103
1855	3,066,867	7,667,163
1856	3,526,898	8,817,243
1857	4,055,932	10,139,821
1858	4,664,321	11,660,802
1859	5,383,969	13,409,922
1860	6,168,564	15,426,415
1861	7,093,040	17,731,621

Illinois.

Chicago and Fort Wayne Railroad.—The surveying engineers on the Chicago and Fort Wayne railroad, arrived in the city on Friday evening last, having completed the survey. We learn that the entire route is favorable to the cheap construction of a road, and the distance is one hundred and fifty miles.

The completion of this road will place us in direct communication with Pittsburgh, Philadelphia, Wheeling and Washington city. In the great struggle for the trade of the West, Philadelphia perceived at an early day the importance of pushing through to this city a continuous line of road; and there only remains to accomplish this object, the link from Fort Wayne to Chicago. A number of gentlemen from the former place, among whom is Judge Hanna, President of the company, are now in our city, looking after the interests of the road. It is to be hoped that they will meet with all the encouragement they have reason to expect from the "city of many railroads."

We understand it is the design of the company to apply to the State Legislature for a special charter from the Indiana State line to this city, and we suppose there is scarcely a doubt but that it will be granted.—*Chicago Tribune.*

Albany and Susquehanna Railroad.

This important road will connect Albany with the New York and Erie railroad at Binghamton.

It will open a new and most expeditious outlet from the great west.

The distance about 140 miles.

It will run through a rich, highly cultivated and densdly settled country.

Locally, it must be used by 200,000 of population, about 60 thriving towns and villages, and 15,000 farmers.

About 300 miles of productive valleys drain into the line of the road.

There can be no parallel roads, but it will receive the business of several branches to add to its resources.

Passengers can be psssed over the road in *four hours.*

The freight *on* the line and *coming* to it from either termination, will be immense.

It will be one of the best paying roads in the nation, and its stock have a value of a constant upward tendency.

The road will greatly add to the income of the Western (Boston) as well as the New York and Albany, and Harlem, and North river boat interest.

Albany, Boston and New York will derive great benefit by this new outlet for the great west in their general interests.

This is one of the enterprises which has been too long delayed. It will attract business from a vast district in and out of the State of New York.

The benefit to the country through which it is to pass will be great—it will at once add 25 per cent to the value of a wide district on the whole line.

The New York and Erie will receive from it, and give to it, an amount of business that neither road can estimate. It will open their vast deposits of coal in Pennsylvania to the State of New York, as well as connect that State with New York by trade and interchange of commodities—to the advantage of both.

The Mississippi.

De Bow's "Review" for the present month, reiterates the appeals often urged upon Congress for for grants to carry out enlarged improvements at the mouth of the Mississippi. Three plans have been presented and discussed at different periods for the accomplishment of the object. One is to deepen, by dredging machines, two of the principal passes, at an estimated cost of $370,000, with a subsequent annual expenditure of $72,000. Another, to close all but one of the passes where they leave the river trunk, estimated cost, $527,000. The third, to cut a ship canal from a point below Fort Jackson to the Gulf, costing, including all contingencies, $10,000,000. Considering the immense commerce of this great inland sea, any of these amounts is insignificant in comparison with the end to be accomplished. De Bow publishes a diagram representing the appearance of the bar in May last, when property valued at $1,500,000 was detained. It is computed that the losses from detention alone would in a single year pay for almost the entire improvement. The Review says:

"Upon the single item of freights alone it is estimated that the use of smaller vessels to which the shallowness of water is driving the commerce of the west, instead of those of largest size and capacity, will be attended with a loss of two dollars per bale, or $2,800,000 annually upon the cotton crop; and equally as much, perhaps, upon the total of other articles of export. In all about $5,000,000 per annum!"

Cattawissa Railroad.

The Philadelphia News gives the following in reference to this road.

"We learn on authority which is entirely reliable, that the Cattawissa railroad company have entered into contracts for the building of their road from the town of Cattawissa to Tamaque, or within some five miles of that point, and that contracts have also been made for the construction of the road from Tamaqua to Beaver Meadow. The funds necessary for the construction of both these links have been raised in New York, where the stock of the Cattawissa company is now mainly held, and the parties who have taken the contracts, we are informed, are entirely responsible for the prompt progress and early completion of the work.

"The present object of these movements is doubtless two-fold, the stock being principally held in New York: one object is evident to secure the coal trade of a portion of the Schuylkill fields to that city, whilst the other doubtless, looks to a conversion of the lake trade to be reached by the Sunbury and Erie road.

"The Gap, from Easton to Beaver Meadow, we are also informed, is now being occupied by the construction of a road, which, it is said, promises an early completion. This will give a continuous line, except the crossing of the river at Easton, from New York to Tamaqua, Cattawissa and Sunbury."

Mineral Point Railroad.

From an "Appeal" addressed to the citizens of Iowa and Lafayette counties, Wisconsin, by the officers of the Mineral Point railroad company, we obtain the following items:

The length of the road from Mineral Point to the Illinois State line at the point of junction with the Illinois Central road is 31 miles. The route has been surveyed by a corps attached to the latter road, and the grade is found easy. The sum of $500,000 is thought to be sufficient to cover the cost of construction and equipping. One thousand and forty-eight shares have been subscribed and five per cent paid in, and some 293 shares have been taken, on which nothing is yet paid. The methods proposed for raising funds are, by stock subscriptions and sale of bonds. The directors think that reliable subscriptions of $200,000 may be obtained on the immediate line of the road, and that by the influence of persons directly interested in the Chicago and Galena and the *Illinois Central companies*, a loan can be successfully negotiated in New York for all additional sums needed. It is proposed to complete the work in January, 1854. The directors are Cyrus Woodman, John Bracken, Moses M. Strong, Parley Eaton, Anthony Nancolas, of Mineral Point; Francis Chpivin, of Miffin; John M. Keep, Beloit; David A. Neal and George Griswold, of New York. M. M. Strong, President; R. B. Mason, Chief Engineer; T. S. Allen, Secretary; Francis Vivian, Treasurer. The income of the road will, it is thought, pay an annual interest of 14½ per cent. on the cost of construction.

Railroad Items.

The Peoria and Oquawka (Ill.) railroad is progressing rapidly. About a hundred hands are employed on the eastern and western divisions. A contract has been made for a large amount of railroad iron at low prices, and the President, Judge Mason, of Burlington, Iowa, expects to have the road in running order from opposite Burlington to Galesburg, where it will intersect the Military Tract Central railroad some time during 1853. About 25 miles of the eastern end of the Peoria and Oquawka road will be completed next year.

The grading, masonry and stone work of the Northern Cross railroad, which runs west from Quincy to Meredosia, Ill., is completed as far a Clayton, near the west line of Adams county, a distance of about 30 miles. This road, when completed, will connect the Mississippi at Quincy with the Central railroad. The contractors for the portion just completed have taken the contract for that lying between Clayton and Mt. Sterling.

Since the completion of the Mississippi and Milwaukee railroad to Whitewater, 51 miles, the receipts have averaged about $700 per day. Twenty one miles more will reach to Janesville, which

will be finished by the latter part of December next at farthest. This will make 72 miles of road at a cost of about $1,200,000.

North Missouri Convention.

A large convention was recently held at Saint Charles, Missouri, for the purpose of promoting the construction of a railroad from St. Louis, up the west bank of the Missouri river to Minnesota Territory. The following gentlemen were elected officers of the convention:

President—George W. Houston, of Lincoln.
Vice Presidents—D. K. Pittman, of St. Charles.
J. B. Henderson, of Callaway.
J. Cavender, of St. Louis.
H. C. Wright, of Warren.
J. H. Robinson, of Montgomery.
Secretaries—Col. A. B. Chambers, of St. Louis.
N. C. Orear, of St. Charles.
L. D. Norris, of St. Louis.
E. A. Lewis, of St. Louis.

The Convention was numerously attended, and the project appears to have the hearty concurrence and support of the people of Missouri. The following resolutions were adopted, expressive of the sense of the Convention.

Resolved, That we regard the early commencement and construction of the North Missouri railroad from St. Louis, by St. Charles, to the Northern State line, with a view to its ultimate extension through Iowa and Minnesota, as an enterprise of the first importance, being one of the main trunks by which the wealth and prosperity of the state are to be promoted.

Resolved, That we regard it as the duty of the state to adopt a judicious as well as liberal system of railroad improvements, and in extending her aid and credit to these, a discriminating policy should be observed, in favor of such as are manifestly main leading trunks, best calculated to subserve the great interests of the state at large, in the developement of its agricultural and mineral resources.

Resolved, That this convention present by memorial to the legislature, the claims of this enterprise, and solicit for it the aid of the state by an extension of the state credit, on the same terms on which it has already been extended to the two great works now in progress.

Resolved, That the legislature be memorialized to so amend the charter of the North Missouri railroad company, as to authorize an extension of the road to St. Louis, and also exempt said company from the onerous features of the general law of the state, in regard to corporations, which exemptions have already been granted to the Pacific and to the St. Joseph and Hannibal railroad companies.

Resolved, That in the opinion of this convention, the construction of railroads through the various producing districts of this state is a great measure of public policy, urgently demanded by the interests of the people generally, and that the promotion of a judicious system of railroads, with a view of providing to the principal agricultural and mineral regions, reasonable facilities for carrying their products to market, is a legitimate subject for the fostering care of the legislature, and ought to be aided by the wealth and power of the state.

Resolved, That in view of the fact, that the population of this state is but young, and individual exertions have to be made in surmounting the natural obstacles incident to our position, this convention is of the opinion that the collective wealth of the community must be mainly looked to for furnishing the means for accomplishing this great undertaking for the people of our state.

Resolved, That in pursuance of the foregoing views, this convention is of the opinion that the General Assembly of this state should be memorialized to pass a general law, authorizing the constituted authorities of all counties, towns and cities to subscribe to any railroad within this state such amounts as may be sanctioned by the voters of such counties, towns or cities, and further authorising them to make such subscription available either by a loan to the amount, or by levying a special tax on the property situated within their respective limits, at the option of the community interested, to be expressed by their votes at a special election for that purpose; such special tax not to exceed in any one year 30 per ct. of the amount of stock subscribed, nor to be less than 20 per cent of the same, and that all persons who shall pay said tax, shall be entitled to become stockholders in said railroad companies to the amount of tax paid by them.

Resolved, That the Congress of the United States be memorialized to make a grant of land to the state of Missouri to aid in the construction of the North Missouri railroad, similar in all respects to the grant heretofore made in aid of the Pacific railroad and the Hannibal and St. Joseph railroad.

Resolved, That this convention recommend to the directors of the North Missouri railroad company to open books for the subscription of stock, as soon as they may deem it advisable, in St. Louis, St. Charles, and in such counties as are interested in the construction of the road.

Ohio and Mississippi Railroad.

The contractors for the construction of this road, as also the road from Illinoistown to Belleville, have, within a few days past received a large accession to the number of laborers. About four hundred men, chiefly from Ireland, have arrived within a few days, and a still larger number are on the way. There are now about eight hundred men engaged on this end of the Ohio and Mississippi railroad, and about two hundred on the road to Belleville.

A corps of engineers, we learn, are making the necessary surveys for the railroad to Terre Haute, and in a short time the plans and specifications will be ready for letting that railroad. It is reported to us that such arrangements have been made between the Ohio and Mississippi railroad company and the Terre Haute company, as will secure the construction of both roads.

The arrangement, if we are correctly informed, is about this: The two roads are to be run on one and the same track, from Illinoistown to Salem, a distance of about seventy miles—thus obviating for that distance, the necessity of constructing two parallel lines and consequently making this seventy miles a very profitable road, as it will have the business of both. From the point where the two roads separate, the engineers are extending the location to Terre Haute. There is about twenty-five miles of the Chicago branch of the Central railroad which is directly in the line to Terre Haute, and the use of which, it is probable, will also be secured—thus shortening, by one hundred miles, the road necessary to be constructed. We are informed that the capital is secured for the construction of this portion of the road.

In the meantime Belleville is to have an independent road, as neither the Ohio and Mississippi or Terre Haute roads will pass through that city. This blending of the interests of the two roads is not only beneficial to each, but we are assured it will not increase the distance nor the cost of either; and while it puts an end to all jealousy and rivalry, they may be dashed forward to completion with equal energy and dispatch.—*St. Louis Rep.*

Sault Ste. Marie Canal.

The Engineers, Capt. Canfield and Judge Burt, completed their surveys for the location of this work last week, and returned to Detroit, where the plans of the survey will be made out for the use of the General Government, and the State, in accordance with the provisions of the act for the construction of the canal. The ground has been found quite as favorable for the easy and speedy completion of this work as was expected.

The length of the canal on the longest line of survey, from the outer extremity of piers above and below, will be about 30 feet less than a mile, the shortest line would be considerably less. The longest route is considered as offering the greatest advantages; for while the additional expense would be but a trifle, and will not in the least delay the work, the longest route would carry the canal "at the head" into much stiller water in the bay above the rapids, affording an easier and more safe entrance for vessels, and at the same time it would be more protected from the heavy currents of ice that sweep down in the spring against the docks and shore at the termination of the shortest route.—*Lake Superior Journal.*

Evansville and Illinois Railroad.

The Princeton Clarion states that the Evansville and Illinois railroad company and the Wabash railroad company have united their charters, and that the construction of the road from Vincennes to Terre Haute will be carried on by the Evansville and Ill. R. R Co., and the same is to be regarded as a part of their road.

This union has been formed in pursuance of authority given for that purpose in the charters. We regard it as a matter of the first consequence that the road from Evansville, via Vincennes to Terre Haute, and thence on to Crawfordsville, should be under the management of one company—and think the union above alluded to will result in the promotion of the interest of the stockholders, and that of the community at large.

Though but little has been written or said in relation to the Evansville and Illinois railroad, we have ever regarded it as one of the first importance to the people of the Wabash Valley, in Indiana and Illinois, and to the Green river country in Kentucky. It has been prosecuted with equal, if not greater vigilance than any other road in the State. It has been but a little over two years since it was commenced, and now it is nearly completed, the whole distance from Evansville on the Ohio river to Vincennes on the Wabash river.

Pennsylvania.

Susquehanna Railroad—The lettings of the new road from Sunbury to Harrisburg, have been made. This road is fifty-six miles in length, and is designed as a part of a continuous line from Buffalo to Baltimore, which will bring those two cities thirty-three miles closer together than are Buffalo and New York by the present nearest route. Including the fifty-six miles just mentioned, there are only one hundred and fifty miles of the road to build, to connect Harrisburgh with the New York and Erie railroad at Elmira, the junction of the Elmira and Canandaigua road, thus giving access to the central line of roads, as well as to the whole line of the Erie road and its connections. A still shorter line, so far as Buffalo is concerned, is in contemplation, by the construction of a road from Williamsport to Wellsborough, and thence to Hornellsville, the termination of the Buffalo and New York City railroad. This would secure a saving of twelve miles in the distance, but would involve the building of a much longer road to form the connection. In time it will be also built, but it is probable that for the present the inhabitants will content themselves with the easier accomplished, though less direct line of communication. When that is secured, a person will be able to leave Buffalo in the morning, and sleep in Washington on the same night.

Ohio.

Central Railroad.—The Gazette says: "The railroad *will*, we are assured, be completed to Columbus this winter, and probably before the first day of January. A force of over 200 men and 40 trains are engaged on the big section, and in five weeks of even ordinary weather, for the season, the track will be laid over the whole line. As for the coal trade, the company, in view of the early completion of the road, by the first of January, have ordered a sufficiency of cars to haul all the coal that can be furnished." The same paper says that the Central road will save the people of Columbus "33 per cent. at least on the cost of every ton of

coal they use in their city." A fact which the consumers of coal in that city will be pleased to learn, and for which they should render appropriate thanks to the President and directors of the Central Ohio railroad.

Production of Cotton.

A late number of De Bow's Review says:—The cotton crop of the old world cannot be accurately estimated for want of correct accounts of the quantity consumed in India and exported thence to China. We may, by approximation, however, arrive at a conclusion sufficient to illustrate our views The quantity imported into the whole of Europe, from all parts of the world during the years 1846, 1847, 1848, and 1849, reached 11,502,000 bags of 300 lbs, which, at the average of prices for these years, 8¼ cts., was worth $293,301,000. The production of cotton in the United States commenced in 1790, and in the next year only 81 bales were exported, and yet of 11,502,000, above stated, $8,922,000 went from the Southern states of America, which at the same price (8¼ cts.) is worth $227,511,000. So that in quantity the production of the south is as 8,922,000 to 11,502,000, and the value is as $227,511,000 to $293,301,000, and thus we see that we produce more than three-fourths in quantity and value of this great staple. If the unascertained quantity consumed in India and exported thence to China, which is inferior in staple to ours is set off against the quantity of our cotton consumed in the United States, (which I have not added to the computation,) the result it is believed will not be varied.

Kentucky.

The Maysville Eagle states that the Maysville and Big Sandy Railroad company will be prepared to put their line under contract to Springville (opposite Portsmouth) as soon as the right of way is obtained, from landholders along the line. Parties are in the field now on this service and are making good progress. The whole line to Catlettsburg (mouth of Big Sandy) will be put under contract as soon as the legislature of Virginia gives assurance that the Virginia Central road shall terminate at that point, and it is confidently believed this will be done during the session which commenced on Monday last. Though the people and railroad interests of Kentucky are deeply interested in the proposed connection with the Virginia system, they will enjoy a direct and eligible railway communication, not only with the Atlantic seaboard but with the northern lakes, through Portsmouth, the Scioto and Hocking Valley railroad, which, uniting with the Sandusky and Newark line, crosses not only all the east and west lines of railway through Ohio, but also the line from Cincinnati to Cleveland. The connexions secured at Portsmouth are most fortunate for the Kentucky and Southwestern railway systems.

Canada.

Grand Trunk Railroad.—By the Canada Gazette of Saturday, we find the proclamation of His Excellency, giving effect to the company just formed for the construction of a railway eastward from Quebec, under the name of the "Grand Trunk railway company of Canada East:"

The Governor General has appointed the undermentioned gentlemen to be nine directors:

Hon. William Walker, Hon. N. F. Belleau, Sir H. J. Caldwell, Bart, Hon. Geo. Pemberton, Ed. Burstall, Esq., W. H. Tilstone, Esq., J. B. Forsyth, Esq., W, Patton, Esq., H. M. Jackson, Esq.

Illinois.

Rock River Valley Union Railroad.—The engineers of this road have completed the survey from The entire distance to Chicago is 124 miles—about Janesville to Madison. The route is very favorable. 20 miles farther than to Milwaukee by the M. and M. road, and nearly on an air line; when completed it will be the straightest road in the Union. The distance from Madison to Chicago by the way of Beloit and Belvidere, according to the late survey, is 149 miles; and to Milwaukee by way of Janesville, 142 miles, to Racine, by way of Janesville, 99 miles.

Springfield, Mount Vernon and Pittsburgh Road.—The commissioners of Knox county, Ohio, have determined to issue, on certain conditions, $150,000 county bonds to the Springfield, Mount Vernon and Pittsburgh railway company. This will enable the company to put under contract the line from Mount Vernon to Loudonville.

Delaware Railroad.

The Delaware railroad, from Dona river to Nanticoke, says the Philadelphia Commercial List, in the direct line for Norfolk, is steadily progressing. The whole line has been put under contract at prices greatly below the original estimates, the road being found by survey and level, to be unequalled in right lines and low grades by any other, perhaps, ever laid out. The cost of the road will be $306,000, two-thirds of which has been subscribed. The state subscribes $130,000, and makes a donation to the company of $50,000; all of which, tho' payable at long intervals, is perfectly well secured. To anticipate these funds, the company proposes to open books for an increased subscription of stock. This road will open the entire peninsula of Delaware and Eastern Maryland and Virginia to Philadelphia.

Pennsylvania.

Mine Hill and Schuylkill Haven Railroad.—The contracts for the extension of this road have been given out, and the work of grading will commence in a short time. The distance from the Mine Hill Gap to Ashland is about 10½ miles. The route selected is the one surveyed by Solomon W. Roberts, Esq., some time ago.—There will be two inclined planes descending the Broad Mountain into the Mahonoy Valley, which will be worked by stationary engines.

Hempfield Railroad.—At an election of directors for the Hempfield railroad held at Washington, Pa. on the 15th inst., Messrs. Lemuel Painter, Wm. M'Kennan and Calvin Reed, of Pa., and I. W. Mitchel, James Paull, S. Neel and James R. Baker, of Wheeling, were elected.

A Good Improvement.

The Baltimore and Philadelphia railroad company have recently placed upon their road a very simple and efficacious mode of preventing accidents to passengers and the officers of the company, by falling between the cars while attempting to pass from one to another while in motion. It consists of a stout leather apron being buckled from one platform to that of the adjoining car, thus effectually guarding against the consequences of a misstep.

Louisiana.

Opelousas Railroad.—The Chief Engineer advertises for proposals to be received up to the 18th instant, at the office of the company in New Orleans, for bridging and piling on the first fifty-two miles above Algiers.

Internal Improvements in North Carolina.

There is a bill now pending before the North Carolina Legislature which provides for the incorporation of the Atlantic and North Carolina railroad company, with a capital of $800,000 to construct a road from Goldsboro' to Beaufort or some point near it, and to run near Trenton and via Newbern. The bill also provides for a transfer of the State's stock (400,000) in the Raleigh and Gaston railroad, of $75,000 from the Fayetteville and Western plank road, and of $25,000 from the Wilmington railroad, in all $500,000, to the Atlantic road. It also authorises the counties and towns through which the road runs to subscribe to its stock.

Georgia.

Survey of Savannah and Albany Railroad.—We learn that Mr. F. P. Holcombe, Chief Engineer of the Waynesborough and Augusta, and Southwestern roads, has been appointed to make the preliminary survey of the Savannah and Albany road, and that he will have his engineering corps in the field in a few days. Such prompt dispatch augurs well for the energy with which this important work is to be pushed forward to completion.

Railroad upon the West Shore of Lake Champlain.

A company has been formed to construct a railroad from Albany to Montreal by extending the Albany Northern, to connect with the Plattsburg and Montreal railway. The following gentlemen compose the direction: Erastus Corning, John Townsend, G. Y. Lansing, and James D. Wasson, Albany; Samuel Cheever, Saratoga; John J. Harris and Thomas S. Gray, Warren; Jas. S. Whalem and Sylvanus Wells, Essex; Henry Green, and Jas. Rodgers, Clinton; Orville Clark and Geo. Harvey, Washington.

Kentucky.

Covington and Lexington Railroad.—The Covington Journal of the 13th inst. says, that the laying of the iron from Covington to Paris, has been left to DeGraff & Co., of Ohio. The work will be commenced in about two weeks.

Indiana.

Fort Wayne and Chicago Railroad.—The engineers of this road had reached Valparaiso on the 6th inst., and pronounce the route most favorable. The crossing of the Kankakee is upon hard bottom.

The Miners' Journal states that Thomas C. Atkinson, Esq., has been appointed general Superintendent and Mining Engineer of the Cumberland coal and iron company, and has accepted the station.

Hannibal and St. Joseph Railroad.

An election for directors of this road was held at St. Joseph, on Monday, the 1st Nov. The following gentlemen were chosen:

Robert M. Stewart, R. F. Lakenan, E. M. Moffatt, Robert I. Boyd, George A. Shortbridge, John Corby, T. R. Selms, Thornton S. Talbott, Thomas E. Thompson.

Illinois.

Terre Haute and Alton Railroad.—At the recent election, Shelby county, by a vote of 850 to 564, resolved to take stock in the Terre Haute and Alton railroad to the amount of $75,000. At a previous election the vote was against the loan. Coles coun-

ty has also voted to increase her subscription from $50,000 to $75,000, and to advance the rate of interest on her bonds from six to seven per cent per annum.

American Railroad Journal.

Saturday, December 4, 1852.

Virginia and Tennessee Railroad.

We give in another portion of our paper, a communication from C. F. M. Garnett, Esq., presenting a lucid and succinct view of the objects and condition of this great work, of which he is Chief Engineer. This road is the longest link in the great line which is to traverse, diagonally, the United States from one extreme to the other. All the parts of the great line are in active progress. The Virginia and Tennessee road has received an expenditure of nearly $3,000,000 without coming into the market for money. The road, with its equipment, will cost about $4,500,000. The company now propose to borrow a portion or the whole of the amount wanting to complete the work. It is justly regarded as one of the best projects in the country, both as regards its prospective business and income, and the safety and value of its securities. It is in the hands of a class of men, who have not only carried the work steadily and successfully forward, but who possess high reputation for means and integrity. No better security can be created than the one they offer, and persons who wish to invest in an unquestioned security, and one having a long time to run, cannot do better than turn their attention to these. They are convertible into the *stock* which we have not a doubt will be at a premium, so soon as the road is opened.

Lake Shore Railroad, and its Connections.

The recent opening of the road from Cleveland to Dunkirk is an event of no ordinary importance in the progress of our railroads. It is the first work of the kind to unite the two great divisions of the country, and will exert a very marked influence upon the traffic and income of our roads, particularly those of the western States. The value of this connection to the business and travelling public can hardly be estimated. All the dangers of lake navigation, the delay and tedium of travelling by stage coach, are now at an end, in the journey from the eastern States to Ohio, Indiana and Illinois. A person may now leave New York for Cincinnati in comfortable cars, over well constructed roads, and travel at the rate of 25 miles the hour, till he reaches his destination. In a few days more, Terre Haute and Lafayette, Indiana, Louisville, Kentucky, and Chicago, Illinois, will be connected with the great railroad system of the country; so that, by the 1st of January next, nearly all of Ohio and Indiana, and a considerable portion of Illinois, will have all the advantages of railway connection with the eastern States.

The event which we have noticed is not only important in its influence upon business and travel, but as tending greatly to strengthen our railroads throughout the country.

At the commencement of the recent movement which has been so productive in these works, fears were entertained by many that the occurrence of some unforeseen crisis (such as happened in 1837,) might check the progress, or defeat the construction of many works, before their whole lines could be brought into profitable use, and before those connections could be formed upon which success was chiefly predicated. Nearly all the most important parts of our great system was commenced at the same time, and there was in fact no little risk that some adverse storm might assail it, before it had become sufficiently strengthened and consolidated to withstand its attacks. All these dangers are now happily passed. So many of our important lines are either completed or their construction passed all contingency, that anything like a general break down is out of the question. The most critical point, that of the simultaneous construction of a large number of roads, calling for a large amount of money, and none in condition to yield any reveeue, has passed. We have not only 13,000 miles of railroad actually completed, but the roads that make up this aggregate are all so connected, that every additional mile opened, is now an extension of roads already in operation, and consequently comes into immediate and profitable use. A few years since our projects were absorbing an immense amount of capital, returning hardly a penny in the shape of earnings. Now, an extent of line is coming annually into use, nearly, if not quite, equal to that of new works projected, while the number of miles *in use* exceeds considerably the number in progress.

Practically, therefore, we may be said to have achieved full success. We have carried forward these enterprises till we have secured the construction of 13,000 miles of road, at a cost of at least $400,000,000. This investment, in the aggregate, having proved exceedingly profitable, forms the basis of nearly an equal amount of capital applicable, if wanted, for *new* works. The entire railroad investment of Ohio is worth in the market, to day, ten per cent more than its whole cost. Whenever, therefore, a new and attractive project presents itself, the holders of securities sell out, and invest the proceeds in such new works, with the expectation of realising upon the new security, a similar advance that they did upon the old. A foreign market takes eagerly all that are unquestioned, and nearly all go into this class so soon as experience has demonstrated their value. Our railroad investments, therefore, being at a premium upon their actual cost, instead of oppressing the market, exert a direct tendency to make money more abundant; and such will continue to be the case, so long as our roads prove profitable, no matter to what extent they may be carried.

But this is only half the story. When a road yields a net income of ten per cent upon its cost, from *tolls*, it often, and in a majority of cases, yields three and four times that sum, in the saving effected in the cost of transportation, which is the great obstacle to the progress of the country. The construction of a railroad often adds 40 or 50 per cent to the value of the corn, wheat, tobacco or cotton, raised in a particular district. This saving stimulates production, so that with a railroad, thousands of bushels are produced, where there were only hundreds before. In this manner, the wealth of the country is incredibly increased, and a prosperity is created, which neither our own people, nor foreigners, can understand or explain.

We think that every one who has paid any attention to the subject of railroad construction in this country, and watched all the stages of its progress, must be satisfied that no great calamity can now overtake it, and that however much particular lines may suffer from mismanagement, or because they are not called for by any sufficiently existing traffic, the aggregate of our works are now beyond the reach of all harm.

Maine.

Androscoggin Railroad.—This road is completed to Livermore Falls, and regular trains have commenced running from Leeds, its junction with the Androscoggin and Kennebec railroad to Livermore Falls.

Free Banking in Wisconsin.

The aggregate vote on the Bank Law in Wisconsin in eighteen counties, was 30,101 for the law to 6,755 against it. The bonds of the Milwaukee and Mississippi railroad company will be receivable next year as a basis for circulation under this law.

The receipts will then be sufficient to meet the requirements of the law.

Rabun Gap Railroad.

By a reconnoisance of the line of this proposed road, it appears that the dividing ridge between the Tennessee river and the waters flowing into the Atlantic can be surmounted by a grade not exceeding 53 feet to the mile.

Stock and Money Market.

We have but merely to repeat again the substance of our money articles for a number of weeks past. Money continues very abundant, with an active demand for first class railroad securities of every kind. For this class the demand exceeds the supply, and prices of every kind are moving upward.

A gradual appreciation of prices, with the present abundance of money, is to be expected, but we are by no means pleased with the attempts made to give a speculative value to many of the stocks of our new roads, particularly of roads in the west. These movements often proceed from parties in this city, some of whom hold large amounts of stock, much of which is often received as a *bonus* for certain *services*, or which was paid to represent the value of an old charter, or the *skeleton* of an 1836 affair, which has been resuscitated and clothed anew. The profits in such cases are measured by the price to which the stock can be carried. In other instances these efforts proceed from a weak and reprehensible ambition on the part of companies to outshine all their neighbors. Some of them are beginning to talk of semi-annual dividends of 7 and 8 per cent, and we have no doubt that some such are contemplated upon a few roads.

Now, all such proceedings are wrong and unwarrantable in every point of view. In the first place there is no evidence whatever that such dividends are earned. No western company is yet able to tell how much their roads can earn, because there are none yet completed. There are none the cost of which is fully ascertained. If there were any *completed* roads, still, it cannot yet be foreseen how many rival projects may be constructed, nor what amount of business will be left to each. No road in the west can command a monopoly of the business of a particular section of country, nor of that between two important points. There are to be no roads of pre-eminent importance in the Mississippi Valley, in consequence of the homogeneous character of the country which allows their construction in every direction. A road may have the monopoly of a particular traffic for 1852, and lose it in 1853. It is, therefore, neither sound policy, nor is it just either, to the stock and bondholders to pay a dividend that has not been earned, and which cannot, with any probability, be sustained.

But there are other objections to excessive dividends, equally potent as those cited. A dividend of

12 or 15 per cent will be sure to invite a competition, which cannot fail to produce the most disastrous results. The rates of interest upon the *best* securities in this country on long loans will not much exceed 4½ per cent; where a higher rate is demanded, it is to cover a supposed *risk*. When an investment will yield three times this sum, it is but reasonable to suppose that a large sum will immediately flow for investment in the same direction.

A notable example of the injurious effects of large dividends is furnished by the experience of the Massachusetts railroads. Some years since, a number of the leading works of that state declared, for one or two years, dividends varying from 8 to 10 per cent. The effect of this was, to carry railroad stocks to an extravagant figure, to beget a very lavish expenditure in the construction of new, and in many cases, uncalled for, works; which have proved most unfortunate speculations, and which would never have been begun but for the supposed extraordinary productiveness of railroad property. A very brief experience showed that the high figures named could not be sustained, and companies were forced to fall back to the old rates of 6 and 7 per cent. But a couple of years was sufficient to do great mischief. Under the influence of high dividends, stocks went to 120 that are now at par. The fall of course was the cause of much individual embarrassment and suffering. The losses sustained by the depreciation of sound stocks and in projects of a speculative character, have amounted to at least $20,000,000 in the New England states alone.

A large portion of this loss is directly attributable to the speculative feeling created in the manner described. The people of Massachusetts have learned this lesson, that railroads cannot on the average, yield an income greater than the ordinary rates of interest, on *good* security. This is all that railroad investments are entitled to yield. It must be borne in mind too, that in every portion of the U. States, numerous roads are in operation and progress, the object of which is not revenue, but the incidental advantages that flow from them, and that such roads come into direct competition with those in which capital is invested for revenue.

Again, in a country like the west, where railroads are everywhere practicable, and sanctioned by *general* laws, the community are not going to pay 15 per cent annually to railroad companies; by no means. Public opinion will very soon take care of such rates as these. The earnings must be reduced, by diminishing the charges of transportation. Railroads will not be allowed to remain an immense incubus upon the energies of the community. The fear of rival projects will in the end lead every company to put their charges down to the lowest possible point; so that, where railroads are free to be built, both by *law*, and by the character of the country, monopolies and high rates of charges, and consequently excessive revenues, are out of the question. Extravagant dividends upon new works, therefore, should never be declared—first, because there are no means of determining whether they have been earned; secondly, because they cannot be sustained; and, thirdly, because they tend to promote speculation, and the construction of works not called for by any existing want; and in this manner are often productive of great loss and suffering.

Another serious objection to extravagant dividends, is the distrust they create of the want of integrity in the management of our roads. A foreigner, for example, holding the bonds of a western road, hears that a 7 per cent semi-annual dividend has been declared, perhaps the second or third that has ever been paid. What are his views of such an act? That it is a fraud upon his rights; that the money paid for dividends actually belongs to him. His suspicions are by no means allayed by receiving his interest regularly, as the prompt payment of this for a time may be necessary to conceal the objects in view, which are, to appropriate to the stockholders the earnings of a road, and in the end to leave the bond holders to take care of themselves. That such suspicions have been created, we have the best means of knowing.

We have no doubt that strong western lines can honestly pay 10 per cent, and lay up something in addition for a few years, as a contingent fund. That, on the average they will exceed this, we do not believe. It is sufficiently high for the best interest of the country, and higher than can be sustained for a long series of years. And for one, we must protest again any great excess over this as calculated to produce the injurious results, and beget the suspicions of which we have spoken.

With regard to *fancy* stocks no remark is necessary. *Uncertainty* of value, is a necessary condition that fits them to become a *fancy*. The price these merely indicate the relative positions of those who gamble in them. With such, neither excessively high nor low prices, are regarded as any indication of real value.

We hope our suggestions, which, we are convinced, are in the main correct, will be carefully considered, and that there will be no occasion to make any particular application of them.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, DECEMBER 4, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	102½
U. S. 6's, 1856	111
U. S. 6's, 1862	116
U. S. 6's, 1862—coupon	117
U. S. 6's, 1867	121
U. S. 6's, 1868	121½
U. S. 6's, 1868—coupon	121½
Indiana 5's	101½
Indiana 2½	61½
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	97
Illinois 6's, 1847	84
Illinois 6's—interest	56
Kentucky 6's, 1871	111½
Maryland 6's	110
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	114
New York 5½'s, 1865	113
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	108
Ohio 6's, 1860	111½
Ohio 6's, 1870	117
Ohio 6's, 1875	117
Ohio 5's, 1865	106
Ohio 7's, 1851	105½
Pennsylvania 5's	98½
Pennsylvania 6's, 1847-'53	101
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	109
Virginia 6's, 1886	112

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	104
St. Louis	96½
Louisville 6's 1880	96½
Pittsburg 6's, 1869-1871	103½
New York 7's, 1857	108
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	103½
New York 5's, 1890	105
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	109½
Baltimore 1870-'90	108
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	113½
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	100½
Erie convertible bonds, 7's, 1871	100½
Hudson River 1st mort., 7's, 1869	108½
Hudson River 2d mort., 7's, 1860	103½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	93
Reading mortgage, 6's, 1860	100
Michigan Central, convertible, 8's, 1860	110
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	123
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	108
Ohio Central 7's, 1861	98

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Nov. 25.	Dec. 2.
Albany and Schenectady	114½	112
Boston and Maine	107½	108½
Boston and Lowell	109	109½
Boston and Worcester	105	105
Boston and Providence	89½	89½
Baltimore and Ohio	93½	95½
Baltimore and Susquehanna	30½	30
Cleveland and Columbus	1 7	127½
Columbus and Xenia	—	—
Camden and Amboy	150	—
Delaware and Hudson (canal)	128	130
Eastern	98½	97½
Erie	95	95½
Fall River	—	—
Fitchburgh	104½	103½
Georgia	—	—
Georgia Central	—	—
Harlem	73½	72½
" preferred	111½	111½
Hartford and New Haven	—	129
Housatonic (preferred)	35	35
Hudson River	79	78½
Little Miami	—	120
Long Island	46	48
Mad River	—	99
Madison and Indianapolis	108½	111
Michigan Central	114	113½
Michigan Southern	133	133½
New York and New Haven	115½	115½
New Jersey	131	131
Nashua and Lowell	—	—
New Bedford and Taunton	—	117
Norwich and Worcester	53	52½
Ogdensburgh	27½	26½
Pennsylvania	48	46½
Philadelphia, Wilm'gton & Balt.	37	39
Petersburg	—	—
Richmond and Fredericksburg	105	105
Richmond and Petersburg	35	35
Reading	100½	100½
Rochester and Syracuse	126½	125½
Stonington	57½	57½
South Carolina	—	122½
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	143½	141½
Vermont Central	17½	17
Vermont and Massachusetts	19½	22½
Virginia Central	—	40
Western	105½	105½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

Foreign Correspondence of the Journal.

No. 21 Tokenhouse Yard, London, November 10, 1852.

Dear Sir: Since I wrote to you under date of the 1st inst., Welch rails have advanced to £8 per ton, from £7,15, and as the duty on this article in the United States is 30 per cent *ad valorem*, the advance from the minimum price of £4,5 since May, is severely felt by the American railway interest. The duty of 30 per cent on rails which cost £4,5 in May last in New York, was £1,5,6, or $6,32 per ton, which added to the first cost—say £4,5 or $21,20, made a total of $27,52 per ton for rails. Now look at the difference, since the rise in price of rails.—The duty being 30 per cent. on £8 makes £2,8, or ($11,92,) which added to the first cost of £8, or $40, makes a total of $51,92 per ton for rails, showing a difference of no less than $24,40 per ton, which the American railway company is obliged to pay more for rails in the present month of November, than in the month of May last. This matter will be still worse, when as I fear, rails shall get up to £10 per ton. The duty then will be £3, and the price £10, making £13, or $65 per ton, instead of the $27,52 per ton which it was last May. This shows the inexpediency of an *ad valorem* duty. First, it brings too much money into an already over-flowing treasury, and it makes the most useful of all institutions in America—the railway company pay an extravagant duty, which enhances most unfortunately an article, indispensable for the construction of a highway, which is beyond price in our country. I hope the *ad valorem* duty will be abolished, especially when the price of rails even get to £5 per ton and upwards. But in the interest of my own State, (Pennsylvania,) I say let there be no duty at all upon rails, then the Pennsylvania iron master will find an abundant demand for Charcoal iron for locomotives, tenders, wheels, axles, stations and many other articles—all of which must be made out of the iron manufactured at home, and must be more consumed than the quantity of rails would equal. Rails made out of the Charcoal iron of Pennsylvania are an extravagance as well as a waste, for they will not wear so well because they would be softer and would be cut by the wheels, whilst the rails made of the tough and enduring Welch No. 2 bar iron, so that when rolled the rail would be No. 3 iron, would outlast, although so cheap in comparison with the Charcoal rail, the best rail to be made in America. In my letter of the 1st inst., I told you that Staffordshire and other midland counties' iron is better by £1 per ton for the general market, than the Welch iron, but for rails it is decidedly inferior, and Welch rails are always preferred and command a higher price than Staffordshire or other Northern rails. So South Welch rails are better than North Welch rails. When the South Welch rail is properly made, there is nothing can exceed its indurance—it is almost impossible to break it. I will give you an example of recent experience of my own. I am inspecting a large qnantity of rails for an American railway company—the rail is of the T pattern, weighing about 58 lbs. per yard. After seeing that the rails were properly rolled, taking care that the proper quantity of No. 2 iron was placed in the pile to secure proper strength as well as freedom from ragged edges, which would certainly be the case if too many of No. 1 iron pieces went into the pile, I determined to have a rail broken for the purpose of seeing what was its strength, and how the fracture looked. I selected the poorest looking rail out of the large heap of rails and ordered that to be broken. This was done as follows: About 16 inches from one end of a 20 feet rail, I had the whole circumference of the rail nicked with a cold chisel—it was thus cut all round to the depth of more than ¼ of an inch. The rail was laid down on an iron platform, at one end of which 12 stout men held down the rail—the opposite or nicked end of the rail overhung the platform by the whole 16 inches. A stout man with a sledge hammer of 65 lbs. weight struck repeated blows upon this end, and being tired out, he was replaced by another, and he again replaced by a third and finally that one replaced by a fourth strong vulcan of a man—they giving 50 of the most severe blows they could, before they succeeded in effecting a fracture of this tough Welch iron. The fracture looked anything but like a piece of cast iron—it was rough, ragged and fibrous, showing the greatest possible strength, which gave me great pleasure, for I have occasionally heard our countrymen say that if you let a bar of English railway iron fall from a height of 6 or 7 feet, it would break like a bar made of glass. The rails are subjected to the roughest treatment possible, and if they arrive safe and sound—unbroken—some three or four hundred miles in the interior of the United States, they may be pronounced as worthy to be put down upon the railway. In a few words I will describe the rough treatment the rail is subjected to. 1st. After coming through the rolls, ends cut, and filed smooth, it is *thrown* down upon the (iron) straightening platform, where blows of a sledge are applied until it becomes quite straight—2nd: it is then thrown from a height of several feet into an iron waggon, which conveys it to the side of a canal boat—3d: it is thrown several feet into the canal boat, which going down to Newport or Cardiff is unloaded, and the rail is for the 4th time thrown on the wharf, and afterwards for the 5th time thrown on the great pile of rails, when a sufficient number are collected they are for the 6th time thrown down into the hold of the coaster to convey them to Bristol or Liverpool for shipment across the Atlantic—when they arrive at Liverpool they are thrown for the 7th time on the quay, and then again conveyed to the side of the American ship and thrown for the 8th time on the wharf, for the 9th time they are thrown down the hold of the American ship which conveys them to City Point—Virginia, or Baltimore, Philadelphia or New York—and from the ship they are thrown for the 10th time on the wharf, where I will leave them and let the reader imagine how many more rough handlings and throwing down operations they are subjected to before they arrive at Cincinnati, or Chicago, or Parkersburg, or some other remote interior town of the United States, where they are to be used for laying down upon sleepers and made into a railway. These roughly handled rails are not quite so brittle as glass, otherwise they would never arrive safely at Cincinnati, but I must say that it is necessary to have an inspector of rails to see that they are properly rolled and properly finished before they leave Nantygto, or Cyfanthfa, or Penydanan, or Doulais, or whatever other works they are made at. Before they go on ship-board they cannot be too carefully inspected. I am afraid the price of iron is going up too high—the consumption must be checked by it. I observe the colliers as well as iron puddlers of Staffordshire having turned out for an advance of wages, the masters were obliged to give in and the wages are put up to the highest rates ever known before. This must tend to keep up the price of iron.

An American.

Journal of Railroad Law.

APPORTIONING DAMAGES.

In the case of *Wheaton vs. the New York and Erie railroad company*, lately tried in our Supreme Court Circuit before Judge Mitchell, it was ruled, that when in a suit for damages, both plaintiff and defendant are in fault—and one injury complained of, has been occasioned by plaintiff, and *another* and *distinct* injury, affecting the same subject-matter, has been occasioned by defendant, there must be a due apportionment of the damages, and each party must suffer the consequences of his own acts.

It will be perceived, that this is not the case of a *single* injury, in producing which both parties have been instrumental. Under such circumstances—the plaintiff who is partly in fault, cannot recover any damages from the defendant.

In the case above-mentioned, which was brought for injury sustained by cattle which had been transported by the defendants, the company allowed an agent of the plaintiff to accompany the cattle, free of expense, expressly that he might take care of them.

The jury, by consent of parties, passed on certain facts, and by like consent the Court was to find any other facts from the evidence which the jury should not find. There was no direct evidence as to what portion of injury was caused to the cattle by want of food and water; and what portion by the delay merely, and the injury that would arise from the delay if they had been properly fed and watered.—The cattle were somewhat bruised and were stiffened in the legs, these were injuries resulting from their being long confined in the cars; they looked gaunt and hollow, these were injuries from the want of food and water. The jury put the whole of this damage at $5 per head. The cattle were not fed from Saturday 3 P. M., until Monday 5 P. M. The Judge declared himself satisfied that at least half of this injury might have come from want of food and water.

In this case, it was regarded the duty of the plaintiff to furnish food and water if the cattle needed it, and the company were not in fault; and when there was delay on the part of the company, then it was his duty to notify the officers of the company that the cattle needed food and water, and ask them to stop to enable him to procure it. When the delay was such as to cause injury to the cattle for the want of food and water, it was this agent's duty to know it and to notify the company of it, and to take means to procure what was necessary for them.—His omission to do so was a gross neglect, for which he might be accountable perhaps to the plaintiff, but for which the company is not to account.

Unless, therefore, the plaintiff consents to reduce the verdict by deducting $167,50 from it, there must be a new trial. The Judge said that he could not direct judgment for defendants, as part of the injury was caused by mere delay.

FIRES CAUSED BY LOCOMOTIVES.

By the law of 1840 enacted by the Legislature of Massachusetts, railroad companies are liable for losses "by fire communicated from their locomotives." In the case of *Hart vs. the Western railroad company*, 13 Metcalf 99, the question was presented whether a fire came within the scope and meaning of this clause, which was occasioned not *immediately* by the locomotive—but by a *previous* fire of which the locomotive was the cause.

A shop was burned, in the case above-mentioned, by sparks coming from the locomotive, and the sparks blown from the burning shop were commu-

nicated to plaintiff's house across the street, and about 60 feet distant. The owner sued for damages. And the Court held that he was entitled to recover.

It may be added that the Court considered that the plaintiff's right of recovery was not barred by the fact that he had been paid the value of his house by the underwriters who had insured it. Although the plaintiff had once received the value of his house—he had also, as a trustee of the underwriters and in their behalf, a right to recover its value again from the railroad company.

Practically the underwriters were substituted in the place of the plaintiff.

DESTRUCTION OF SLAVES.

Herring vs. Wilmington railroad company, 10 Tredell 402, was an action brought to recover the value of two slaves. They lay asleep on a straight railroad track, and might have been seen at the distance of a mile. It was proved that when the Engineer had approached within twenty-five yards of them he reversed his engine. But it was too late, and both the slaves were killed.

Whether or not the Engineer was in this case guilty of negligence, the court held to be a question of fact to be decided by the jury. The Engineer had a right it was said, to presume, that being rational creatures, the negroes would have consulted their safety, and have seasonably abandoned their perilous situation. Judgment was given in his favor.

Pennsylvania Railroad.

The subscription of the entire capital of $10,000,000 of the Pennsylvania railroad is completed.

Locomotive Engines.

DANFORTH, COOK & CO., Patterson, N. J., having erected an extensive shop, with the most approved machinery and tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various tools suitable for furnishing repair shops.

The business of machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1y49

To Contractors.

SEALED PROPOSALS are requested for the Graduation, Masonry, Timber Bridging, and Track-laying of the Albany and Susquehanna Railroad, extending from Albany to Binghamton: distance 140 miles.

The line will be ready for the inspection of Contractors on the 16th November, and proposals will be received until the 8th December.

The work will be divided into sections of about five miles each, and Contractors can include in their proposals as many of these as may suit their convenience.

The Company reserves the right to accept of such proposals as in their judgment will best secure the prompt construction of the road.

All proposals to be sealed and indorsed: "Proposals for the Albany and Susquehanna Railroad," and directed to J. P. Kirkwood, 116 State street, Albany.

The plans and profiles can be seen at the Engineer's Office, 116 State street, Albany, on and after the 16th of November, where further information can be obtained.

E. C. DELAVAN, President.
JAMES P. KIRKWOOD, Engineer.
Albany, 116 State Street.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

Dudley B. Fuller & Co.,
IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

PEREMPTORY SALE of RAILROAD BONDS. THE BUFFALO, CORNING AND NEW YORK RAILROAD COMPANY will sell by Auction, through SIMEON DRAPER, on Wednesday, December 15th, at 12½ o'clock, at the Merchants' Exchange, $150,000 of their first Mortgage Bonds. These Bonds are for $1,000 each, and mature 1st April, 1867. They bear coupons for interest, at the rate of 7 per cent. per annum, due on the 1st April and 1st October, at the Bank of Commerce, in this city. They are secured by the first and only Mortgage on their whole road and franchises, made to John A. Stevens, Jas. S. T. Stranahan, and John A. G. Gray, Trustees, and are convertible, at the option of the holder, into the Capital Stock of the Company, any time before 1857. The Mortgage provides for an issue of $1,000,000 of bonds in specified lots, as consecutive portions of the road are thrown open to public traffic. $400,000 were sold last May; $150,000 are now to be disposed of, and the balance is not to be offered till next summer, after the other portions of the work are completed.

The road is now finished and running to Consecus, a distance of 57 miles, and is graded for nearly 41 miles further, to Batavia. The iron is purchased and paid for, for this whole distance. When in May last, $400,000 of the bonds of this Company were offered at auction, the eastern section of the road had only just been put in operation, and all estimates of its earnings were merely conjectural. The cars have now been running since May, on an average, about 35 miles, and the net earnings are equal to fully ten per cent. on the entire cost of the whole 57 mile section now completed. As yet only the way traffic has contributed to the receipts, which have been constantly increasing; and the directors anticipate, with well grounded confidence, a continued augmentation from the new channels of traffic they are now opening. It is believed that the receipts now exceed those of any other section of unfinished railroad in this State, of similar length, and so short a time in operation.

The whole work is under contract to Buffalo, where a location is secured for Depot buildings, and the directors feel entire confidence in saying, that the cars will run over the whole road by next July. The length of the line from Corning to Buffalo is 134¼ miles. Its grading, masonry and bridging are of the best character; the Depot buildings are neat and substantial, and the entire work will compare favorably with any other in the country. Its rails are of the heavy T pattern, and are laid on the broad gauge, forming the connecting link between the Erie railroad at Corning and the Great Lakes at Buffalo. The Buffalo and Brantford road is of the same broad gauge, and will continue this channel of railroad communication to Detroit and the Far West. The district of country through which the Buffalo, Coraing, and New York road runs is the most productive in the Western part of this state, and affords local traffic sufficient to sustain and pay good divideuds on the cost of the road, and the directors count with confidence on a fair share of the great through travel in addition. The character of the bonds now offered, is such that the directors can say with sincerity that they are equal to any railroad securities in the market, the net earnings of that part of the road now running being sufficient to make certain the payment of principal and interest on the whole amount of bonds the Company is authorised to issue, thus placing their safety beyond question. The convertible clause adds greatly to their real value as an investment.

To Railroad Contractors.

PROPOSALS will be received at the office of the New York and Boston Railroad Co., in the city of Middletown, until the 20th inst., for the grading and masonry for the road bed for a double track of the N. Y. and Boston Railroad.

Proposals are invited for the first, second, and third divisions, commencing at New Haven, and extending easterly about 71 miles. Also, for the fourth divisions if prepared in time.

Profiles may be examined and specifications of the work can be had by applying at the Company's Office.

CHAS. R. ALSOP, President.
City of Middletown, Nov. 1, 1852.

NOTICE.

IN Consequence of the Accident at Windsor Locks, by which Gen. Palmer, Chief Engineer of the New York and Boston Railroad, was severely injured, and is still unable to attend to business, the time limited for receiving Proposals for the Grading and Masonry of 71 miles of the New York and Boston Railroad is extended to December 5th, 1852. CHAS. R. ALSOP, President.
Middletown, November 16, 1852. 1t

A. Whitney & Son,
PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

The Cambria Iron Company,

ORGANIZED under the laws of Pennsylvania, with a capital of $1,000,000, propose embarking in the manufacture of Railroad Iron, at *Johnstown, Pennsylvania.* The location they have secured offers advantages superior, it is confidently believed, to any other in this country. Iron Ores, semi-bituminous Coal, Limestone, and nearly every article required for the manufacture of Iron, exist, in inexhaustible quantities, on the spot; and these deposits are now worked, and the minerals delivered, cheaper than at any other known point now occupied for the manufacture of Iron. The Pennsylvania Canal and Central Railroad pass through the property, and cross each other at the spot where the mineral veins are most thoroughly opened out; and which location, for its other advantages for facility of manufacturing, and vicinity to a populous borough, has been selected for the establishment of Railroad Iron Works, and for the erection of other Blast Furnaces, in addition to those now in operation.

The attention of capitalists disposed to embark in an enterprise which offers a remunerating profit, even on the low prices of iron current before the rise of the last six months, and which promises to be very lucrative while anything like present rates prevail, and also of Railroad Companies desirous of making arrangements for Iron Rails to be delivered in 1853, is called to this enterprise.

Out of the capital named above, the sum of $360,000 has been devoted to the purchase of about 30,000 acres of land, upon which there are six blast furnaces, which cost, including the personal property accompany them, $350,000. Three of these furnaces are now in successful operation, and by next spring, with an outlay of about $6,000, the other three can go into blast; and at the present price of pig iron, these six charcoal furnaces would realise a net profit of six per cent on $1,000,000 capital.

The company contemplate erecting four more blast furnaces, for smelting with coke the iron ores at Johnstown, and also works for manufacturing railroad iron. To do this, they will require subscriptions in all to the amount of $600,000, and to carry on most profitably the manufacture and disposal of rails, the whole chartered capital should be raised. Subscription lists, providing that no subscription shall be binding unless *bona fide* subscribers for the amount of $600,000 are obtained by the 1st January next, and pamphlets descriptive of the advantages of the locality and estimates of costs, can be had of the undersigned.

D. M. WILSON, Newark,
EDWARD F. GRANT, New York,
SAMUEL H. JONES, Philadelphia,
JOHN HARTSHORN, Boston,
T. F. SECOR, New York,
G. S. KING, Johnstown,
P. SHOENBUGER, Pittsburg,
RHEY, MATHEWS & CO., Pittsburg,
or at the office of the Provisional Committee, at
SIMEON DRAPER'S, 46 Pine-st.

The subscriber is prepared to enter into contracts to deliver RAILROAD IRON to Companies requiring it in 1853. SIMEON DRAPER.

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

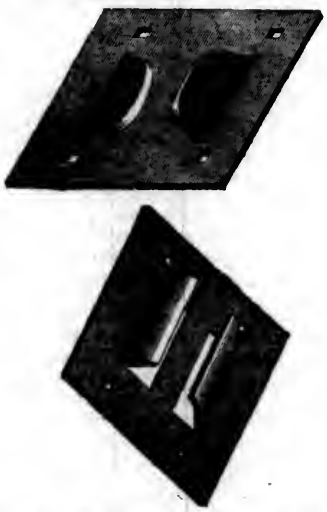
PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.

WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.



Patent Wrought Iron Railroad Chair.

THE undersigned are now prepared to manufacture their Patent Wrought Iron Railroad Chair, at the rate of fifteen tons per day. They are made exclusively from best Trenton Iron, which received the prize medal for strength at the World's Fair at London.

The patent is for the CHAIR itself—which is formed by raising the lip out of the plate sufficiently high to receive the rail. It is obvious that while the strain upon the lip is so slight as to remove all danger of its breaking, it becomes less the more tightly the lip is made to clasp the rail. The cheapness and durability of the chairs, and the facility with which the track can be adjusted, commend them to public favor.

SIZES AND PRICES.

A Chair 8 by 7½	inches	3-8	inch thick,	costs	25 cents.
" " "	"	7-16	" "		27 "
" " "	"	1-2	" "		29 "
" " "	"	5-8	" "		33 "

Other sizes are made to order at equivalent rates. Sample Chairs will be forwarded, free of charge, on application to

COOPER & HEWITT,
17 Burling Slip, New York.

December 1, 1852.

LOCOMOTIVE, TENDER, & RAILROAD CAR SPRING Manufactory.

THE undersigned, manufacturers of Locomotive, Tender and Railroad Car Springs, beg leave to inform Railroad Companies, Locomotive and Car Builders, that we have enlarged our Works, and are prepared to execute,

ON THE MOST REASONABLE TERMS,

any orders for LOCOMOTIVE, TENDER AND CAR SPRINGS, they may favor us with, OF THE BEST OF STEEL, all of which we have manufactured to order from SWEDE STEEL IRON.

McDANEL & HORNER,
Wilmington, Delaware.

December 1, 1852.

We respectfully call attention to testimonials in favor of our Springs from the following well-known gentlemen connected with Railroads:

Locomotive Works, Philadelphia, 1st Sept., 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

Gentlemen: In reply to your letter of yesterday, with regard to the character of the springs which you have made for the locomotives and tenders constructed by us, we have much pleasure in stating that they have given entire satisfaction, and we have found them, upon trial with those made by others, to be superior in the essential qualities of elasticity and durability, combined with lightness, the result of employing the best material only, and having it properly manufactured.

We are using them exclusively under our locomotives and tenders, and can with confidence recommend them as being superior to any we have yet met with.

Yours respectfully,
NORRIS, BROTHERS.

—

This is to certify that we have for a number of years been using steel springs manufactured by McDanel & Horner, under our locomotives, tenders, passenger and freight cars on the Philadelphia, Wilmington and Baltimore railroad, I take pleasure in saying that they have always given entire satisfaction. Their durability and elasticity are superior to any others that we have used, and can confidently recommend their make of springs to all railroad companies, and others who may want a good article.

I. R. TRIMBLE,
Gen'l Sup't P. W. and B. R. R.

Wilmington, Sept. 20, 1852.

—

Superintendent's Office Central Railroad, Savannah, Ga., Oct. 15, 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

I have much pleasure in certifying to the superiority of your steel springs.

This company have for upwards of two years had in constant use your locomotive, tender and railroad car springs, (the latter in large numbers), and we have found them uniformly well finished, properly tempered and durable. Our orders have always been promptly filled, and your terms have been moderate.

Very truly yours,
MACPHERSON B. MILLER,
General Superintendent.

—

A considerable number of engine and car springs were furnished the Philadelphia and Reading railroad several years since, by Mr. John McDanel, before the company made such articles in their own workshops.

These springs proved invariably of excellent quality, elastic and durable, and equal to the best in use during the above period

G. A. NICOLLS,
Engineer, etc., Philad. and Reading R. R.

Reading, Pa., Sept. 9, 1852.

—

Macon and Western Railroad, Macon, Oct. 11, 1852.

Messrs. McDanel & Horner,

Gents: This company have purchased and used car and engine springs of your manufacture. They have been tested under the same cars with springs from other approved makers, and, so far as appears to us, have proved themselves fully equal to any we have used.

Yours very respectfully,
EMERSON FOOTE, Supt.

—

Macon and Western Railroad,
Macon, Oct. 14, 1852.

Messrs. McDanel & Horner,

Dear Sirs: This company have used the springs made by your firm for several years under engine, baggage and freight cars, and have found them superior to any I have seen.

Yours respectfully,
THOS. DOUGHERTY,
Master Machinist M. and W. R. R.

—

Richmond, Va., Nov. 1, 1852.

Messrs. McDanel & Horner,

It affords me much pleasure to say, after some seven or eight years use of your steel car springs, I find them equal to any we have used, and have given entire satisfaction.

I am very respectfully yours,
THOS. SHARP,
Sup't R. F. and P. R. R.

—

Petersburg, Va., Sept. 18, 1852.

Messrs. McDanel and Horner,

Dear Sirs: I have been for several years past using steel springs of your manufacture under a large portion of the cars that I have built for the different railroads in this vicinity, and I consider them as good in every respect as any steel springs I have ever used.

Very respectfully yours, etc.,
URIAH WILLS,
per Jas. J. Lills.

SIMEON DRAPER, No. 46 Pine-st., offers for sale, a variety of RAILROAD BONDS and STOCKS; also CITY, TOWN and COUNTY BONDS, among which are—

1st Mortgage Convertible—

7 per ct.	bonds of	Canandaigua and Corning R.R., payable in	New York, 1860
Do.	Cleveland,	Columbus and Cin.	do....1859
Do.	Buffalo,	Corning and New York	do....1867
Do.	Western	Vermont Railroad	do. 1861-71
8 do.	Michigan	Central	Boston, 1860
Do.	Peoria and	Oquawka,	New York, 1862

1st Mortgage—

7 per ct.	bonds,	Corning & Blossburg	do....1871
Do.	Mansfield and	Sandusky	do....1860
10 per ct.	bonds	do	do...1855-7
Do.	New Albany and	Salem	do..1858-62
7 per ct.	Vermont	Valley	do....1860
6 do.	East Tennessee and	Georgia	do....1880
7 do.	Seabcard and	Roanoke	do....1860
Do.	Troy and	Bennington	Troy, N. Y. 1861
Do.	New Jersey	Central	New York, 1860-70
Do.	Dauphin and	Susq. Coal Co.	do....1871
Do.	Brunswick	Canal Co	do....1857

Also, second mortgage bonds of many of the above companies, and—

7 per ct.	bonds	Saratoga and Wash.	N. York, 1862
Do.	Mad River	Railroad	do....1866
Do.	Troy and	Boston	do....1864
Do.	Muscogee	Railroad	Savannah, 1862
Do.	Huron and	Oxford	N. York, 1862

Also, Georgia 7 per ct. State stocks, interest payable semi-annually ..... do....1872

City of Savannah 7 per cent. bonds, interest payable semi-annually ..... do..1870-76

7 per ct. bonds of the Town of Huron, Erie county, Ohio ..... do....1861

Do. Township of Waynsfield ..... do....1862

10 per ct. City of Keokuk, Iowa, Keokuk, 1863

6 per cent, City of Memphis..Philadelphia, 1880

10 per cent. City of San Francisco..... 1870

7 per cent. Atlantic Steamship Co..N. York, 1855

12 per cent. Improvement Scrip of the State of Wisconsin for improvement of Fox River ..... do....1862

6 per cent. State of Illinois Liq. Bonds, issued 1849, interest paid semi-annually by J. Wardsworth ..... N. Y. city, due 1865

2½ per cent. State of Indiana Bonds..... 1866

Troy and Rutland railroad Stock, with guarantee of 4 per cent. dividend and one half surplus profits of this and Rutland and Wash. R. R.

Rutland and Whitehall Stock, with guarantee of 4 per cent. dividend by Saratoga and Washington Railroad.

Also, Stock in the Cumberland Coal and Iron Co.
Stock of the Cambria Iron Company.
Stock in the Western Vermont R. R. Co.
Stock in the Junction R. R. Co. of Ohio.
Stock in the Mad River R. R. Co.
Stock in the Southern Bank of Kentucky.
Stock in the Mechanic's Bank of N. Y.
Stock in the East River Insurance Co.

The Cold Spring Iron Works,

INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—

John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder, " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

Change of Hours.

MONTREAL & NEW YoRK AND Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜



FALL AND WINTER ARRANGEMENT.



ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P.M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3·50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M.

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad, and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

RAILROAD CAR TRIMMINGS.

DOREMUS & NIXON,
No. 21 PARK PLACE,
AND
18 MURRAY STREET,
IMPORTERS

OF PLAIN AND FIGURED MOHAIR PLUSH;
Printed and Uncut do. do. entirely new designs;
ALSO GERMAN OIL CLOTHS FOR HEAD LININGS,
Enameled with Gold and Silver and Velvet Printed.

☞ These Headings are the most beautiful ever shown, having been made expressly for **American Cars.** D. & N. are sole Agents.

ALSO, PATENT PARIS COTTON FELT.

☞ This is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin.

It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair.

ALSO, BROCATELLES and MOQUETTS.
ALSO, CURLED HAIR.

N. B.—D. & N. have the Plush and Linings *in bond for exportation.*

November, 1852.

Railroad Iron.

1500 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

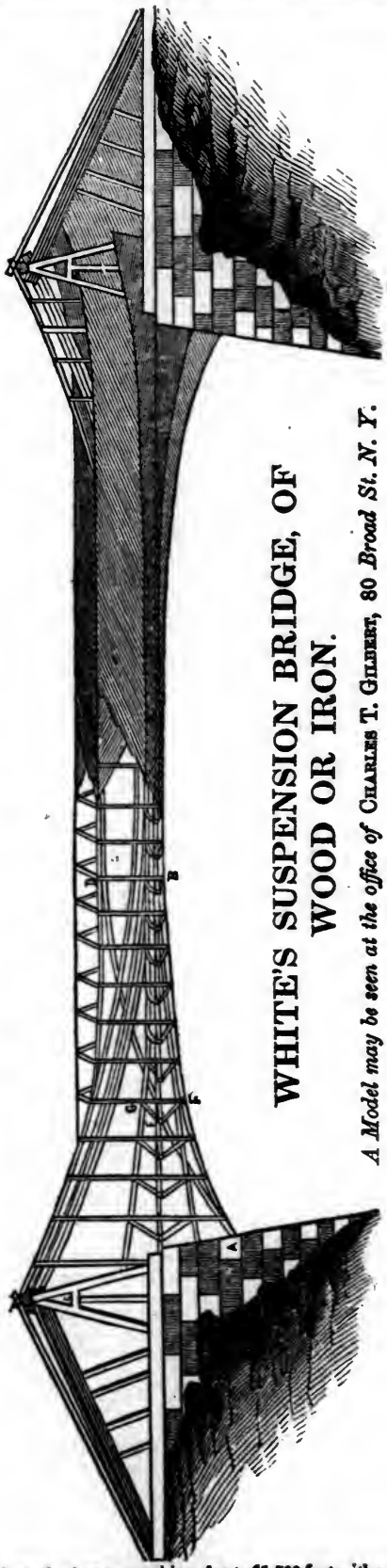
November 4, 1852. 4t

Railroad Iron.

1600 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

November 4, 1852. 4t



WHITE'S SUSPENSION BRIDGE, OF WOOD OR IRON.

A Model may be seen at the office of CHARLES T. GILBERT, *80 Broad St. N. Y.*

Length of span, anything short of 1,500 feet with perfect safety for every kind of travel. The above cut represents a Wooden Bridge with a roof. The arrangement for the Iron Bridge is such as to avoid all the bad effects of changes of Temperature. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, Proprietors,
Cambridgeport, Mass.
Office next door to the Athenæum.

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY,
CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR,
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY
JAMES ALLEN,

of New York.
of California.

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*

Railroad Iron.

1400 TONS Railroad Iron, weighing about 55 lbs. per yard, of an approved pattern, now in bond, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

November 4, 1852. 4t

Huger, T. P.,

Northeastern Railroad, Charleston, S. C.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 3s

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sho' Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.

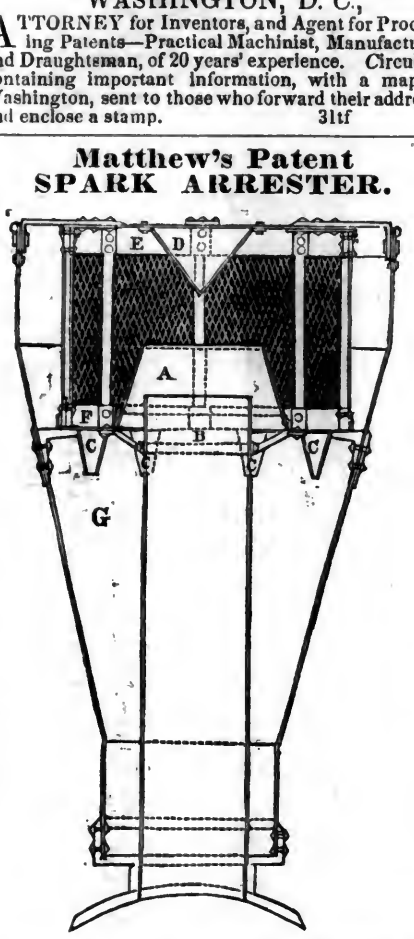
July 10, 1851.

I. Dennis, Jr.,

WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Matthew's Patent SPARK ARRESTER.



THE Patentee of the above named Spark Arrester invites the attention of Railroad Directors and Officers of Railroads, who have no other interest than the comfort and safety of passengers, and the economy of their company, to test them and judge for themselves. To all such persons, the Patentee will furnish his Patent Spark Arrester free of charge, by such parties sending the necessary dimensions. And the price will be, for the Spark Arrester and Chimney, with patent right to use and repair the same, all ready to place on the Locomotive, $130—if approved; if not approved, and returned, no charge made. He warrants them superior to any in use, *in all points, lighter, cheaper, more durable, safer, cleaner*, saving from 15 to 20 per cent in fuel.

The necessary dimensions to be furnished, are:

1st The radius of the smoke box, on which the pipe sets.
2d. The height from smoke box to top of pipe.
3d. The diameter of cylinder and length of stroke.
4th. Whether a cut-off is used or not.

DAVID MATTHEW,
Penn st., (one door north of Almond st.,)
Philadelphia, Pa.

TESTIMONALS.

Office of the Syracuse and Utica R.R. Co.,
Syracuse, August 18, 1842.

This company have several "Patent Spark Arresters and Chimneys" upon their locomotive engines, which were furnished by David Matthew, constructed according to the specification attached to his patent.

They are by far the best smoke pipe and spark arrester that we have tried or seen.

No inconvenience from sparks or cinders is suffered by the passengers; nor is the draft impeded.

We consider them a great improvement, and regard them as almost indispensable in our business.

JOHN WILKINSON, President.

—

Office of the Auburn and Rochester R.R. Co.,
Canandaigua August 26, 1842.

This may certify, that there has been in use on the Auburn and Rochester railroad, for the last two years, eight of Matthew's "Patent Spark Arresters," which have given the most perfect satisfaction. From the use of the Arresters on this road, and what I have seen of them elsewhere, I have no doubt but that they are the best in use in the country.

R. HIGHAM,
Supt. and Engineer A. & R. R. R.
To DAVID MATTHEW, Machinist.

—

Auburn and Syracuse R. R. Office,
August 29, 1842.

Dear Sir—The three Spark arresters of your patent, which we have in use on our road, have given perfect satisfaction, and we consider them superior to any now in use, combining as they do the power of arresting the sparks and cinders, without affecting the draft of the engine. Respectfully yours,

E. P. WILLIAMS, Superintendent.
M. W. MASON, Supt. of Machinery.
To DAVID MATTHEW, Esq.

—

Rochester, August, 1842.

We, the undersigned, have used D. Matthew's Patent Spark Arresters and Chimney on the locomotive engines used on the Auburn and Rochester railroad, of different manufacturers, viz: Rogers, Ketchum & Grosvenor, Norris, and Eastwick & Harrison, for more than one year; and all the engines using these Spark Arresters and Chimney have made steam as free as with any other pipe we have ever used; and we believe the draft is as good as any other pipes of the same dimensions, and prevents the escape of sparks and cinders. There has not been any expense for repair on the Spark Arrester or Chimney since they have been put on the locomotive engines; and we further think that they will last for years with little or no repairs.

THOS. SNOOK, Supt. M. P.
CHARLES W. HIGHAM,
N. C. MARTIN,
WM. HART,
Locomotive Engineers.

—

Syracuse, August 21, 1842.

We, the undersigned, locomotive engineers on the Syracuse and Utica railroad, have used during the last two years, David Matthew's "Patent Spark Arresters and Chimneys," and on our engines we have been able to generate steam as freely as with any other pipe we have ever used. The draft is as strong and free as that of an open pipe of the same diameter, and most effectually prevents the escape of fire and cinders. There have, as yet, been no repairs required to any of these pipes, and we believe they may be used for years with but trifling expense to keep them in perfect order. We certainly consider this pipe a great improvement over any other with which we have been acquainted.

DAVID BEGGS, Supt. M. P.
PETER GRANT,
WILLIAM McGIBBON,
WILLIAM CESSFORD,
JAMES BONNER,
JOHN VEDDER, Jr.,
Locomotive Engineers.

—

Syracuse, April 4, 1847.

Mr. DAVID MATTHEW:

Dear Sir—Your letter came duly to hand, in relation to the Spark Arresters. Those which we use are all of your patent; and on the neighboring roads we got others to try, but they were not good, and we had to substitute yours.

I am, dear sir, yours respectfully,
DAVID BEGGS,
E. M. P. Sy. and Utica Railroad.

Utica and Schenectady Railroad Office,
May 5, 1847.

Mr. DAVID MATTHEW:

Sir:—In regard to the "Spark Arrester." several kinds have been tried; but yours, as you left it, has been constantly in use. We have your patent on fifteen engines, and use no other kind. Nothing tried here has been so acceptable to us.

Respectfully your ob't serv't,
WM. C. YOUNG,
Supt. and Eng. U. & S. R. Co.

—

Locomotive Works, Philadelphia,
February 2, 1850.

MR. DAVID MATTHEW, Vulcan Works, Baltimore:

Dear Sir:—Your letter of 30th ultimo reached us only this morning, and in reply we would state, that we have not had much opportunity of judging of the merits of your Pipe in comparison with others, but that on the Utica and Schenectady Railroad, where we have a number of our engines running, your Pipe is exclusively used, and preferred to all others. Yours, very truly,
NORRIS, BROTHERS.

—

Patterson, N. J., Feb. 6, 1850.

Mr. DAVID MATTHEW, Baltimore:

Dear Sir:—Your favor of the 31st January is received. When we used your Spark Arresters on our locomotives they gave entire satisfaction, and we should have continued to use them if we could have procured them; but the gentleman at Catskill, who, we understood, had made arrangements with you respecting the sale of the right to use them, refused to furnish them, except there was an agreement made for selling the right to the whole road. This we could not do, which compelled us to procure our Spark Arresters elsewhere.

We have often been applied to for your Spark Arresters; but as we could not procure them, we have been obliged to furnish others.

Your Spark Arresters have been highly spoken of by all those that we know who have used them, and we think they are equal to any in use.

Very respectfully,
ROGERS, KETCHUM & GROSVERNOR.
Per S. J. ROGERS.

—

Utica and Schenectady Railroad Office,
Schenectady, Feb. 19, 1850.

DAVID MATTHEW:

Dear Sir—I received yours of January 25th, in reply to smoke-pipes, we consider the Spark Arrester of yours, used by us, far superior to any in use.

Respecttully, your obedient servant,
C. VIBBARD, Sup't U. & S. Railroad.

—

Mr. DAVID MATTHEW—

Dear Sir:—In reply to your enquiries I have to state, that I have been engaged in the manufacture of your "Spark Arrester and Smoke-Pike for steam engines," for over ten years last past.

I have no hesitation in saying, that your "Spark Arrester is the best that has ever been in use in this country. I have seen all others, or nearly all others tried, but your invention, as patented 31st December, 1840, possesses all the requisites for railroad and other uses in a degree decidedly superior to them all. I am now employed as an engine builder in the establishment of the Hudson River Railroad, and after a careful trial of all the spark arresters and pipes most esteemed in this country, we have found yours to be decidedly the best, and, in this opinion I am supported by the chief superintendent of motive power of that road, who has so expressed himself to me.

I am, very respectfully, your ob't serv't,
JOHN TAYLOR.

—

DAVID MATTHEW, Esq:

Dear Sir—Your "Patent Spark Arrester," has been in use on our Locomotives since 1840, during which time we have tried several of a different construction. We can recommend yours as being the most effective and economical of any used by us. Little or no inconvenience from sparks is suffered by passengers; nor is the draft obstructed. From the best estimate we can make they can be kept in repair for about ten dollars each per year.

C. VIBBARD, Superintendent.
V. BLACKBURN, Mast. Ma.

Office of the Syracuse and Utica R. R. Co.,
Syracuse, August 7, 1851.

My Dear Sir:—I am glad that you obtained your right of building Spark-Arresters, and most certainly it is the best in use, and generally approved of. I think they are using them pretty generally on the Hudson River R. R., and all the other patents which have been made since the date of yours, are copies in some degree, from yours. Anything that I can do to forward your interests in this matter will be done with cheerfulness. I think of going to Philadelphia this summer, and shall call on you.

Yours, very truly, D. BEGGS.

—

Utica and Schenectady Railroad Office,
Schenectady, August 30th, 1851.

This is to certify that Mr. David Matthew's Spark Arresters have been used on a number of the locomotives constructed by the Newcastle Manufacturing Company. They have, in all cases, given entire satisfaction. With them the exhaust pipes can always be made sufficiently large to ensure a full discharge of steam; while at the same time, they afford the necessary draught, and completely stop the sparks. I cheerfully recommend them to the attention of railroad companies and manufactures of locomotive engines.

ANDREW C. GRAY,
Pres't Newcastle Manufacturing Co.

—

Albany, September 8th, 1851.

Gen. W. SWIFT:

Dear Sir—This will serve to introduce to your favorable notice Mr. David Matthew, who is the inventor, and holds the patent for a Spark Arrester, which has been used by many of our railroads on their locomotives. I consider it a valuable improvement, and do not doubt but Railroad Companies will generally use it. Yours respectfully,
ERASTUS CORNING.

—

Office Hudson River Railroad,
New York, February 14, 1852.

D. MATTHEW, Esq.,

Dear Sir—I am so little acquainted with the merits of different kinds of Spark Arresters, that I do not feel competent to give an opinion for publication. I know that your Arrester is a good one, and has been highly esteemed on the roads where I have been employed. But I have not sufficient practical knowledge of the subject, to venture any comparison of its merits with other kinds of arresters.

Yours truly, O. H. LEE, H. R. R.

—

Office of the Hudson River R. R.,
31st st., New York, May 16, 1852.

Mr. DAVID MATTHEW:

Dear Sir—I have been acquainted with your Spark Arrester since its introduction, and have carefully watched its operation in comparison with many others. I have no hesitation in saying, that as a Spark Arrester without diminution of draft, it has no equal in use. I have been able to use a much larger exhaust pipe than with other pipe, and, from experiments recently made, I am satisfied that the Cap, or Spark Arrester, is no impediment to the draft of the open chimney. Very respectfully,
HENRY WATERMAN,
Superintendent of Motive Power.

—

I have this day purchased the right to use the above pipes on the Saratoga and Washington railroad, and concur in all that Mr. Sargent has said of them. J. VAN RENSSELAER,
Superintendent S. & W. R. R.
Saratoga Springs, May 22d, 1852.

—

Albany and Schenectady Railroad, Albany.

Having used Mr. Matthew's Spark Arrester on our engines, and considering it a valuable invention, we have purchased the right to use it on our road. E. C. M'INTOSH, President.

—

Schenectady and Troy R. R. Office,
Troy, July 20th, 1852.

I have this day purchased the right to use Mr. Matthew's Spark Arrester on this road; I have been acquainted with this Spark Arrester for ten years, and consider it the best that has come under my notice. EDWARD MARTIN,
Superintendent S. and T. R. R.

Office Rensselaer and Saratoga Railroad,
Troy, May 22d, 1852.

This may certify that I consider the Patent Locomotive Smoke Pipes and Spark Arrester of D. Matthew's as more economical and safe than any now in use. It is more durable, and throws less fire and cinders, without impairing the draft, they have been in constant use upon the different roads under my charge since 1841, as have all the other various kinds now used, and after this long experience and careful observation, I am entirely satisfied that those invented by Mr. Matthew are decidedly the best, and I have secured the right to use the same by this company, and the Saratoga and Schenectady railroad company, by purchase made yesterday. L. R. SARGENT, Superintendent.

—

I have this day purchased of Mr. Matthew the right to use his Spark Arresters on the Syracuse and Utica railroad. I believe it is the best pipe there is. JOHN WILKINSON,
President S. & U. R. R.
Syracuse, July 16, 1852.

—

I have this day purchased of Mr. David Matthew the right to use his Patent Spark Arrester on the Rochester and Syracuse railroad, during its present term, and renewal or extension, believing it to be the best Arrester now in use.

CHARLES DUTTON, Supt.

—

Superintendent's Office
Buffalo and Rochester Railroad Co.,
Buffalo, July 29, 1852.

David Matthew, Esq. has this day conveyed to this company the right to use his Spark Arrester patented in 1840. It has been in use on this road for some years past, and gives better satisfaction than any other improvement claiming the name of Spark Arrester. HENRY MARTIN,
Superintendent, J. W.

—

☞ REFERENCE is made to the following Gentlemen and Companies, with whom Agencies have been established for the sale of the Spark Arrester, and rights under the Patent:—

Erastus Corning, Esq., Albany, N. Y.; Messrs Rogers, Ketchum and Grosvenor, 74 Broadway: New York city, and at their Works in Patterson, N. J.; The New Jersey Locomotive Machine Company, at Patterson N. J., James Jackson, President,—address also at Patterson, Messrs William Swinburne & Co., Locomotive Builders, Patterson, N. J.; Messrs. Norris, Brothers, Philadelphia, Pa.; M. W. Baldwin, Esq. do; A. C. Gray, Esq., Newcastle Manufacturing Company, Newcastle Delaware; the Schenectady Locomotive Iron Works, Schenectady, N. York; The Boston Locomotive Works, Boston, Mass.; The Taunton Locomotive Manufacturing Company, Taunton, Mass.; Wm. Cundle Patterson, N. J.; Clute & Brothers Schenectady; Peter Smith, Albany, N. York; Thomas Snook, Rochester, N. Y.; Nashville Manufacturing Company, Nashville, Tenn.; Niles & Co Cincinnati, Ohio; Cuyahoga Works, Ohio City.

All applications for the use of the above Patent Rights, etc. for the New England States, and New York, East of the Hudson River, to be made to H. VAN KURAN, Boston Locomotive Works, Mass., or to D. MATTHEW, Patentee, Philadelphia, Pa.

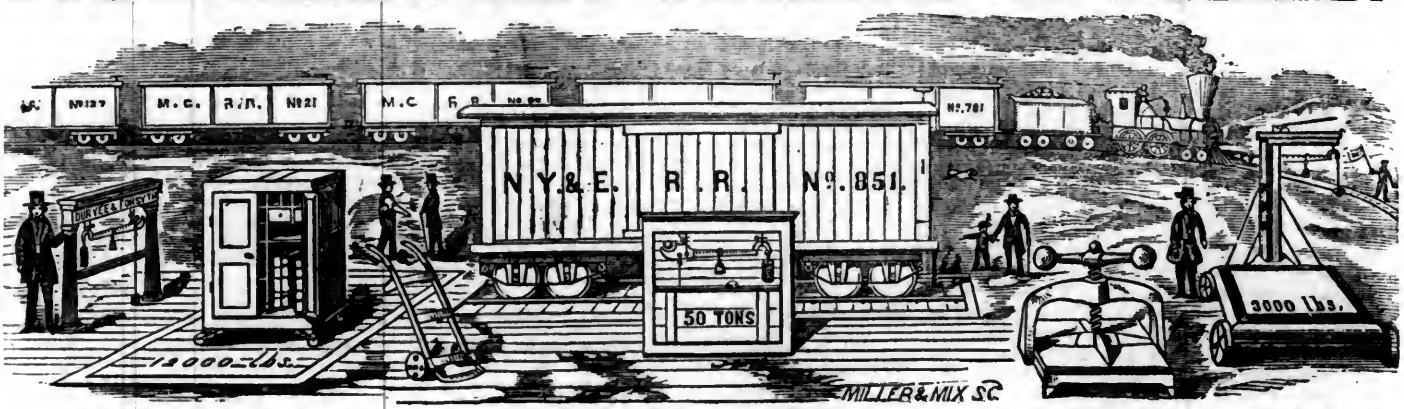
NOTICE.—Railroad Companies getting new engines, can have Matthew's Patent Spark Arrester placed on them, by applying to the manufacturers, so that the apparatus costs them nothing but the patent right. This they will find of great advantage to them. D. M.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1851 -6m*

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates;* Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practiaal mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as *'Durable and Accurate'* as any scales in the market; the bearing edges are made of the best *Cast Steel,* well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to underseil other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 50] SATURDAY, DECEMBER 11, 1852. [WHOLE No. 869, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Railroad Exhibits and Negotiations.....785
Wabash Valley Railroad.....787
Inland Commerce of the United States.....787
Virginia Central Railroad.....787
Winchester and Potomac Railroad.....789
Travel between Albany and New York.....790
Nicaragua Ship Canal.....790
Massachusetts Railroad Statistics.....790
Cincinnati, Hamilton and Dayton Railroad....790
Cleveland, Coshocton and Zanesville Road....791
Philadelphia, Easton and Water Gap Road....791
Ohio and Pennsylvania Railroad.....771
Buffalo, Corning and New York Railroad.....792
Railroad Connections.....792
Philadelphia, Germantown & Norristown R. R.792
Hillsboro' and Cincinnati Railroad.....793
Stock and Money Market.....793
Journal of Railroad Law.....794
Cleveland and Erie Railroad.....794
Commerce vs. Revenue.....794
Susquehanna Railroad.....796
Commerce of Cleveland.....796

American Railroad Journal.

Saturday, December 11, 1852.

Railroad Exhibits and Negotiations.

We have made it a general rule, when we could not speak approvingly, to remain silent in reference to railroad projects coming before the public, the securities issued upon them, the manner in which their affairs have been managed, and the modes and plans proposed for their construction.—We were influenced by two considerations, the possibility of being mistaken in our opinions, and the fear that censure, though applicable to few roads only, might create suspicion of others perfectly sound, and in this way, effect more harm, than good.

The last of these considerations no longer exists. The critical period in the history of our roads, has passed. An unbounded confidence has succeeded to the doubt and distrust with which these enterprizes were at first viewed. Their productiveness as investments of capital, is now regarded as fully proved, and the accomplishment of extensive lines, the magnitude of which would once have appalled us, a holiday task. Railroads are now the great topic of the country, the most attractive of all others to capital, to enterprize, and to adventure.

As far as these works are concerned, our real danger has just commenced. Where capital only a few years since, was doled out slowly and cautiously, millions are now proffered. In place of a few works, undertaken to meet the pressing wants of our existing business, numerous schemes are now proposed in advance of any such wants, and adapted to a condition of things, which have no real existence. There is great danger, therefore, that taking advantage of the confidence known to exist in railroad investments, and the abundance of money, some projects not entitled to aid from their inherent strength, and others of a purely speculative character may succeed in effecting large loans, involving not only great risk of loss but bringing discredit and suspicion upon the whole railway interest, and productive of the most injurious consequences.

The ease too, with which money is now borrowed has led to an inexcusable looseness, in making up the exhibits and statements of railroad companies, not only of those coming before the public for money, but of those in operation. There is a great lack of the circumstantial detail, necessary to a clear idea of the actual condition of affairs. Everything is stated in general terms. Instead of full statements of *facts*, leaving inferences and conclusions to be drawn by the reader, the latter only are given, and their correctness assumed, and money is now borrowed in immense sums, upon evidence that would not be taken for an instant in transactions between neighbors, amongst whom familiar intercourse prevails.

This change in the condition of our railroads, and of the credit attached to them, must be met on our part, by an altered tone of our Journal. Where a year or two since, we were only called upon to help a struggling interest, it is now our duty, as it is equally for the interests of railroads and the public, to point out the dangers to which we are exposed from an excessive investment in these works, to expose merely speculative schemes, which are encouraged by the ease with which money is had for anything like a railroad, and to effect the necessary reforms in the style of railroad accounts and exhibits. As a great interest, our railroads possess sufficiently the public confidence, to secure to them all the aid and support they deserve. Their great success has relieved us of the necessity of insisting upon their general value and importance. These being admitted, the duties now devolving upon us is to point out the conditions entitling new projects to aid, to present a faithful record of the operations of our roads, and to urge the adoption of such measures as shall be productive of the greatest advantage not only of those, but of all interested in them.

To make a more profitable application of these general remarks, we shall, as a general rule, discourage attempts to negotiate loans for new roads where a considerable portion of the means necessary for construction cannot be furnished by those *immediately* interested, and where also a considerable sum has not been actually expended. Such a rule is absolutely necessary to guard against the wildest speculations. If a company can borrow money before a dollar of stock be subscribed or a cent expended upon its line, it is plain to see that speculation would run riot very quick. On the other hand, when it is made a condition of borrowing, that at least *one half* of the cost of a road be subscribed in *good cash* stock, and a reasonable portion of this expended in construction; the public may be certain of two things; first, that a route upon which this amount of cash stock can be raised, will probably furnish a profitable business; and secondly, where its projectors have so large an interest at stake, its affairs will be carefully and prudently managed. Where these are not and cannot be done, the converse of the above propositions will most likely be true, and the public good, as well as those of the company, require the postponement of the project, till time shall have brought with it, the conditions necessary to success and profit. We shall therefore, as a general rule, not hesitate to apply the above tests to all new works, coming before the public.

Again, companies in their exhibits must present a *full* statement of their affairs, and leave nothing for inference, or to be taken for granted. The time for indulgence is past. Roads that *should* be built have nothing to fear from exposure, those that should not, the public good requires should be exposed. We shall take any important omission in these statements as good cause for suspicion, and shall not hesitate to refer to such in direct terms, and to instance the reports and exhibits of companies, as illustrations of what we approve, or disapprove.

Two railroad companies the Terre Haute and

Alton, and Covington and Lexington, are now before the market for money, both of which are, to a certain extent, obnoxious to the rules we have laid down. We are more free to instance these, from our friendly personal relations with those connected with them, and for the reason that in these cases, justice at least will be done to our motives.

The first named road, the prospectus of which we published in our paper of the 4th inst., is to extend from Terre Haute to Alton, a distance of 173 miles, and is to cost about $18,000 per mile, or an aggregate of $3,114,000.

The means stated to be applicable to this are as follows:

Individual subscriptions including stock to be issued to contractors	$1,100,000
City of Alton 6 per cent. bonds	100,000
County of Montgomery 7 per cent bonds	50,000
" Shelby " " "	75,000
" Coles " " "	100,000
" Edgar " " "	100,000
Making a total subscription of	$1,525,000

Upon this subscription the company now offer for sale *first* mortgage bonds to the amount of $1,000,000, by which the absolute means of the company, it is stated, will be carried up to $2,500,000. The necessary balance is proposed to be raised by increased subscriptions, and by an issue of 2nd mortgage bonds.

With regard to the amount of work executed, the exhibit of the company says:

"The construction of the work has begun during the summer just past, (1852,) and has been steadily progressing, and about thirty miles have been graded and made ready for the rails. A large force is now employed upon the work, with the view of completing the entire line within two years; and the whole line may be in operation by that time.—No efforts will be spared to effect this object by the earliest practicable period. Large numbers of the cross-ties are now contracted for, and being delivered, and a large amount of iron rails, sufficient for a hundred miles of the track, have been secured by the contractors."

Upon such a statement of means and work done, the company claim to be entitled to borrow $1,000,000.

We object to the exhibit in the first place, that it does not show what portion of the amount set down as individual subscriptions, is taken by the contractors, and what by other parties. Should it turn out that all was taken by contractors, the next question is, how large a portion of it may be regarded in the light of a bonus, and how much of it is *bona fide*. A material point to know is, who are the contractors, for the purpose of forming an opinion as to their ability to make good their subscriptions. We cannot help expressing our conviction, that a considerable portion of the amount set down as private subscriptions is never intended to be collected. We are entitled to infer so much, from the manner in which this is set out in the exhibit.

Further: It does not appear that all the county and city securities enumerated have been voted.—Unless such votes have been taken, the city of New York might with equal truth be put down as subscribing a given sum. We believe, too, the county subscriptions that have been voted are upon the conditions that their proceeds be applied to the work within their respective limits. If such be the fact, it should have been so stated, as these are *conditional* only, and may never be applicable to the work.

The statement of the company therefore furnishes no evidence of the amount of its available means. There is no positive evidence that there is security for the proposed issue of bonds to the amount of a dollar, except what may be collected of individual subscriptions, not taken by contractors.

Again, it does not appear from the exhibit, that the company has, or ever had, an engineer in its employ; nor by whom the estimates of cost were made, whether by the directors or contractors. The public are furnished with no items of cost, and have no means of forming an opinion whether the road will cost 15, or $50,000, per mile. We submit, that such an omission is of itself sufficient reason for the rejection of the proposed loan.

We are equally at a loss to know how much has been actually expended upon the work. In the absence of any statement by the company, we hazard the opinion, that estimates to the amount of $35,000 have not been paid. The impression intended to be conveyed by the exhibit is, that the amount of work done upon this road will compare favorably with the average amount upon other roads coming into the market for money. Such is not the fact. In this case it bears no reasonable proportion to the amount of money sought to be borrowed. But whatever it is, the fact should be fully and explicitly stated, vouched by the certificate of some competent engineer.

If the company have therefore, as stated $1,525,000 in good stock subscriptions, why is it necessary to sell its bonds, till these are collected and expended? The city and county bonds can be converted into money as soon as issued; why not expend this before borrowing? What is to be done with the money? Why not keep the bonds for the iron, which at present prices will cost at least $1,000,000? If the money raised on bonds is to be expended in construction, how are the rails to be purchased? not on second mortgage bonds, because these could not be sold till after the iron was purchased and paid for. Not upon stock subscription because no western company has been able to raise money for rails in this manner. *All* are compelled to borrow for this article. Certainly the means of the Illinois roads do not exempt them from this common necessity. We submit that the exhibit of the above company is insufficient in not showing,

1st. The cost of the road;

2d. The means applicable to the work;

3d. The amount of work actually done;

and that consequently it is not entitled to borrow money; and that the proposed loan would not only be unsafe, but its negotiation would establish a precedent tending to the most injurious results.

In the case of the Covington and Lexington railroad, we do not object to the sufficiency of the security now offered, (its payment being guaranteed by the city of Covington, which must render it unquestionable,) but to that of the statement put forth as the basis of the loan, and to the improvident and unbusiness-like manner in which the affairs of the company have been conducted. Below we copy the most material part of the exhibit of the company, inviting tenders for the proposed sale of bonds:

"The estimated cost of the road, duly equipped, is $2,354,562.

"The present available stock subscription of the company is about $1,550,000, which is being increased.

"About $1,455,000 has been expended on the work up to this date."

The amount of capital stock subscribed is stated to be $1,550,000, but the public are not informed how this is made up, nor what portion collected or collectable; facts very necessary to be known, to form a correct idea of the value of the company's securities.

The cost of the road is stated to be $2,354,562. Upon what authority this estimate is made we are not informed, nor what items are embraced in it. For aught that appears, the above sum may be very far from completing the road, and it certainly falls far below the estimate given us by the President of the company.

But admitting the correctness of both of the above estimates, still the loan proposed will be very far from supplying the wants of the company.

The means applicable to the work are as follows:

Capital stock	$1,550,000
Bonds issued	600,000
	$2,150,000
The cost of the road is estimated at	$2,354,562
Means provided	2,150,000
Leaving to be provided	$ 204,562

But this statement by no means presents the real condition of the company's affairs. From the assets, at least 15 per cent must be deducted for discount on securities, uncollectable stocks, etc., etc., making this deduction and the account would stand as follows:

Assets	$2,150,000
Less	322,500
	=$1,827,500

Leaving still $523,062, to be provided for necessary to the completion of the road.

How is this sum to be raised? not on issue of bonds, because the authority to do so is exhausted; not on stock, because in the position of the company's affairs this could not be obtained. In fact we see no way in which the company can extricate itself from its dilemma, but to get authority from the legislature to make a further issue of bonds; but this body does not meet till December, 1853. Under these circumstances we do not think the company justified in stating positively that 38 miles of the road will be completed by the first of May next, and the balance by the first of November, 1853.

The company have now executed two distinct mortgages: one to the city of Cincinnati, as security for the loan of $100,000; the other, as security for the bonds given for the purchase of the iron. These bonds now offered are a new batch, (without the security of a mortgage), so that the company's property is encumbered by three sets of bonds. The credit and value of each succeeding issue is of course weakened. The obvious and proper course should have been to have rejected the Cincinnati loan, (as this sum was too small to be of any practical value, but sufficiently large to render less saleable subsequent issues), and to have issued an amount of bonds, equal to the balance necessary, on the stock subscriptions, to complete the road. This issue should have been at least $1,450,000. In such case, the following statement would have represented the financial condition of the company:

Stock subscriptions, deducting Cincinnati loan	$1,450,000
Bonds	1,450,000
	$2,900,000
Deduct 15 per ct. commissions, and for uncollected subscriptions	435,000
	$2,465,000

This issue would have not only provided the necessary funds, leaving a margin by no means too large for contingencies but the loan would have averaged a better price than the $600,000 already issued. The reason is obvious. The larger the

loan, the *security* being sufficient, the better price it will command. Capitalists too much prefer to take a large loan, when they see it will effect the end proposed, than one for a much smaller amount, though both are based upon an equal security. The amount of the loan is not so much objected to, provided it be reasonable, as the temporary shifts, which soil the character of the security, without accomplishing the object proposed.

The objections indicated suggest the policy that should have been pursued. It is the duty of this company to remedy them as far as it is in their power to do so; and of other companies to avoid the mistakes into which this has fallen.

When a railroad company comes into the market for money, it is right that the public should be thoroughly informed, not only as to the actual state of its affairs, but of the amount necessary to effect its objects. Unless this is done, and unless capitalists make it a condition of lending money, loans will be effected for schemes that have no substantial basis, and which are got up only for the purpose of imposing upon popular credulity. We by no means intend to make any such charges in the cases instanced. We believe in both, that the loans asked for would be honestly expended, as proposed. The question we are discussing, is not the application of the money in a given case, but one of principle, applicable to all companies. The rule may bear hard upon a few projects; but it is much better that they should suffer, than that a precedent should be established, calculated to produce the most injurious results.

We believe the rules we have laid down to be most salutary, and imperatively demanded in the present state of public sentiment towards our railroad projects. As far as we are concerned, we intend to insist upon their observance; and we hope to have the concurrence and aid both of capitalists and railroad companies.

Illinois.

Lake Erie, Wabash and Alton Railroad.—The project of a railway connection of Toledo, on lake Erie, directly with the Mississippi river, at this point, is at the present time exciting considerable interest along the whole extent of the proposed line. In many respects, the advantages which it offers, both with respect to travel and traffic, are equal, if not superior to any other road looking towards the Mississippi river, and there is no doubt, that immediately upon its construction, it will be one of the best paying roads in the state.

A survey of the route from Lake Erie has been completed to a point on the Indiana State line, between Danville and Williamsport, and is, we understand, in the highest degree favorable.—The engineers in charge, not being authorised to proceed further, stopped there; but since, as we learn from the Danville Citizen, they have extended the line as far west as that place. As no act of incorporation has yet been granted to this company, through Illinois, it is not determined which direction the road shall take, but a straight line will cause it to intersect the Terre Haute and Alton road in the neighborhood of Shelbyville; and we have no doubt that such will be the line of its direction.

The citizens of Danville, and the country intermediate, are taking active steps to secure a charter for this project at the approaching session of our legislature, and there is every prospect that they will be successful. Once incorporated, we have every reason to believe that the road will be speedily constructed.

The Inland Commerce, more Important than the Foreign Commerce with the United States.

H. V. Poor, Esq:

I have read with interest, the able article in your paper of the 20th November, "*On the Inland Commerce of the Mississippi Valley, and the St. Lawrence Basin*," over the signature of "N." I presume it to be from the pen of an old friend in the Canal department, who has the best sources for statistical facts, and they should be widely circulated.

In the beginning of January, 1835, a real estate owner in the city of New York remarked to the writer, on the great rise of real estate in the city, and attributed it to the Foreign trade. This led to the reply, that the tonnage floated on our canals, was greater, than all the foreign tonnage arriving at, and departing from New York, and that I should not be surprised, that I could throw in the domestic foreign trade, with the coasting tonnage into the bargain. This idea, was ridiculed as unsound and visionary. It led me to make the examination, and to furnish tables, which you will find by reference, to our friend D. K. Minor's Journal, Vol. 4 No. 1, January 10 and 17, 1835, continued by you. It is there shown by the Custom House returns made out for me, that there were in 1834,

553	Foreign arrivals—with	110,835	tons	register.
513	" clearances "	101,512	"	"
1,365	Domestic arrivals "	320,083	"	"
1,026	" clearances "	239,416	"	"

Foreign, and coasting trade.771,046 tons register.

I then observed in the Journal referred to, "that the boats and floats exceed 24,000 the last year, assumed by the lockages at Alexander's lock, a mile west of Schenectady. Thus, at 33½ tons to a lockage" [they now average about 60 tons,] will give 800,000 tons, without taking into view the large amount of tonnage by the Champlain canal. I then add "that to put the matter at rest, I present T. M. Francis (the collector of Utica, "statement, of the comparative view of the property passing Utica, east and west—in 1833 and 1834."

A Table of some of the principal items, that passed by Utica on the Erie canal, both ways in 1834, compared with items arriving at the Hudson River in 1851.—Prepared by Joseph E. Bloomfield, 1852.

Name.	1834, Utica.	1851, Albany.
Flour, bbls.	1,157,059	3,279,400
Wheat, bush	1,197,304	3,163,666
Grains—coarse, bush	402,216	13,225,640
Cheese, lbs	3,173,147	25,602,000
Butter and lard, lbs	4,499,008	20,382,000
Provisions—salt, bbls	39,888	216,262
Coal, lbs	4,551,960	27,876,000
Ashes, lbs	30,502	14,542,000
Pig iron, lbs	2,005,185	5,916,000
Blooms, "		33,350,000
Castings, "		2,448,000
Furs, "	399,832	484 000
Whiskey, gals	1,461,051	3,484,000
Potatoes, bush	4,809	5,983,000
Tobacco, lbs	538,840	2,702,000
Wool, "	1,135,225	10,518,000
Leather, lbs		8,204,000
Eggs, "		3,676,000
Lard oil, "		2,408,000
Oil cake, "		6,810 000
Sundries	3,458,190	149,440,000

Note.—The above items, on their arrival in Albany are there noted in tons. The flour is reduced to bbls at 220 lbs—salt provisions 230, wheat 60 lbs, coarse grains—corn, rye and barley—at 50 lbs., to make the comparison with the Utica table, 1835. The increase in cheese, butter and lard is astonishing, so in iron, wool, ashes, etc., etc. The increase in the lumber trade is more astonishing; I have not the data at hand to estimate the pounds weight.

"By this table you will ascertain that 420,000 tons *weight*, on an estimate of the several articles, floated by Utica during the 7 months of canal navigation in 1834. This tonnage, will fully equal the weight carried by the 1918 vessels entered, and 1,539 cleared at the New York Custom House, 1834; when it is taken into view, that more than one-third, entered and cleared in ballast or were but partially loaded, particularlarly in the coasting trade with the South."

This commerce has been steady on the increase. It will be an interesting enquiry, with the Custom House at your hand, for you to make a comparison at the close of the year, with the collectors returns, compared with the annual report of the State Comptroller, at Albany. Mr. G. W. Newell will furnish it.

By reference to "N's" tables, I find 1,977,151 tons —of 2,000 lbs. to the ton—of various articles that came to tide water on the Hudson, 1851, and that the "*total movement*" on all the canals that year, was 5,582,733. As the *up* through tonnage is now estimated as one to four of the down tonnage, it would give the enormous amount of 2,471,439 tons weight, as compared with 420,000 tons, 1834 being an increase of more than 500 per cent in seventeen years, or about 700 per cent. increase in the total movement. The internal exchanges in our own State appear to amount to 1,111,294 tons. By reference to this ratio of increase, some exemplifications of which I give, in the annexed table, we are irresistably drawn to the conclusion, that with our present canals and all our railways in this State and in the States south and north of us, they will be inadequate to the rapidly increasing trade from the valley of the Mississippi, and from the great Basin of the St. Lawrence, bordering on our Upper Lakes.

The Canadas, now numbering near two millions of population, with, perhaps, the best wheat, and lumber region on the Continent, has only begun to develop her resources. So it is, with the new States and territories west of the State of New York. They are in their infancy.

This State, has the best, I may say only pass at the Little Falls and Highlands, between the great Valley of the Mississippi, the lakes, and tide-waters.*

In the States, north and south of New York, it has been found impracticable to construct *continuous* canals to the Ohio and to the Upper Lakes, while the railway summits in the several States south of New York, over the "Back Bone" of the United States—the Appalachian ridge—average about 2,500 feet rise, at their lowest depressions, above tide water, or say half a mile in the air, is to be overcome by the locomotives in contending with gravity, and in transporting the 10,000,000 of tons that N. estimates there will be to be transported from the west to the east, and to New Orleans, by the year 1860.

That the city of New York will get the "Lions share" of this great tonnage, and by railways too, is scarcely evident, to any reflecting person, when it will be perceived by the profiles I enclosed you, of "the Central"—the Oswego, and New York and Erie railroads (prepared by E. F. Johnson, Esq., Civil Engineer, 1840) as comparsd with the elevations to overcome in the States of Pennsylvania,

* The Hudson and Mohawk rivers, are the only streams, that have broken through the Alleghany ridge, the latter, in high water, mingling with Wood creek, at Rome, a tributary to Lake Ontario, by the Oneida Lake and Oswego river.

Maryland, and Virginia, that we have decidedly the advantage in the three routes through this State above-named. The Boston and Ogdensburg is next in order.

You will notice, that "the Central" route by the road from Buffalo, by the Falls, and *Ridge road*—now on the eve of completion to the Hudson River railroad, with a distance of 300 miles, and 447 to your City Hall, is nearly level, or is descending with the grade from Lake Erie. The route from the port of Oswego, which may be truly called the end; eastward—of Lake navigation, the distance across Oswego county, by Rome to the Hudson R. railroad, is only 168 miles, or 315 to the City Hall, New York. With this line properly equipped, you must allow that there is no line to or from the seaboard to the Upper Lakes, and the Canadas, that can compete with it, particularly when extended, as will be, by the Ridge road to the Suspension bridge at Niagara Falls, via Rochester and Lockport.

You are aware that this is nearly level, or is a descending line to tide water, with diminished distance. It is as 315 miles is to 447, and as 484 by the New York and Erie to Jersey City. This must secure to the forwarder, from Lake Ontario, the most profitable business. When the expense of loading a cargo at Chicago, ——— ports is once incurred, it is only say 3 to 6 days extra wages of the crew, with low tolls on the Welland canal, to carry 3000 bbls of flour or 15,000 bushels of wheat in one cargo to Oswego, there to be unloaded into cars, by water-power, instead of by manual labor, at the port of Buffalo or Dunkirk, a decided advantage.

The comparison is more unfavorable for all the cities laying north and south of New York, to compete with her for the commerce of the great Basin of the St. Lawrence, and the valley of the Ohio.

J. E. B.

Virginia Central Railroad.

The 17th annual report of the Virginia Central railroad company, presents the following exhibit of the present condition and future prospects of the work:

The business of the road has been steadily on the advance since the last annual meeting. The receipts for transportation within the year ending 30th Sept. 1852, amount to $176,485 95, viz:

For passenger's fare	$79,110 10
Freight	97,740 94
Transportation of mail	8,250 00
Express freight	318 71
Miscellaneous receipts	65 96

This is an increase over the receipts of the previous year of $32,684 05. The whole of the work under charge of this company on the east side of the Blue Ridge is now completed except the bridge over Mecham's river, which is expected to be finished in a few weeks, when the cars will run to the point of connection with the Blue Ridge railroad, which is under the direction of the state.

The progress of the state work is such as to justify the expectation that the greater portion east of the tunnel at Rockfish Gap, may be opened during the next year, but the very great difficulties of construction at some points may cause a further delay. The grading of the road between Waynesborough and Staunton, is now nearly completed, and steps are about to be taken to bring it into operation early next summer, when it is to be hoped that there will be but a short portage intervening across the mountains to form a connection with the road on the east side.

The corps of engineers engaged in locating the road between Staunton and Covington, completed twenty miles of the most difficult and expensive part of the eastern end, and the grading and masonry were put under contract on the 18th of December last—to be finished on the first day of July, 1853.

It appears from the estimate of the treasurer, that the aggregate receipts from all sources, were $176,485 69, for the year ending the 30th of September, 1852, from which deducting the ordinary charges of administration, which there appear under the heads of salaries, miscellaneous expenses, depot expenses, repairs of road and train expenses, there will remain the sum of $74,902 24, which though expended in the purchase of new locomotives, cars, etc., necessary for the extended operations of the road, may be taken as an exhibit of the profits of the year.

The capital to be employed in earning this sum consists of—

Cost of eastern extension and buildings in Richmond, excluding grounds purchased for future use	$348,254 41	
Cost of road from Junction to Gordonsville	411,275 70	
Cost of " " " to Woodsville	363,322 95	
		1,122,833 06
Equipment of Engines and cars	192,454 99	
		$1,315,307 99

$74,902 24, is nearly six per cent on this sum.

Virginia.

Winchester and Potomac Railroad Company.—The annual meeting of this company was held on the 23rd Oct., 1852. Wm. L. Clark, Esq., was elected president. Messrs. A. S. Baldwin, Henry M. Brent, Wm. B. Baker, and H. H. McGuire, directors. A committee was also appointed to examine into the condition and management of the road. The report of the president and directors for the year ending 30th Sept., contains the operations of the road for that period, and discusses at length several questions highly important to the stockholders. The gross revenue of the company for the above period was $89,776 22.—216,760 barrels of flour have been transported during the year over the road, being an increase of 8,226 barrels over the previous year. Of this number, 159,730 barrels, were sent from Winchester to Harper's Ferry. The tonnage in the aggregate does not vary materially. The revenue from passengers has diminished in amount consequent on a reduction in fares of twenty-five per cent on the former cost.

Among the extraordinary expenses is the cost of the iron bridge constructed at Harper's Ferry, in place of the bridges and trestle work swept away by the flood of last April. The track has been placed on stone piers 45 in number, each 18 feet long, 4½ feet wide at the base, and running up to 2½ at the top.

The report contains a comparative view of the present state of the company and that in 1845.

On 1st October, 1852, the capital stock was	$180,000 00
Funded debt due 1867	120,000 00
Annuity to the state equal to	83,333 33
Floating debt	33,198 92
	$416,532 25

The rolling stock of the company is estimated at $64,521 72.

During the last five years, 750 tons of iron have been laid, averaging the company $50 per ton. Of the general condition of the road, the committee say that they have not with the most careful attention found a single defect either in its iron or its understructure. The result of the reconstruction of the road since 1845, is put at $72,900, being $22,100 less than the estimate of Mr. Latrobe, the chief engineer of the Baltimore and Ohio railroad.

The revenue of the year 1845 was $59,088 99 shewing an increase for the year 1852 of $29,161,08. The debton the 15th July, 1845, was $307,940; on the first Oct., 1852, it was $236,532 25.

In 1845 the capital stock was $300,000. In 1852 it is $180,000, so that the reduction of the debt and stock on the 1st October, 1852, is $191,408 40.

The recapitulation of the difference between the two periods is:

Increase in annual revenue	$29,161 08
Increased value of whole concern by diminution of debt and stock	191,408 49
Increased value of property, other than road or real estate	26,826 09
Reconstruction of road	72,900 00
	$291,134 49

In addition to this the stockholders will, on the first of Nobember next, have received in dividends $66,600.

On the subject of the tariff of tolls, the report states that by the charter and its various amendments, the limit of charge fixed by the last amendment in 1842, was 8 cents per ton per mile for descending, and 10 cents per ton per mile for ascending freights, and 8 cents per mile for passengers. On the faith of these legislative enactments, the original stock was subscribed, and the state in the general railroad law of 1849 has provided in cases where rates have not been fixed by charter, that 6 cents per mile for passengers, and 8 cents per ton per mile for freights may be charged with the exception of gypsum and lime, which are fixed at 4 cents. And in pursuance of the same policy, the faith of the state is pledged in the following words: "No law shall reduce the tolls so as to prevent dividends of 15 per cent per annum within thirty years from the time the first dividend of profits of said company was declared.

The experience of the freighting business of the New England and New York railroads is then adduced, and the general opinion of those conversant with railroad matters that the rates of charges are entirely inadequate.

The conclusion of the report is that the public are not benefitted by too low rates. The immediate localities in the neighborhood of the roads are benefitted to the extent that the stockholders are the sufferers; but how the whole community (if the stockholders who build the improvement are a part of the community)is benefitted by such an exchange of burdens, is not easily proved; and how it can be asked by those who have comparatively invested nothing, that those who have conferred these greatest of all benefits on the community shall be debarred from their rights under their charter, is less easily conceived.

In the meantime, the general confidence in railroad stocks as *investment* for capital is shaken, utterly broken down. No trustee would have the face to go into a court of chancery and report that he had invested trust funds in railroad stocks; and even the best railroad bonds are infected from being in the neighborhood of the stocks, so as to bring far less in the market than other securities of equal safety—the best seven per centum railroad bonds having sold for eighty-five in the hundred; and the result of all is and must be the arrest of the railroad enterprise of the country, except where sustained by public munificence. How much better for the *public* would it have been had the charges always *insured* the par value of the stock. In that condition of things capital would have *flowed* to the construction of railroads instead of being dragged to it, and whilst the great producidn interests of the country would have received comparatively all the

benefits, the same interests, being the great consuming interests, would have borne the burdens, as would be just and equitable.

The average rate of freights at present charged on the Winchester and Potomac road is 5·65 cents per ton—less than the average of the Virginia roads, which charge 6·62 cents per ton per mile.

The average charge for passengers for the local travel is 2·67 cents per mile, and on the local and through travel combined 4·63 cents per mile; only one mill more than the average fare of the Baltimore and Washington railroad.

The board promise regularly, but cautiously, to reduce the charges when it is possible without serious diminution of the revenue, and discriminating with reference to the nature of the article, its bearing on other items of trade, its exposure to ruinous competition and other attending circumstances.

Nicaragua Ship Canal.

The route between the two oceans by the way of the River San Juan and Lake Nicaragua, and the practicability of constructing a ship canal through the valley in part occupied by these bodies of water, has been very fully examined by Col. O, W. Childs, the Chief Engineer of the company.

The charter granted by the State of Nicaragua is dated 22d September, 1849, and is to continue 85 years from the completion of the canal. The dimensions of the canal are to be such as to admit and freely pass vessels of all sizes. The company are to pay an annual bonus of $10,000 during the the period assigned for the construction of the canal, 12 years, and to give the State $200,000 of stock on its issue. The State is also to receive for the first twenty years 20 per cent per annum of the net profits after deducting 7 per cent on the capital invested, and 25 per cent for the remainder of the term. After its reversion to the State, the company are to receive 15 per cent of the net profits annually for 10 years, if it does not cost over twenty millions, and 20 per cent for 20 years in case its cost exceeds that sum. During the period of construction, the company are to have rights of transit over the territories of the State, paying a toll of 10 per cent on the net profits. The surveys for the canal were to be commenced within one year from the date of the grant, and on the 27th August, 1850, Col. Childs arrived at Nicaragua.

Between Lake Nicaragua and the Atlantic, the River San Juan is the only route; from the Lake to the Pacific the following have been suggested: 1st, via the River Sapoa to the Bay of Belanes in the Gulf of Salinas; 2d, via the River Lajas to the port of San Jun del Sur; 3d, via the Rio Jepitapa into Lake Managua, and from this latter lake to the Pacific at the ports of Tamarinda or Realejo, or at the Gulf of Fonseca.

The lakes of Managua and Nicaragua occupy a great transverse valley, commencing on the gulf of Fonscea, where it is nearly 100 miles broad, and separated from the Pacific by slightly elevated ground, relieved by occasional low hills, and a few volcanic cones. The height of these grounds is barely sufficient to prevent the waters of the valley from flowing into the Pacific, and to turn them towards the Atlantic. This valley is contracted towards the southeast, where it is completely filled by lake Nicaragua, from which flows its outlet, the river San Juan, through a narrow valley of the same name, into the Atlantic.

The lake of Nicaragua is estimated by Mr. Childs to be 110 miles in extreme length by 25 in (average?) width. Its greatest proximity to the Atlantic is near its southern extremity, from which, on a right line, it is about 60 miles distant. The point of its nearest approach to the Pacific is near the middle of its length, where by the shortest line the distance is about 11 miles.

The San Juan river was found by Mr. Childs to be, following its sinuosities, 119 miles in length. It has a great number of tributaries, generally small, with the exception of the San Careos and Serapiqui, which come in from the hills of Costa Rica on the south. The first of these enters the San Juan at 65 miles, and the second 90 miles below the lake. These streams flow through valleys transversely to that of the San Juan, which is further intersected by ranges of hills coming in both from the north and the south, at the rapids del Toro, Castillo, Machuca, etc.

The lake of Nicaragua lies longitudinally nearly parallel to the Pacific ocean, and is separated from it for nearly two-thirds the length of the lake by hills of comparatively moderate acclivity and elevation, in most cases capable of cultivation to their summits. Here are several transverse valleys, one of which is deemed suitable for the proposed canal.

The route by the way of the river Sapoa is through a country now in dispute between the States of Nicaragua and Costa Rica. It was deemed physically impracticable for a canal. Mr. Childs found that to pass the summit a cut of 119 feet in depth would be required, and an up-lockage from the lake of 350½ feet, and a down lockage to the Pacific of 432 feet. Water to supply the upper locks could only be obtained with difficulty and at great cost, and a long rock cut of three-fourths of a mile would be required, from the edge of the bay of Salinas to deep water.

The route by the Rio Lajas to the port of San Juan del Sur has heretofore attracted much attention. Not less than three surveys have been made over this line—one in 1781 by Galisteo, a Spanish engineer, and the last by Mr. Bailey, an Englishman, under the Republic of Central America, published in Stephens' Incidents of Travel in Central America. The length of Bailey's line is 16 miles and 730 feet, and its summit 487 feet above the lake. That of Galisteo is over 17 miles long, and its highest point 134 feet above the lake. The necessity of tunnels and the inadequate supply of water, combined to render the construction of a canal impracticable on these routes.

The route proposed by Mr. Childs starts from the mouth of the river Lajas, and is carried to the summit of a transversal valley lying about 6½ miles south of Rivas, and reaching between the valley of Rio Lajas and that of the Rio Grande, already mentioned as flowing into the Pacific at Brito. This summit was found to be only 47½ feet above the surface of the lake, as it stood on the 23d December 1850, at which time it was 3½ feet above its lowest stages, and 1½ feet below the level at which it ordinarily stands at the height of the rainy season. The length of this line from lake to sea is about 20 miles.

The depth proposed is 17 feet, and as the water is to be supplied from the lake, it will be necessary to commence the construction in the lake, at a point where the water is 17 feet deep at its mean stage. This point is opposite the mouth of the Lajas, and 25 chains from the line of the shore. From this point for 1½ mile, partially along the river Lajas, the excavation will be principally earth. But beyond this, for a distance of 5½ miles, which carries the line beyond the summit, three-fourths of the excavation will be in a trap rock; that is to say, the deepest excavation or open cut, will be 65 feet, and involve the removal of 1,879,000 cubic yards of earth, and 3,378,000 cubic yards of rock. The excavation and construction on this 5½ miles alone are estimated at upwards of $6,000,000.

The summit passed, and the valley of the Rio Grande reached, the excavation, as a general rule, will be only the depth of the canal. The lake is 102 feet 10 inches above the Pacific at high tide, and 111 feet 5 inches at low tide. This descent is proposed to be effected by 14 locks of 8 feet lift each. On the Pacific terminus at the point where the Rio Grande enters the sea, there is only a small indentation partially protected by a low ledge of rock, but destitute of all natural advantages for a harbor. It is proposed to construct an artificial harbor of 34 acres in area, partly by excavations in the land and partly by moles and jetties in the sea. The cost of these works is estimated at $2,600,000.

Proceeding from 17 feet depth of water in the lake, opposite to the river Lajas, in the direction of the outlet of the lake at Fort San Carlos, there is ample water for vessels of all sizes, for a distance of about 51 miles, to a point halt a mile south of the Boccas islands. Here the depth of water diminishes rapidly to 14 feet. For the remaining 5½ miles to the Fort, the water is variable, averaging only about 9 feet at low, and 14 feet at high water. For this distance of 5½ miles, therefore, an average under water excavation of 8 feet would be required to make the channel, at low water, of the depth of the canal, or 17 feet. But if the lake were kept at high level, the under water excavation would be but an average of three feet. The channel is to be protected by rows of piles driven into the bottom on its margin.

The improvement of the navigation of the river San Juan, is considered the most difficult part of the route. The whole distance from San Carlos to 17 feet depth of water in the harbor of San Juan is 119½ miles; and the whole fall, from the surface of high lake to the surface of highest tide in the harbor, is 107½ feet—to lowest tide, 108½ feet. The first 91 miles of this distance is to be rendered navigable by excavating the bed of the river, and by constructing dams to be passed by means of locks and short canals; the remaining 28 miles of the canal to be constructed inland, or independent of the rivers. Of the whole fall, 62½ feet occurs on that portion which it is proposed to improve by dams, and on which there are to be eight locks, and the remaining 46½ feet occurs on the inland portion of the canal, on which are to be six locks—14 locks in all.

The first dam is to be located at the head of the Castillo rapids, a distance of 37 miles from the lake and the rapids to be passed by a lateral canal. By this canal the water is to be raised 21½ feet at that point, and at the lake 5 feet, so as to keep the lake permanently at high water. The fall at this dam would be 16 feet. Six other dams are proposed. Four of 8 feet fall, one of 14½ feet, and one of 13½ feet. Between all of these there would be more or less excavations of the bed of the stream, sometimes in earth, and often in rock.

The harbor of San Juan is to be improved by moles, and the construction of an artificial harbor of the capacity of 13 acres.

The water passed from the lake at its lowest stage, on the 4th of June, 1851, was 11,930 cubic feet per second. The greatest rise of the lake is about 5 feet. When it stood at 3 43 feet above its lowest level, the flow of water was 18,059 cubic feet per second, being an increase of about 50 per cent. Supposing the same ratio of increase, at high lake, the amount of water in the river would be doubled.

The river receives large accessions from its tributaries. Below these, and above the point of di-

vergence of the Colorado, flowing direct into the sea and from the San Juan, into the harbor of the same name, the flow of water was 51,830 cubic feet per second, of which 42 056 passed through the Colorado branch into the ocean, and 12,325 through the San Juan.

The dimensions of the canal are 17 feet deep, 50 feet wide at the bottom, 86 wide at 9 feet above the bottom, and 118 feet wide at the surface.

When the excavation is in rock, the canal is to be 50 feet wide at the bottom, 77 feet at 9 feet above bottom, and 78½ feet at the surface of the water.

The total length from San Juan on the Atlantic, to Brito on the Pacific, is 193½ miles.

	Miles.
Canal, from port of San Juan to its point of intersection with the river, near the mouth of the Serapiqui	28,505
Slack water navigation on the San Juan river, from the above point to San Carlos, as the outlet of the lake	90,800
From San Carlos, across lake Nicaragua, to the mouth of the Rio Lajas	56,500
From the mouth of the Rio Lajas te Brito	18.588
Total as above	194,393

The cost is estimated as follows:

Eastern division *i. e.* from port of San Juan to lake	$12,502,346
Middle division (through the lake)	1,025,676
Western division (from lake to Pacific)	13,896,603
	$27,424 625
Add for contingencies 15 per cent	4,113,693
Total estimated cost of canal	$31,538,319

Any increase to the depth of the canal would in the opinion of Mr. C., greatly increase the amount of excavation and the expense, besides exposing the works to receive deposits of earth to such an extent as to impede the navigation.

The questions of a supply of labor and materials are secondary to those belonging to the physical characteristics of the route. There is no doubt that the topographical features, as presented by Colonel Childs, are fairly stated. It is a matter to be decided whether the means proposed are adequate to accommodate with sufficient speed and cheapness, the commerce between the two oceans.

Travel between Albany and New York.

"Competition is the life of trade." If so, the trade between Albany and New York has as many lives as a cat. The river which originally created the travel, is now in a fair way of being deserted by it, or at least, of being compelled to divide its honors. There are now three ways of getting to and from New York, each of which possesses some advantages which the others cannot obtain.

First and oldest are the boats, comfortable, luxurious even; taking eight or nine hours to make the trip, but in reality losing no time at all if they provide you with means of enjoying your night's rest, and waking up in the morning where you want to be. The fare is, and always will be much lower than the railroads can afford to run for. It is now 50 cents, or one-third of what they charge.

Second, by the side of the steamboats and in full sight of them, spin along the cars of the Hudson River railway, distancing everything that runs on paddle-wheels, and getting to the journey's end by the time they have got half-way—so that you can go and come back by daylight. This line is crowded with passengers, and beautiful in the way of dust and noise. It is literally—

"Rattling under arches,
Rumbling over bridges;"

for tunnels, embankments, and pile-work through shallow water, take up a great deal of the way. If you are in a hurry, take the Hudson River railroad.

Third, and newest of all, is the Harlem line, running five or six miles back of the river, carrying you for the same rate as the Hudson River line, and only taking half an hour longer. It is newly established, and hence as yet has comparatively few passengers, but these few are extremely well taken care of and politely treated. Its peculiar recommendations are midway between those of its two competitors. It is faster than the steamboats, and more comfortable than the other road, and safer by the difference than there is between a road twisting about among rocks and water, and one whirling over dry land, through an open country.

To sum it all up, the boats are the cheapest, the River road the fastest, and the Harlem the safest; and none of them are so dear, or so slow, or so dangerous that they will not bear comparison with any similar lines in the world.

The stream of travel is so great and so constantly increasing, that it will give employment to all three; the result of which is likely to be, that while neither of them amass overgrown profits, the travelling public will enjoy the best advantages that can be given it. To which, if we are stockholders, let us become duly resigned, or being "only passengers," be devoutly thankful.—*Albany Evening Journal.*

Massachusetts Railroad Statistics.

Nashua and Lowell Railroad.—Incorporated in 1836. Opened in 1838. Length, 14 miles, (double track.) Cost, January 1, 1852, $651,200.

The following table exhibits the operations of the road, during the last ten years; its cost, and the market price of the stock, at the beginning of each year:—

Year	Cost.	Value of stock.	Gross receipts.	Running expenses.	Net income.	Dividends.
	$	$ .... per sh.				
1842.....	380,000	125	$131,189	$91,577	$39,612	8 per cent.
1843.....	380,000	....	84,079	39,992	44,087	8 "
1844.....	380,000	125	94,588	59,644	34,914	10 "
1845.....	398,200	126	112,681	48,010	64,671	9* "
1846.....	125	127,496	70,279	57,217	10 "	
1847.....	500,000	125	157,335	96,937	60,398	10 "
1848.....	500,000	118	169,188	109,599	59,589	10 "
1849.....	525,000	115	156,435	99,456	56,979	10 "
1850.....	641,100	115	129,617	79,347	50,270	8 "
1851.....	651,200	108	117,017	55,445	61,572	9 "
			$1,979,625	$750,296	529,339	Av. 9 1-5 p. ct.

* An extra dividend of 6 per cent. was declared in 1845 from the reserved profits of former years.

New Hampshire.

The company which has purchased the Concord and Claremont and New Hampshire Central railroads, intend to unite the corporations into one, and to build a road from Bradford, N. H. where they meet, to join the Sullivan railroad at Claremont. The Central road starts for Manchester, as the other does from Concord. The towns of Newport and Claremont, through which the new line of road lies, have been asked to loan their credit to the new corporation, by guaranteeing its bonds, but they have only authorized an application to the government to allow them to do so The proposed road will compete with another road already established in N. Hampshire, and when the applications come up in the legislature, there will be a severe battle between the different interests.

Ohio.

Cincinnati, Hamilton and Dayton Railroad.—We are happy to copy from the Cincinnati Gazette the following account of the favorable position of the affairs of this company:

The following statement of the monthly earnings of the Cincinnati, Hamilton and Dayton railway, for the first year of its operations, has been obtained from the secretary of the company. It will be seen that nearly all the business of this road so far is local; and that it has nearly doubled within the year.

The earnings of October, 1852. were over thirty thousand dollars. The travel during the past two weeks, however, has somewhat fallen off, owing doubtless, in a great measure to unpleasant weather. The earnings of the month will probably not vary much from the last.

The secretary's abstract, rejecting the fractions of cents, is as follows:

Earnings of Cincinnati, Hamilton and Dayton Railway Company, for 12 *months ending Sept.* 30, 1852.

	No. Passeng's.	Passeng's Earnings.	Freight Earnings.	Total.
October, 1851	18,186	$16,306	$ 532	$16,838
November	13,716	11,842	608	12,441
December	14,493	11,345	4,888	16,334
January, 1852	11,401	8,736	6,008	14,745
February	12,311	9,893	4,377	14,270
March	16,265	13,557	5,509	19,067
April	17,088	14,314	6,166	20,481
May	18,096	15,386	7,314	22,701
June	19,389	16,315	7,781	24,096
July	22,581	17,768	8,532	26,301
August	19,733	15,458	9,552	25,011
September	20,981	16,943	12,194	29,138
	204,198	$167,950	$73,467	$241,427

Of the above earnings, $219,548 was *local*, and $21,877 was *through* business.

When it is considered that the road has made no pretensions during the year, (owing to the want of first class steamers from Sandusky, and the flat bar rail on part of the Mad river road between Sandusky and Springfield,) to compete for through travel, the success of the first year's business must be gratifying to those who take an interest in such improvements.

The Hamilton and Eaton road, connecting with the C. H. & D. at Hamilton, has only been in partial operation 27 miles for a few months. By the close of the present year it will be open to Richmond. Early next month the Greenville and Bellefontaine roads will unite at Union, giving an uninterrupted railway connection between our city, Indianapolis, Terre Haute and Lafayette. About the same time the Toledo and Norwalk road will be open to Bellvue, connecting the C. H. & D. through the Mad River road, with Toledo and Chicago. From these sources a large accession of freight and travel may be expected.

There can be no doubt that those who have made investments in the Cincinnati, Hamilton and Dayton road, will for a long period of years receive a good return in dividends; and they deserve it, for building up a road, which in point of durability and completeness, has no superior in the West, and which is of so much importance to the city and country.

Before the opening of spring navigation, the M. R. & L. E. road will be completely re-laid with T rail, fully ballasted, and will then, in connection with the Cincinnati, Hamilton and Dayton road, make one of the most pleasant routes eastward. The companies forming the line will have ready two of the fastest and safest steamers which have before made their appearance on the lakes. We differ with those who suppose first class passenger steamboats will not be patronized on the lakes during the summer months. A less number, than is generally supposed, of travellers will encounter the fatigue and dust of proceeding by rail from Cincinnati to New York and Boston, when they can go aboard a safe boat at Sandusky or Cleveland, and have a night's comfortable rest.—We want no better evidence of this than is furnished by the success of the boats in the Fall River route, from N. York to Boston. Notwithstanding the complete

railway connection between these two large cities, the magnificent boats on the Sound were so crowded during the past year, that the traveller who got aSbed esteemed himself quite fortunate.

The time by the Sandusky route, next spring, from Cincinnati to Buffalo will be twenty hours, and we doubt not a fair share of the travel will go that way. The Mad River and Lake Erie Company are building new cars that will be equal to the best on any other road.

We understand an important decision was made by the board of directors on the C. H. & D. company, at a late meeting, which will give much satisfaction to the business community generally, and tend to lessen the cost of transportation between Cincinnati and all portions of Northeastern Indiana. The board with a view to accommodate all the Indiana railways built and to be built, have entered into an agreement with the several roads forming the line from Cincinnati to Chicago, to lay down their second track as far as Hamilton on the narrow or Indiana gauge, by the time the line is finished to Logansport; and the several roads agree to form an exclusive connection with the C. H. & D. road for 20 years.

Hamilton, the most important point on the road between Cincinnati and Dayton, was made a point in the charter of the company. Since the agreement to adopt the Indiana gauge, on one track, the proposition to shorten the line between Cincinnati and Dayton, some six or eight miles, for express through trains, is much talked of. The company, we understand, intend shortly to survey a route from Glendale, up Skillman's Valley and Gregory's Creek, intersecting their main line near Middletown, and cutting off the bend made in going to Hamilton. This, we are told, will furnish a very fine line of low grades and cheap construction, and will only require the building of about 14 miles of additional road. In our judgment, however, the time has not come for such an additional outlay. The present road by Hamilton having ample capacity to do the business between Cincinnati and Dayton. Such is the admirable character of the present road, in point of grades, straight lines, smoothness, etc., that it may be run, with safety, by express trains, in one hour and a half. This speed should satisfy the present generation. Let the next if they will travel faster, provide the way. We are informed the C. H. & D. company, have now completed arrangements under seal, with every road now built or building into the Valley of the Great Miami, in the direction of Cincinnati, for an exclusive business connection for the next 10 or 20 years.

Rochester City Bonds.

The recent act of the Common Council of Rochester, repudiating the sale of the bonds of that city, is not at all relished by our negotiating houses here. We must say that a great blunder, at least, has been committed, the consequences of which will be felt when the same parties again come into market. Such trifling will not be tolerated. In speaking of this transaction, the Journal of Commerce says:

There is considerable indignation felt here by the bidders for the six per cent. bonds of the city of Rochester, recently offered in this market, at the manner in which the same have been disposed of in that city. It will be remembered that the city of Rochester advertised for proposals for a loan of $100,000 at six per cent., the bids to be opened at the office of Messrs. Carpenter & Vermilye, in this city, and to be rejected if not satisfactory. The reservation was supposed to apply only to some combination among capitalists (in case such should be attempted) to obtain the loan below a fair market rate.

The day limited arrived, and the bids were opened, when it was found that four times the amount was offered, at a rate which secured the whole at 104 a 104 37½, or a premium of 4 to 4⅜ per cent.—The bids were bona fide and were offered, as the fair value of the bonds, by some of our most respectable capitalists, who fully expected their acceptance. The authorities of Rochester, however, have rejected the bids, and award the amount to one of their own body, an exchange broker of the place, at a slight fractional advance on the bids here, viz: at 104 613. Had any considerable advance over the New York bids been obtained, the Corporation might have been justified in their course; but the transaction, as it stands, will pass for a piece of jugglery, more easily understood than defended.—The indignation in regard to the result of this affair is not confined to this city. The Controller of the Corporation, being an honorable man, it is said will resign from mortification; other distinguished citizens of Rochester have felt the disgrace to their city so keenly that they have offered to pay the fractional premium themselves, and give it to the New York bidders at their first offer.

Ohio.

Cleveland, Coshocton and Zanesville Railroad Co.—That one of the most eligible, (if not the very best) routes in the state of Ohio, could be located from Cleveland by way of Zanesville to the Ohio river, following the course mainly of the Muskingum river and its branches to Marietta, we have believed for years.

The shortest, cheapest and most direct route for the great Ohio canal, would unquestionably have been, *directly* down the Muskingum valley, from Cleveland via Zanesville to the mouth of this river at Marietta, instead of the long diagonal line of canal through the state, which was made at an enormous expense, and which has created a load of taxation upon our property, that many years will not remove. Canals, however, are rapidly becoming superseded by railways, and the time is approaching, and may not be far off, when they will be used for travel and traffic no more for ever.

A law was enacted by our legislature in March 1851, to incorporate a company, with the above title, naming citizens of Wayne, Holmes, Coshocton, and Muskingum as incorporators, and a capital stock of two and a half millions of dollars, with power to construct a railroad from the city of Cleveland, or some point on the Cleveland, Columbus and Cincinnati railroad to Wooster, in the Co Wayne; Millersburg, in the county of Holmes; Coshocton in the county of Coshocton; and Zanesville in the county of Muskingum, *with the privilege of extending said railroad to the Ohio river*, by such route as may be deemed advantageous, etc. This *extension* of the road, we are assured was contemplated to be *down* the Muskingum.

The State and Georgia Railroads.

The Editor of the Chattanooga Advertiser, who recently passed over these roads, in a letter to his journal, speaks of them thus:

"In passing over the State road on Friday, we were very favorably impressed with the substantial improvements which a twelvemonth has wrought. New locomotives, new passenger cars, and for most of the distance, new heavy bar track, have taken the place of the old order of things. A ride over the State road, in point of comfort, now compares very favorably with any of our neighboring roads, but the speed might be considerably quickened without detriment to the passenger's feelings. This will doubtless be done so soon as the relaying of the track is finished. At Calhoun a commodious brick depot is nearly completed. At Kingston another one, of hammer dressed stone is going up. At Marietta also a fine depot building is in process of erection, while at Atlanta the foundation is already laid for a much larger structure than any of those named. At Dalton and at Chattanooga preparation is making for the same rejuvenating process. These buildings are planned not only with a regard for permanence, but with some reference to architectural beauty.

"Besides the above, we notice that the work of filling up several of the high bridges is going forward as rapidly as the circumstances will admit. The improvements now going forward on the whole line of the road are more numerous and important than we were apprised of, and certainly convey a favorable opinion of the business capacity of Mr. Wadley.

"The Georgia road is still a model road. With a good track, good cars, and good management, it is doing a very successful business, and answering all the purposes to the trading and travelling public, which every railroad should do."

Philadelphia, Easton and Water Gap Railroad.

This project meets with decided favor, and we have the assurances of gentlemen well informed respecting it, that warrant us in saying it will be built. The necessity for an iron way from this city to the Northeastern valleys of the State is too apparent to need argument, and it is gratifying to us to know that those advocating the project are capable and determined to complete it. The line will be 65 miles in length from Philadelphia to Easton; will pass through a fertile part of Bucks county, leaving Doylestown a few miles to the east, and enter the flourishing town of Bethlehem, whence branches are proposed to Mauch Chunk, Allentown and Whitehaven. The main track will continue on to the famous Water Gap on the Delaware, 23 miles above Easton, at which point it will be met by the Cob's Gap railroad, 45 miles to Scranton, which again connects with the Lackawanna and Western road, a line that unites with the New York and Erie road, near that part known as the Great Bend. Thus a communication is opened with Binghamton, and thence by the Syracuse and Binghamton road, of 75 miles in length to Syracuse, and from thence to Oswego, which is by this route 309 miles from this city, or 18 miles nearer to Philadelphia than New York. The connection thus obtained with the New York and Erie road will be invaluable to Philadelphia, and place us 27 miles nearer Dunkirk than New York is by that route—65 miles nearer to Buffalo, 45 nearer Niagara Falls, and 35 nearer to Rochester than our great Northern rival. The advantages in distance in our State trade are still more apparent. It will place Bethlehem 37 miles nearer Philadelphia than New York, and give Easton a clear gain of 13 miles, in addition to a direct communication with this city.

New York has been pushing her roads into our State, and overreaching us in her schemes to control the valuable trade of Northern Pennsylvania. Now we can retaliate, and make her roads, to a great extent, ours. Complete this Philadelphia, Easton and Water Gap railroad, and we at once open in connection with the lines named a chain of railways that will contribute immensely to the advancement of our city and State. The road when finished will form a great trunk line North and South, with branches to the Lehigh, Delaware, Lackawanna and Susquehanna valleys, and various sections of the State of New York, both East and West.—*Phila. Register.*

Ohio and Pennsylvania Railroad.

The business of the Ohio and Pennsylvania railroad, for November was as follows:

From passengers and mails	$29.497 63
From freights	10,778 30
Total	$40,275 93
Passengers carried in November	22,478

The receipts of November exceed those of any previous month, except October, notwithstanding the rise in the Ohio river, and the opening of the Lake Shore line.

The Pittsburgh Gazette says: We may add to the above statement, that a very small part of the receipts arise from the through business. The great bulk of it is from the legitimate local business of the road. The results so far establish beyond all question, taking the most limited view of the business of the road, that when it is finished to Crestline, its clear receipts will amount to $50,000 per month, which, allowing one half of the receipts to be consumed in the ordinary run of expenses, keeping the road in repair, etc., which is a very large allowance, (as 40 per cent. is considered a fair average,) will give a net revenue on the cost of the road and equipment of about 7 per cent per annum. This shows that the stock is absolutely certain to be among the most reliable and safe in the country and that it can never go below par.

But $50,000 is entirely below what the road will yield. We shall be disappointed in our calculations if its receipts do not amount to $100,000 per month by this time next year, when some of its most important connections will be finished. By next spring we have no doubt its receipts will amount to

$75,000 per month, and that instead of 7 per cent. its stock will pay 10 per cent. The increase of passenger travel will not increase the expenses in proportion to the receipts; neither will it cost as much per mile to run the trains to Crestline as to Wooster, so that the profits of the road will be increased in every aspect in which the subject can be viewed

American Railroad Journal.

Saturday, December 11, 1852.

New York and Philadelphia.

Our neighbors in Philadelphia are constantly contrasting the efforts which that city and New York are making to secure to themselves the domestic trade of the country; and regard the works that the latter are constructing, as evidence of her grasping aims at a commercial domination. Everything that is done by the people of this city is looked upon as having some ulterior object, far beyond the *apparent* one; that the construction of our lines of railroad have been but the carrying out of a far reaching and well digested scheme; the object at the bottom of the whole being to increase the business of this city at the expense of that of all others.

Now, as far as any design of the character charged, or anything like what may be termed public spirit, having for its aim the advantage of the city, is concerned, there is not the least ground for the charges put forth by the Philadelphia press. Public spirit, by which we mean a willingness to make personal sacrifices for the public good, is a sentiment not known in this community. Our business men would laugh at the idea of an appeal of such character being made to them. The Erie road was the only work upon which any sacrifices were ever made by us for a common advantage. But this was many years ago; since which, the character of our people has, in many respects, undergone a radical change.

The roads constructed and in progress, based upon New York, are merely *private* speculations, in which the public neither feel, nor have, any direct interest. They have been undertaken and executed by private parties, for private advantage, and would never have been undertaken, but with such objects.

The correctness of these statements will be readily admitted, when it is seen how free are our people to aid projects, the avowed object of which is to divert trade from themselves to their great rival. The first blow upon the Ohio and Pennsylvania railroad would hardly have been struck, but for the aid furnished by this city. The Hempfield road, too, came to this market to sell their bonds; so will the Pittsburg and Steubenville—all of them works looking directly to Philadelphia. So, too, with the Ohio works, having the same object—the Steubenville and Indiana, Ohio Central, and Cincinnati and Marietta roads. The money to build all these roads is furnished directly by N. York. Although their projectors and builders claim them to be Philadelphia roads, yet no New Yorker objects to aid the above works, on account of their objects being adverse to his interests; and we never recollect to have seen a paragraph in any paper in this city, object to our aiding the above works, on account of the apparently hostile influence.

In the face of all these facts, showing us to be the most tolerant and obliging people in the world, we hope our neighbors will no longer persist in accusing us of seeking to aggrandize ourselves at their cost. All such ideas are simply creations of their own imagination. New York has no designs in the prosecution of any enterprise, than the money to be directly made out of it. Our people will be sure to keep clear of all enterprises that do not promise to pay, and are equally ready to undertake all that will, whatever may be their *commercial* effect. If the people of Philadelphia would act upon the same principle, they would complain less, and accomplish a great deal more.

We not only furnish capital most liberally to projects, the object of which is to turn trade and travel away from our city, and our railroads, but we invite other cities to make our own territory the theatre of their efforts to wrest both from us. We have granted free permission to the city of Boston to come to the Hudson and St. Lawrence, for the purpose of intercepting the trade of the west at Albany and Ogdensburgh. Neither do we charge $10,000 a year for this privilege, the amount of the penalty imposed upon the Erie road for running through a corner of Pennsylvania. So in the western part of the State, we grant full permission to Baltimore and Philadelphia to tap our works, which we have at such an immense expense constructed as outlets of western trade; and were we to credit predictions confidently asserted, we are liable to have the whole of this trade taken from us. In face of all these dangers and rivalries we impose no restrictions, but generously offer to the competition of others what we could legally monopolise. Will not Philadelphia take a lesson of tolerance from New York, both in legislation and in commercial liberality?

Sale of Buffalo, Corning and New York Railroad Bonds.

S. Draper, Esq, will sell on the 15th inst., $150,000 of the bonds of this company, being a part of an issue of $1,000,000 upon the whole road of 134 miles. The bonds we regard as a first class security, and we believe there is nothing better offering of the kind. The condition and prospect of the road are well set out in the advertisement of sale, in another column.

Railroad Connections.

We have previously noticed the opening of the Lake Shore road from Cleveland to Buffalo. Another connection, second only in importance to the above, was effected last week, in the completion of the Toledo, Norwalk and Cleveland railroad, from Toledo to Munroeville on the Sandusky and Mansfield road. New York, Boston and Philadelphia, are now in communication by railroad with Lake Michigan and Chicago, and our roads have progressed one thousand miles directly into the interior, and are rapidly advancing still further West.

The present route from Cleveland to Toledo is somewhat circuitous. Passengers are first taken to Shelby, over the Cleveland and Columbus road, thence to Munroeville, over the Sandusky and Mansfield road. It is expected that by the first of January the Toledo, Norwalk and Cleveland road will be completed, opening a direct line between the latter place, and Toledo. The distance between these points is 112 miles, and between Cleveland and Chicago 356 miles.

The completion of the Lake Shore and the Cleveland, Norwalk and Toledo road, will prove an immense benefit to the business and travelling public. A journey of a thousand miles, to Chicago, is not now so much dreaded as was that from New York to Albany, by land, before the use of railroads. The dangers of Lake navigation late in the season, and the intolerable delays and hardships of a journey through Ohio and Indiana by stage coach, are now at an end. A person now leaves this city certain of moving for the whole distance of this proposed journey, at the highest speed compatible with safety, and in warm, comfortable and commodious cars. What a change from the mode of travelling a few years since! In a few days more we expect to hear of the union of the Indianapolis and Bellefontaine, and Greenville and Miami roads, extending our railroad system to Central and Southern Indiana.

In less than one year more the Mississippi will be reached. This will be an event of first magnitude in the history of our roads and of the internal commerce of the country. Already are the influences of our roads beginning to be felt in the increased activity manifested in every branch of business and in every department of industry. What we now see is, however, only an earnest of what is to come.

Railroad Accommodations at Indianapolis.

We learn, says the Indiana State Journal, that the Lawrenceburg and Upper Mississippi, and the Indiana Central railway companies were admitted into the Union arrangements, at the recent session of the Union board at this city. The companies now united in interest in the Union railway track, and Union passenger grounds, are six: The Madison and Indianapolis, the Terre Haute and Richmond, the Indianapolis and Bellefontaine, the Indiana Central, the Lawrenceburg and Upper Mississippi, and the Peru and Indianapolis, the latter company having an interest in the Union track but not in the Union passenger grounds and buildings. The Lafayette and Indianapolis company will make the seventh, and probably the New Albany the eighth railroad company that will be united in business connections over the Union track, while the passengers from all these roads will be exchanged in the general passenger depot building near the centre of our city. The arrangements must afford unusual facilities to the travelling public, and evinces much foresight on the part of the officers of the companies who projected this system.

Pennsylvania.

Philadelphia, Germantown and Norristown Rail road Co.—The report of the President and managers of the above company to the stockholders, for the year ending 31st Oct., 1852, contains the following statements:

The number of arrivals and departures at Philadelphia during the past year, were.....515,132
During 1851.....506,501

Increase..... 8,631

The only accident involving loss of life or limb, was the death of a person, who was overtaken by the cars while walking on the track.

Passenger receipts.	1851.	1852.
Norristown branch.....	$63,436.90	$59,903.00
Germantown ".....	31,637.00	35,500.00
General freights, N. branch.	31,450.00	31,876 54
Coal " " "...	6,780.42	5,961.20
General freights, G. branch.	2,550.35	1,900.82
Coal " " "...	923.00	1,206.00
Interest and rents, etc.....	2,583.25	2,568.70
	$139,360.92	138,516.26

The decrease is attributed to the severity of the last winter and the depressed state of the iron trade.

Out of the proceeds the interest on the loan of the company has been paid, and 2 per cent. divieend on the stock declared in April last and 3 per cent in October. A contract has been made with the Chestnut Hill railroad company by which the P.

G. and Norristown railroad company are to furnish cars and engines and operate the road. The companies to divide equally the receipts below $17,000, and the surplus above that sum to be divided ⅓ to the Chestnut Hill railroad company and ⅔ to the P. G. and N. railroad. The agreement to continue for 15 years.

The connexion with the Reading railroad was to be completed during November.

During the last session of the Legislature an act was passed authorizing the issue of a new loan of $100,000, under it $60,000 has been negotiated on favorable terms, under this loan $39,016 has been expended for iron, ties and laying.

The stock and loan account is thus stated:

Consolidated loan	$272,500
Loan of 1852	58,000
Sinking fund and loan of 1852	750
Capital stock as authorized	$16,000
Actually issued	15,876

In view of profitable connexions with other roads and accessions of business from such sources, the board recommend to provide additional depot lots, while they can be procured at fair prices.

New York Railroad Statistics.

The report of the Albany and Schenectady railroad company, for the year ending Sept. 30, has been made up for the legislature, and we condense from it the annexed very favorable statement of the affairs of the road:

Capital	$1,064,700
Debt all funded	$685,300
Total cost of road and equipments	$1,745,548
Length of road	16 5145-5280 miles.
The track is double the entire distance.	
Number of miles run	138,476
Total amount of freight	161,178 tuns.

RECEIPTS.

Passengers	$171,752 74	
Freight	117,854 98	
Miscellaneous	6,500 00	
		$296,112 68
Expenses		131,664 87
Dividend		81,616 00
Interest		45,749 95
To surplus fund		5,095 56
Total surplus fund		46,900 00

Cincinnati, Hillsborough and Parkersburg Railroad.

The middle division of this important line of road, 56 miles, is now offered for contract, and the balance of the line (60 miles,) we are informed, will be ready for letting by the first day of May next.

This company design to partly forward the road to completion, *simultaneously* with the finishing of the North Western Virginia railroad.

This is the route across Ohio, which is preferred by the Baltimore and Ohio railroad company, (see 26th annual report,) and by the North Western Virginia railroad company, (see 1st annual report) and it has received in the most emphatic manner the endorsement of Benjamin H. Latrobe, Esq., Chief Engineer of those works.

It is planned in a superior manner, and is intended to be a first class road, it will form a section of the Baltimore through line to St. Louis, and is worthy of attention, from our best contractors.

Stock and Money Market.

The activity in the stock market continues favored by an abundance of money, and the large receipts upon most of our lines of road. There is a gradual and steady appreciation of every kind of railway property, and first class securities of new works can only be had at advanced rates. The demand for such considerably exceeds the supply at the old rates. The following account of sale of a large lot of securities, sold by S. Draper on the 8th instant, will give a good idea of the state of the market:

$10,000 Buffalo State Line 7s, first mortgage	101¼
10,000 Buffalo State Line 7s, first mortgage	101
1,000 Buffalo State Line 7s, first mortgage	100¾
25,000 Buffalo State Line 7s, income bonds	97¼
38,000 Vermont Valley 7s, first mortgage	75
10,000 Cincinnati, Hamilton and Dayton 7s, Convertible	101¼
4,000 Lafayette and Indianapolis 7s, Convertible	93¼
4,000 Buffalo and Rochester R. R. 7s	100¼
5,000 Pacific Mail steamship 7s, (Howland and Aspinwall's line)	100¼
10,000 Pacific Mail steamship 7s, (Howland and Aspinwall's line)	100
(The above all sold with interest off.)	
5,000 Pacific Mail steamship stock	120
10,000 Pacific Mail steamship stock	119¼
250 shares Rochester and Syracuse R. R.	126¼
200 shares Syracuse and Utica railroad	134¼
200 shares Buffalo and State line railroad	118¼
50 shares Utica and Schenectady railroad	144¾
50 shares Utica and Schenectady railroad	144¼
140 shares Utica and Schenectady railroad scrip	137¼
60 shares Utica and Schenectady railroad scrip	136¼
100 shares Erie and Kalamazoo railroad	94
201 shares Erie and Kalamazoo railroad	96¼
100 shares Southern Michigan railroad	135¼
15 shares New York and Erie railroad	97¾
101 shares Union Ferry Co. (Brooklyn)	115
30 shares U. S. mail steamship line (Law's)	100
135 shares Paterson and Hudson River railroad	105
100 shares Paterson & Ramapo railroad	94

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, DECEMBER 11, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¼
U. S. 6's, 1856	118¼
U. S. 6's, 1862	114
U. S. 6's, 1862—coupon	115
U. S. 6's, 1867	118
U. S. 6's, 1868	120
U. S. 6's, 1868—coupon	121¼
Indiana 5's	102
Indiana 2½	61¼
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	98
Illinois 6's, 1847	84
Illinois 6's—interest	60
Kentucky 6's, 1871	111¾
Maryland 6's	111¼
New York 6's, 1854-5	109
New York 6's, 1860-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	114
New York 5½'s, 1865	113
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112½
New York 5's, 1866	117
New York 4½'s, 1858-'59 '64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	108
Ohio 6's, 1860	112
Ohio 6's, 1870	117
Ohio 6's, 1875	117
Ohio 5's, 1865	106
Ohio 7's, 1851	105½
Pennsylvania 5's	98¼
Pennsylvania 6's, 1847,-'53	101
Pennsylvania 6's, 1879	99¼
Tennessee 5's	92
Tennessee 6's, 1880	109
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	104
St. Louis	97½
Louisville 6's 1880	97½
Pittsburg 6's, 1869-1871	103½
New York 7's, 1857	108
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	103½
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	109½
Baltimore 1870-'90	109
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	114
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	101
Erie convertible bonds, 7's, 1871	102½
Hudson River 1st mort., 7's, 1869	109
Hudson River 2d mort., 7's, 1860	104½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	93
Reading mortgage, 6's, 1860	100¾
Michigan Central, convertible, 8's, 1860	111
Michigan Southern, 7's, 1860	101
Cleveland, Col. and Cin. 7's, 1859	123
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	108
Ohio Central 7's, 1861	98

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Dec. 9.	Dec. 2.
Albany and Schenectady	114¼	112
Boston and Maine	107¾	108¼
Boston and Lowell	109	109½
Boston and Worcester	105	105
Boston and Providence	89¾	89¾
Baltimore and Ohio	93¼	95¼
Baltimore and Susquehanna	30¼	30
Cleveland and Columbus	129	127¼
Columbus and Xenia	—	—
Camden and Amboy	150	—
Delaware and Hudson (canal)	128	130
Eastern	98¼	97¾
Erie	97¼	95¼
Fall River	—	—
Fitchburgh	104¼	103¼
Georgia	—	—
Georgia Central	—	—
Harlem	75	72¼
" preferred	111¼	111¼
Hartford and New Haven	129	129
Housatonic (preferred)	35	35
Hudson River	76¼	78¼
Little Miami	—	140
Long Island	55	48
Mad River	—	99
Madison and Indianapolis	111	111
Michigan Central	101¼	113¾
Michigan Southern	135	133¼
New York and New Haven	115¼	115¼
New Jersey	131	131
Nashua and Lowell	—	—
New Bedford and Taunton	117	117
Norwich and Worcester	54¼	52¼
Ogdensburgh	27¼	26¾
Pennsylvania	49¾	46¼
Philadelphia, Wilm'gton & Balt.	37	39
Petersburg	—	—
Richmond and Fredericksburg	105	105
Richmond and Petersburg	35	35
Reading	100¼	100¼
Rochester and Syracuse	126	125¾
Stonington	58	57¼
South Carolina	122¼	122¾
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	142½	141½
Vermont Central	17¼	17
Vermont and Massachusetts	19¾	22¼
Virginia Central	40	40
Western	105¼	105¾
Wilmington and Raleigh	57¼	57¼

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

Journal of Railroad Law.

CAN A RAILWAY COMPANY BE COMPELLED TO COMPLETE THEIR LINE?

This highly important question has recently been discussed very fully in the Court of Queen's Bench, in England, in the two cases of the *Queen vs. the York and North Midland railway company, and the same, vs. the Lancashire and Yorkshire railway Co.* It was then decided in the affirmative and a mandamus issued, as it would seem, upon very solid and satisfactory grounds. But it is probable that the cases will be carried up to the House of Lords and there still further argued.

We subjoin an extract from the able opinion of Lord Campbell, in the last of the English cases above mentioned.

"He would assume that when a company had availed themselves of the extraordinary powers conferred upon them, and taken possession of lands and commenced the undertaking, it was their duty to complete the railway, and that this Court was empowered to compel the performance of that duty by *Mandamus*. But when the company had done nothing as between themselves and third parties, and had abandoned the whole undertaking, he was at first inclined to think that they could not be said to have entered into any contiact or andertaking to complete their line, for that neither individuals nor the public could suffer any injury if the shareholders should agree to dissolve the company. But his present opinion was, that the moment the Act received the Royal assent, the contract and obligation attached. The notion that the directors had the *right of abandoning* the undertaking was wholly gratuitous. The *contract* between the company, the owners of the land, and the public, was absolute so soon as the Act was passed. There was ample consideration for this in the prejudice sustained by the landholders who were liable to have their lands compulsorily taken from them. The reciprocal consideration from the company, was their expenditure in the making of the line, and the benefit to the public from the making the railway. Mutual consent was given to the provisions of the act which constituted the contract. It had been argued at the bar, that the Act of Parliament was only *permissive*. But he was of opinion that there was no right of *abandoning* the *undertaking* after the act was passed. By merely serving a notice, the directors could obtain the land at any moment during the long period that their compulsory power had existed. Landowners were thus prevented from applying their lands to any purposes inconsistent with the railroad. During all this period was one party to be bound, while the other party was free? That could be hardly contended. Again, the passing the act, removed all competitors for making the line, and thus the public lost the benefit of having the line made by other parties. Was that advantage to be lost, without a countervailing benefit? If in the progress of the work unforeseen difficulties should occur, application might be made to Parliament for relief—as, it is suggested, has been done in this case. But this would not, necessarily, absolve the Court from the duty of giving its due construction to an act of Parliament—which should come legitimately before it. In some of the railway acts, the companies "*are required*" to do certain things. In other acts it is provided that "*it shall be lawful*" for them to do similar things. Words of a permissive character are sometimes construed as compulsory. It is also stated in Comyn's Digest under the title of "Parliament," that "if a Statute says that a thing for the public benefit may be done, it shall be construed, that it must be done." He was therefore of opinion that the company had power given to them, and that it was their duty to take all the necessary steps for the completion of the railway. *Peremptory Mandamus issued.*

A very important decision in regard to railroad law has just been made in the case of "Gay, Collins and others, vs. the Buffalo, Corning and New York R. R. Co."

This case was argued and decided in the Cayuga special term on the 22d inst. The judge decided that the omission to pay the ten per cent upon the subscriptions of the original stockholders, and taking the notes of the stockholders in lieu of the money therefor, as charged in the complaint and ana admitted by the demurrer, constituted a fatal objection to the incorporation of the defendants, and ordered a perpetual injunction against running their road, unless they shall amend in 30 days the payment of costs.

It tous appears that the ten per cent payment required by the General Railroad Law must be paid in money, and not the notes of the stockholders, before the company becomes an incorporation.

Cleveland and Erie Railroad.

We are indebted to the Cleveland Herald for the following description of the above road, contained in the notice of the opening celebration of the 23d ult.

The railroad distance from Cleveland to Erie is 95 miles, and the route is one of the most feasible in the West. The line is nearly straight the whole distance, and there is not a single deep cut. Nearly all the way the road bed is thrown up sufficiently to receive the ties. The valleys and streams are crossed by embankments and bridges, the grades are very low, and when the entire line is ballasted, it will be the best for speed and safety in the country. —The road both in Ohio and Pennsylvania has been well built, and reflects great credit on the contractors, Messrs. Stone & Witt, from Cleveland to the Pennsylvania line, Wm. Beckwith, chief engineer: and Messrs. W. S. Lane, Lowry and Jackson, Becker and Rust, Geo. W. Barr, Miles, Hart & Co., C. Englehart, Baldwin and McKendree, from the Ohio line to Erie—that portion being designated the Franklin Canal Company railroad. John Galbraith, president; W. S. Lane, treasurer and secretary, and Professor Twining, chief engineer.

The stations and distances on the line are as follows: Cleveland to Euclid, 9¼ miles; Wickliffe, 14¼; Willoughby, 18¼; Mentor, 23; Painesville, 29; Perry, 34¼; Madison, 40; Unionville, 42; Geneva, 54¼; Saybrook, 49¼; Ashtabula, 54¼; Kingsville, 60¼; Conneaut, 67¼; Springfield, 75¼; Girard, 80; Fairview—Erie, 95.

The principal bridges are at Willoughby, Painesville, Ashtabula, and Conneaut in Ohio; and Crooked Creek, Elk Creek and Walnut Creek in Pennsylvania. The bridges in Ohio are How's Patent Trestle, generally five spans of 160 feet each. The Painesville bridge is 82 feet high, the Ashtabula, 55. The bridges in Pennsylvania are Stone's Plan, lattice trestle, with through iron bolts. The bridge at Crooked Creek is 800 feet long, 60 feet high, and cost $31,000. Over Elk Creek, 13,00 feet long, 116 high, and cost $75,000. One million two hundred thousand cubic feet of timber used in its construction. Miles, Hart & Co., builders. The main bridge at Walnut Creek, 1,000 feet long, and 104 feet high. The entire trestle work is 2,000 feet long. Becker & Rust builders. The Pennsylvania bridges are 31 feet wide at the top, with slope of one-twelfth. They are very substantial structures, the locomotive and train scarcely producing more jar than on terra firma. So with all the bridges on the line.

The station houses finished on the C. P. and A. portion of the line are models of beauty and convenience, and the depot grounds are ample and eligibly located. The cost of the road equipped is about $20 000 per mile, and the stock would now sell readily at $122, the highest value perhaps of any road in the Union on its first opening for thro' business. Owing to heavy bridging the Franklin Canal company railroad cost somewhat higher. The obstructions thrown in the way of its construction by the authorities of Pennsylvania have also added to the cost of the road. Thanks, however, to the perseverance and good management of presidents Galbraith and Kelley and their coadjutors in both states. every obstacle has been overcome, and the "Cuyahoga wheel-barrow man" is now ready to take the Sunbury track to Philadelphia, or a narrow gauge beside the old Keystone's 18 miles of wide, as may be mutually agreed on.

Commerce against Revenue.

The cities of Baltimore and Philadelphia are applying all their energies toward the construction of two great lines of railroad, which, it is claimed, are to become the routes of travel between the east and west, in preference to those lying north, and are to secure a large trade by withdrawing it from other cities and other routes.

We desire to see all the success attending these efforts, that they deserve. That important results will be achieved, we have no doubt. But we think, plausible as the claims presented may appear, that some important conditions are still wanting, and some lessons are yet to be learned, to the full realization of these expectations. The first of these lessons, is the necessity of consulting *commercial considerations* alone, in everything that relates to railway management and construction, when an attempt is to be made to compete for the commerce of the country. Speed and cheapness of transit determine the *route* both of persons and property, and all railroads not prepared to yield the minor consideration of immediate revenue, to the higher one of commercial advantage, will do well to withdraw from the contest without attempting a trial of strength.

The city of New York is now in possession of the interior trade of the country, for which she is indebted to the Erie canal, and to a judicious regulation of its tolls. These have been graduated to secure business, rather than revenue. The result has been that the canal has nearly supplanted its rivals in the carriage of many of the more important articles of freight, and is rapidly increasing its tonnage and aggregate tolls, at their expense. The policy of the Board of Public Works of this State has been, to reduce tolls upon an article to a nominal sum, provided by doing so it could be made to take the canal in preference to other routes. The recent change in route of railroad iron imported into the Mississippi Valley, is a good illustration of the effect of this policy. A few years since all this iron was received by way of New Orleans.—The canal board determined, if possible, to secure this important article for that work, and commenced a gradual reduction of tolls, till they have reached the low figure of 3 mills per ton, per mile. The result has been that nearly all the iron for Western States is entered at the port of New York, and passes through the canal. We should not be sur-

prised if at least 150,000 tons should take that route, the present year, yielding a revenue of $10,000, all of which has been secured by low tolls, and would be lost again, by imposing the old rates.

Considerations like these, which exert a paramount influence in the management of the great N. York works, are hardly acknowledged when we come tothe roads either of Penn., or Maryland. The chief reason undoubtedly is to be found in the fact that their roads have enjoyed a monopoly of the business which they were constructed to accommodate. Their owners were not in a position where they could feel the force of any appeal not directed to their immediate apparent interests. The comparative small number of roads too, had not even stimulated a healthy and beneficial rivalry for the *local* trade of particular sections of country; nor has it brought up the aggregate of the roads in those states, to the excellence of management that prevails upon the roads of New York and New England. There are exceptions of course to this general statement, but the *rule* we believe is unquestioned.

A good illustration of the correctness of the foregoing remarks is to be found in the charges upon the Washington branch of the Baltimore and Ohio railroad. Baltimore may be regarde as a southern city, and in virtue of being such, is making constant appeals for the trade of the south. She would appear to be the appropriate depot of this trade. Instead, however, of encouraging it by all the means within her power, she throws the strongest possible obstacle in the way, in the shape of a toll of 5 cents per mile upon a person passing over it. The consequence is, that the trade which under a proper rate of charges might be invited to that city, is intercepted by the various cities lying still further south, Washington, Richmond, Petersburgh, etc., and a very large number of travellers are drawn off the land route, and take the steamers plying between New York, Savannah, Mobile and New Orleans. In this manner a road which should be one great arm of the prosperity of Baltimore, serves no other purpose than as a connecting link in the great route of travel between the north and south.

Compare the policy which regulates the tolls upon this road, with that which controls the management of the roads running out of the city of New York. Upon the Hudson River and Harlem, the charge from New York to Troy, a distance of 150 miles, is $1 50, or 30 cents less than from Baltimore to Washington, a distance of 38 miles; while the speed upon the former is nearly twice as great as upon the latter. The fare from New York to Buffalo, a distance of 470 miles, is only $8, or at the rate of 17 mills per mile, and the time required 14 hours, just about the average time consumed in a trip from New York to Washington, and at very nearly the same price, showing that upon the New York roads, a person travels twice as fast for the same money, or an equal distance for one-half the amount charged upon the line from New York to Washington.

The result of the high speed upon eastern roads, is to bring the whole of New York and New England, as well as a large portion of Canada, embracing a population of over 7,000,000, within one day's ride of New York. Every evening is this city filled with swarms of people from the most distant parts of the above named States—from Portland, Bath, Augusta and Waterville, Maine; Concord and Portsmouth, N. H.; Burlington and Montpelier, Vt.; Buffalo, Dunkirk, Rochester, Elmira and Watertown, N. Y.; and from Montreal, in Canada. In all these places, the morning papers, the mails, and packages of merchandise, are delivered the same evening. An immense and mutual advantage results from this almost incredible celerity of movement. New York is in this manner made the convenient market for the whole population within daily reach by her railroads, and she in turn commands an immense trade, which, without railroads, or with an unwise or unskillful management of them, would be drawn off to other points.

The moment we go south from New York; we come into a different atmosphere. One feels that the instant he steps across the Hudson, an incubus rests upon everything connected with locomotion. This results in a great measure from the mistaken notions which have prevailed, both in Philadelphia and Baltimore, as to the effect that entire freedom of movement, both of persons and property, would have upon the interests of those cities. They have acted upon the belief that their advantage would be promoted by throwing all obstacles in the way of the cheap, comfortable and expeditious movement of persons and merchandise between them and New York; that these would be the means of retaining a trade which would go to the latter, could that point be conveniently reached. It is this idea that has led the State of Maryland to refuse so steadily to allow the Susquehanna to be bridged by the Philadelphia, Wilmington and Baltimore railroad company, and Philadelphia to remain so quiescent under the monopoly of the New Jersey companies.

The policy of which we have spoken seemed to work very well, so long as these cities had no western connections. There seemed to be no objection in throwing impediments in the way of southern travel going north, for the reason that in this case only one route existed, which secured it a monopoly under any circumstances. But these cities are now constructing roads, the object of which is to place each on a great line of travel between the east and west. To secure this travel, they have to compete with numerous other lines. As New York is a great commercial city, and the point to which the largest stream of western travel is directed, the liner of road between that city and Baltimore, are to become part of the two great lines of travel between the east and west.

The construction of their great lines of road has, in a manner, effected a complete change in the supposed interests of the cities of Baltimore and Philadelphia, and of course a corresponding one as to the means by which this is to be promoted. The only way in which travel can be secured for their great works, is to facilitate and cheapen the transit of persons and property over the roads connecting them with New York, as well as over their own lines. It now requires a little longer time to travel from New York to Buffalo, than from New York to Baltimore. At Buffalo, a person is nearly two hundred miles nearer Cincinnati than Philadelphia, and more than one hundred nearer than Baltimore. At Buffalo, a person is eight or ten hours nearer Cincinnati than either of the above cities. Travel west must therefore take the northern route, unless a radical change be effected in the policy by which the New Jersey roads, and the Philadelphia, Wilmington and Baltimore, are managed.—Of this there can be no doubt.

Again, the rates of toll, both upon the Baltimore and Ohio and Pennsylvania railroads, have been established with a view of securing a large *immediate* revenue, rather than a large amount of business, either to themselves or the respective cities on which they are based. Those rates are at least 50 per cent higher than upon the New York lines. A radical change here is called for to accomplish the object of the construction of the above roads, and to secure to them even, that portion of the N. York trade and travel they are fitted to accommodate.

We have no doubt that both Philadelphia and Baltimore, will, in the end, be governed in the management of their railroads, by the liberal policy of which we have spoken, drawn from commercial considerations rather than those looking to mere revenue; and that the former will effect, not only the reforms needed upon their own lines, but upon the roads connecting them with New York. So long as this shall remain uneffected, their roads will fail to accomplish one of the leading objects in their construction.

A New Railway Project.

"A project is on foot, and is pressed with great earnestness by Eastern capitalists as well as by many enterprising citizens in Ohio, to construct a line of railway from Olean, New York, through Pennsylvania, to connect with lines leading to Indiana and to Cincinnati, at some suitable point in Ohio. This track to connect with the New York and Erie road at Olean, and to be a six foot track, so as to open an unbroken wide gauge from New York to this city. The proposed line, as we understand it, passes down the valley of the Allegheny, say to Warren, Pa., thence into Ohio by Warren and Ravenna, and on to intersect the Pennsylvania and Ohio road, at Wooster or Mansfield branching southwest to this city. Should this line strike Wooster or Loudonville, it will, probably, take the route through Mt. Vernon, Delaware and Springfield in this direction, and will make a pretty direct route from this city to Olean.

This is an important project, and we are informed that it is based on existing charters in Ohio (granted under the old constitution) and, in Pennsylvania and New York. We are not now able to refer to the precise provisions of the charters alluded to, or to give their dates or titles; but we suppose that the whole extent of the proposed line within the State of New York, and for some considerable distance within the State of Pennsylvania, will be over the route of the Allegheny Valley road, from Pittsburg to Olean, and within Ohio will pass some thirty or forty miles south of the Lake shore in the Western Reserve, diverging gradually farther south. Should the St. Louis track be laid on the wide gauge, it may happen that a continuous line of wide guage road may connect the cities of St. Louis, Cincinnati and New York."—*Cin. Gaz.*

We are glad to see the above movement, if the right to construct the proposed road exists, as we presume it does, it will put an end to the attempts on the part of certain parties in Pennsylvania, to stop the running of the Lake Shore road. The right to build *other* roads, having the same general objects and directions, will render useless all attempts to defeat an existing work.

We really believe that if the building of the Lake Shore road could have been defeated, the result would have been only injurious to the best interests of Philadelphia. She would have remained satisfied with her success in putting a stop to works regarded as prejudicial to herself, and would not have been aroused to the importance and necessity of putting forward all her strength to maintain her position. She must now act, and that vigorously, and the increase of her own strength, is the only

thing that can teach her how to use it profitably and successfully.

United States Mint.

The business of the Philadelphia Mint for the month of November has been as follows:

COINAGE FOR NOVEMBER.

Gold.	*Pieces.*	*Amount.*
Double eagles	207,431	$4,148,620 00
Eagles	9,717	197,170 00
Half eagles	75.974	379,870 00
Quarter eagles	34,540	86,350 00
Gold dollars	178,533	178,533 00
Total	516,195	$4,990,543 00
Silver.	*Pieces.*	*Amount.*
Half dollars	21,940	10,970 00
Quarter dollar	70,400	17,600 00
Dimes	80,000	8,000 00
Half Dimes	67,000	3,350 00
Three cent pieces	2,002,800	60,084 00
Total	2,758,335	$5,090,547 00
Copper.		
Cents	242,232	2,422 32
Total	3,000,567	$5,092,969 32

GOLD BULLION DEPOSITED.

From California	$7,188,500 00
From other sources	71,500 00
Total	$7,260,000 00
Silver bullion deposited	$24,300 00

City of Cairo.

We had the pleasure, on yesterday, of an interview with S. Statts Taylor, Esq., the agent for the trustees of the Cairo city property, and also of examining the plot of the first division of that city, recently laid out under the direction of Maj. Long, engineer of the company. The plan which has been agreed upon by the trustees, we understand, has received the approval of the most scientific and experienced commercial men in the eastern cities; and for convenience, beauty and symmetry, must strike every one as unequalled anywhere. The whole city is laid out on a scheme of airiness, liberality and magnificence, well worthy of the commercial importance which it is ultimately destined to attain.

The first division of the city of Cairo, the survey of which has just been completed, comprehends about four hundred acres, and is laid out into seventy-nine blocks or squares, making altogether 2,100 lots. The cross streets, running from the Ohio to the Mississippi, are alternately fifty and sixty feet wide, and eighteen in number. The avenues radiating out from the junction of the two rivers—to be extended when the other divisions of the city shall be laid out—are each of them one hundred feet wide. These avenues are intersected by streets running at right angles to the cross streets, and parallel to each other. A number of public squares and parks are also projected in different parts of the city—one of nearly fifty acres in the centre, and another crescent shaped at the point, similar in some respects to the "Battery" of New York city.

According to an agreement with the Central railroad company, the track of that road is to make a divergence about five miles above the point, and circle entirely around the city. For this purpose, a Railroad avenue, 125 feet in breadth, is reserved for the use of the company. There is also reserved a strip 80 feet in breadth, immediately upon the summit of the levee, for the purpose of a double track. There are to be depots upon both rivers, as well as extensive buildings at the point of divergence of the two tracks.

We understand that the plot of this division of Cairo, after a few unimportant alterations, will be recorded, and that, in all probability, lots will be ready for sale by the first of next January. A large number of applications for the purchase of lots have already been made, and many wealthy individuals are preparing to build warehouses, and establish themselves in business at that point.

In regard to the eligibility of the site, or the practicability of building a city at the confluence of the Ohio and Mississippi rivers, we presume there is no longer a doubt existing anywhere. Topographically considered, Cairo city is situated nearly in the centre of the United States. It lies at the very threshold of the most fertile regions of the west, surrounded by the best timber and coal, and, from the construction of the Central railroad, and the immense range of navigable rivers, all centering at this point, it has necessarily the advantage of becoming the great entrepot of a large portion of the agricultural and mineral wealth of the Mississippi valley. We have no hesitation in saying that the city of Cairo will doubtless be, at no very distant day, the central depot of all the western and southwestern States of the Union.—*Alton Tel.*

Commerce of Cleveland.

When the Cleveland, Columbus and Cincinnati railroad was in contemplation, its opponents claimed that its construction would prove destructive to the canal commerce of the city, and that the Ohio canal losing its trade, would become a tax upon the State, and the profits of the transportation belonging to it, would find their way to the pockets of railroad stockholders. The result shows that while the city has received a new and wonderful impulse from the new trade opened to it by the railroad, the canal has not only retained its own business but has increased it handsomely.

In 1850, 367,737 barrels of flour arrived at Cleveland by the canal. In 1851 this was increased to 645,730 barrels; and in 1852, to 760,475 bbls.

The wheat receipts of 1850, were 1,192,559 bushels; in 1851, 2,529,699; and in 1852, 2,920,534 bushels.

Those of corn were, in 1850, 831,704; in 1851, 998,059; and in 1852, 861,897 bushels.

Of whiskey, in 1850, 24,580 bbls.; in 1851, 44,843 bbls.; and in 1852, 42,279 bbls.

Of coal, in 1850, 2,347,844 bushels; in 1851, 2,992,343 bushels; and in 1852, 3,940,749 bushels.

Showing an increased value in the receipts of these articles in 1852 over those of 1850 of $2,949,635.

In wool there is as canal loss of $400,000, much of it having come in by railroad; but this deficiency is made up in the excess of the articles, lumber, timber, stone, sugar and coffee.—*Cleveland Herald.*

The Chicago Tribune furnishes the following table of lines of railroads over two hundred miles in length, coming into that place, which are either built or in course of construction:

	Miles.
Boston via Albany, Niagara, Detroit	1,000
New York via Dunkirk, Toledo	900
Philadelphia via Pittsburg, Fort Wayne	800
Baltimore via Wheeling, Columbus	750
Norfolk via Cincinnati and Chicago	800
Charleston and Savannah, via Louisville and Indianapolis, Nashville and Evansville	1,000
Mobile via Cairo	900
St. Louis, Alton, Springfield and Bloomington	250
Quincy and Military Tract	200
Rock Island, Peru and Joliet	200
Dubuque, Galena and Chicago	200
Illinois and Wisconsin, via Fon du Lac to lake Superior	400
Lake Shore, Milwaukee and Green Bay	200
Measuring	7,650

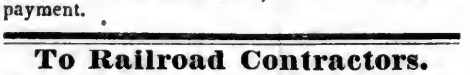
And all be in operation probably in three years.

Susquehanna Railroad.

The Harrisburg Keystone states some particulars respecting the letting of the Susquehanna railroad:

The contract for the entire grading and masonry of this road was allotted at Baltimore, on the 23d ult., to Messrs. Philip Dougherty, Zenos Barnum, Geo. M. Lauman and Wm. R. Travers. The line of the road commences opposite Harrisburg, where it connects with the Baltimore and Cumberland Valley railroads—it runs to the west side of the Susquehanna about eight miles, whence it crosses to Dauphin, between which point and Harrisburg there is already a railroad connection on the east side of the river. From Dauphin it runs to Sunbury, along the eastern margin of the Susquehanna, and thence to Lewisburg. It is stipulated in the contract that the work is to be commenced within 30 days and completed within 21 months. The terms are said to be very favorable to the company, somewhat below the estimates of the engineer.—Stock to the amount of $250,000 is to be taken in payment.

To Railroad Contractors.



SEALED PROPOSALS, addressed to either of the undersigned, will be received at Hillsborough, Highland county, Ohio, until the 1st day of February next, at noon.

For the Graduation and Masonry of the Middle Division of the Cincinnati, Hillsborough and Parkersbugh Railway, extending from Hillsborough, Highland county, to a point near Jackson, Jackson county, Ohio, about 56 miles.

The line will be ready for examination early in January, and Profiles and Specifications of the work will be exhibited at the Engineer's office, in Hillsborough, for one week prior to the 1st day of February.

This Railway forms the recognized continuation across Ohio, of the Baltimore and Ohio, and North Western Virginia Railways, and being located as a link, in the great through line between Baltimore and St. Louis, will be found in every way worthy of the attention of able and enterprising contractors.

The remainder of the line to the Ohio river will be ready for contract about the 1st day of May next. JAMES M. TRIMBLE, President.

ELWOOD MORRIS, Chief Engineer.

Superior Cast Iron Gas and Water Pipes.

THE Subscriber is prepared to contract for the supply of CAST IRON PIPES required by Gass or Water Companies, Corporations, etc., delivered in any Seaport in the Union, on reasonable terms. These Pipes are cast on the most improved principle by the best Founders in Scotland, from a superior quality of Pig Iron remelted, are guaranteed to resist a pressure of 300 lbs. to the square inch, or greater if necessary, and to be soft enough to drill easily and freely. Full information regarding price, and references to parties in the United States now using the Pipes, can be obtained on application to the Agent in New York.

WILLIAM ROY, Junr.,
21 Renfield st., Glasgow, Scotland.

J. M. EADIE, Agent,
26 Front st., New York. 1y50

Anthracite and Charcoal Pig Iron.

800 Tons No. 1 Glendon Anthracite Pig Iron.
1000 " No. 2 " " "
1000 " Forge " " "
200 " No. 1 Stockbridge Charcoal "
100 " No. 2 " " "
500 " Forge Katahdin " "

For sale by
GEORGE W. A. WILLIAMS,
5 Liberty Square, Boston.
December 11, 1852. 3m

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Oxford Furnace, N. J.
ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.
Sept. 11, 1852. 1y*

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

Change of Hours.

MONTREAL & NEW YoRK AND Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜

FALL AND WINTER ARRANGEMENT.

ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A. M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P.M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3·50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M.

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad, and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

RAILROAD CAR TRIMMINGS.

DOREMUS & NIXON,
No. 21 PARK PLACE,
AND
18 MURRAY STREET,
IMPORTERS

OF PLAIN AND FIGURED MOHAIR PLUSH;
Printed and Uncut do. do. entirely new designs;
ALSO GERMAN OIL CLOTHS FOR HEAD LININGS,
Enameled with Gold and Silver and Velvet Printed.

☞ These Headings are the most beautiful ever shown, having been made expressly for **American Cars.** D. & N. are sole Agents.

ALSO, PATENT PARIS COTTON FELT.

☞ This is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin.

It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair.

ALSO, BROCATELLES and MOQUETTS.
ALSO, CURLED HAIR.

N. B.—D. & N. have the Plush and Linings *in bond for exportation.* November, 1852.

Railroad Iron.

5000 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

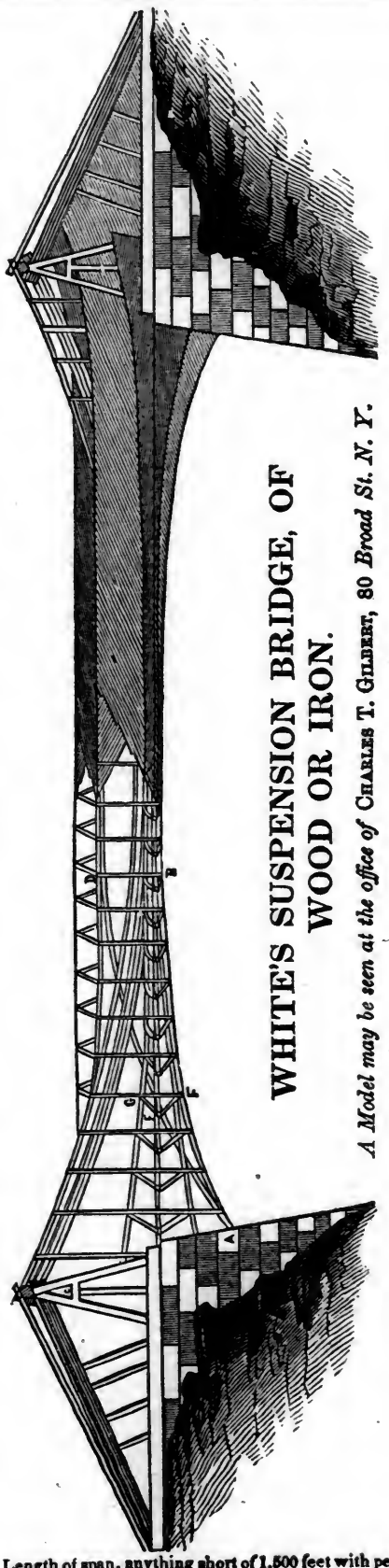
December 4, 1852. 4t

Railroad Iron.

5000 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by

P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.

December 4, 1852. 4t



WHITE'S SUSPENSION BRIDGE, OF WOOD OR IRON.

A Model may be seen at the office of CHARLES T. GILBERT, *80 Broad St. N. Y.*

Length of span, anything short of 1,500 feet with perfect safety for every kind of travel. The above cut represents a Wooden Bridge with a roof. The arrangement for the Iron Bridge is such as to avoid all the bad effects of changes of Temperature. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, Proprietors,
Cambridgeport, Mass.
Office next door to the Athenæum.

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY,
CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR,
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY
JAMES ALLEN,

of New York.
of California.

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.

Aug. 28, 1852 6m

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK,

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson, Esq., Baltimore. 39

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.

PEREMPTORY SALE of RAILROAD BONDS. THE BUFFALO, CORNING AND NEW YORK RAILROAD COMPANY will sell by Auction, through SIMEON DRAPER, on Wednesday, December 15th, at 12½ o'clock, at the Merchants' Exchange, $150,000 of their first Mortgage Bonds. These Bonds are for $1,000 each, and mature 1st April, 1867. They bear coupons for interest, at the rate of 7 per cent. per annum, due on the 1st April and 1st October, at the Bank of Commerce, in this city. They are secured by the first and only Mortgage on their whole road and franchises, made to John A. Stevens, Jas. S. T. Stranahan, and John A. G. Gray, Trustees, and are convertible, at the option of the holder, into the Capital Stock of the Company, any time before 1857. The Mortgage provides for an issue of $1,000,000 of bonds in specified lots, as consecutive portions of the road are thrown open to public traffic. $400,000 were sold last May; $150,000 are now to be disposed of, and the balance is not to be offered till next summer, after the other portions of the work are completed.

The road is now finished and running to Consecus, a distance of 57 miles, and is graded for nearly 41 miles further, to Batavia. The iron is purchased and paid for, for this whole distance. When in May last, $400,000 of the bonds of this Company were offered at auction, the eastern section of the road had only just been put in operation, and all estimates of its earnings were merely conjectural. The cars have now been running since May, on an average, about 35 miles, and the net earnings are equal to fully ten per cent. on the entire cost of the whole 57 mile section now completed. As yet only the way traffic has contributed to the receipts, which have been constantly increasing; and the directors anticipate, with well grounded confidence, a continued augmentation from the new channels of traffic they are now opening. It is believed that the receipts now exceed those of any other section of unfinished railroad in this State, of similar length, and so short a time in operation.

The whole work is under contract to Buffalo, where a location is secured for Depot buildings, and the directors feel entire confidence in saying, that the cars will run over the whole road by next July. The length of the line from Corning to Buffalo is 134¼ miles. Its grading, masonry and bridging are of the best character; the Depot buildings are neat and substantial, and the entire work will compare favorably with any other in the country. Its rails are of the heavy T pattern, and are laid on the broad gauge, forming the connecting link between the Erie railroad at Corning and the Great Lakes at Buffalo. The Buffalo and Brantford road is of the same broad gauge, and will continue this channel of railroad communication to Detroit and the Far West. The district of country through which the Buffalo, Coraing, and New York road runs is the most productive in the Western part of this state, and affords local traffic sufficient to sustain and pay good divideuds on the cost of the road, and the directors count with confidence on a fair share of the great through travel in addition. The character of the bonds now offered, is such that the directors can say with sincerity that they are equal to any railroad securities in the market, the net earnings of that part of the road now running being sufficient to make certain the payment of principal and interest on the whole amount of bonds the Company is authorised to issue, thus placing their safety beyond question. The convertible clause adds greatly to their real value as an investment.

Locomotive Engines.

DANFORTH, COOK & CO, Patterson, N. J., having erected an extensive shop, with the most approved machinery and tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various tools suitable for furnishing repair shops.

The business of machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1y49

Mills, John B., Civil Engineer, Address to care of Wm. Churchill, Jr., New York.

The Cambria Iron Company,

ORGANIZED under the laws of Pennsylvania, with a capital of $1,000,000, propose embarking in the manufacture of Railroad Iron, at *Johnstown, Pennsylvania.* The location they have secured offers advantages superior, it is confidently believed, to any other in this country. Iron Ores, semi-bituminous Coal, Limestone, and nearly every article required for the manufacture of Iron, exist, in inexhaustible quantities, on the spot; and these deposits are now worked, and the minerals delivered, cheaper than at any other known point now occupied for the manufacture of Iron. The Pennsylvania Canal and Central Railroad pass through the property, and cross each other at the spot where the mineral veins are most thoroughly opened out; and which location, for its other advantages for facility of manufacturing, and vicinity to a populous borough, has been selected for the establishment of Railroad Iron Works, and for the erection of other Blast Furnaces, in addition to those now in operation.

The attention of capitalists disposed to embark in an enterprise which offers a remunerating profit, even on the low prices of iron current before the rise of the last six months, and which promises to be very lucrative while anything like present rates prevail, and also of Railroad Companies desirous of making arrangements for Iron Rails to be delivered in 1853, is called to this enterprise.

Out of the capital named above, the sum of $360,000 has been devoted to the purchase of about 30,000 acres of land, upon which there are six blast furnaces, which cost, including the personal property accompany them, $350,000. Three of these furnaces are now in successful operation, and by next spring, with an outlay of about $6,000, the other three can go into blast; and at the present price of pig iron, these six charcoal furnaces would realise a net profit of six per cent on $1,000,000 capital.

The company contemplate erecting four more blast furnaces, for smelting with coke the iron ores at Johnstown, and also works for manufacturing railroad iron. To do this, they will require subscriptions in all to the amount of $600,000, and to carry on most profitably the manufacture and disposal of rails, the whole chartered capital should be raised. Subscription lists, providing that no subscription shall be binding unless *bona fide* subscribers for the amount of $600,000 are obtained by the 1st January next, and pamphlets descriptive of the advantages of the locality and estimates of costs, can be had of the undersigned.

D. M. WILSON, Newark,
EDWARD F. GRANT, New York,
SAMUEL H. JONES, Philadelphia,
JOHN HARTSHORN, Boston,
T. F. SECOR, New York,
G. S. KING, Johnstown,
P. SHOENBUGER, Pittsburg,
RHEY, MATHEWS & CO., Pittsburg,
or at the office of the Provisional Committee, at
SIMEON DRAPER'S, 46 Pine st.

The subscriber is prepared to enter into contracts to deliver RAILROAD IRON to Companies requiring it in 1853. SIMEON DRAPER.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

SIMEON DRAPER, No. 46 Pine-st., offers for sale, a variety of RAILROAD BONDS and STOCKS; also CITY, TOWN and COUNTY BONDS, among which are—

1st Mortgage Convertible—
7 per ct. bonds of Canandaigua and Corning R.R., payable in.....New York, 1860
Do. Cleveland, Columbus and Cin. do....1859
Do. Buffalo, Corning and New York do....1867
Do. Western Vermont Railroad.....do.1861-71
8 do. Michigan Central.....Boston, 1860
Do. Peoria and Oquawka,.....New York, 1862
1st Mortgage—
7 per ct. bonds, Corning & Blossburg do.....1871
Do. Mansfield and Sandusky.....do.....1860
10 per ct. bonds do..... do...1855-7
Do. New Albany and Salem.....do..1858 62
7 per ct. Vermont Valley.....do.....1860
6 do. East Tennessee and Georgia...do.....1880
7 do. Seaboard and Roanoke.....do.....1860
Do. Troy and Bennington.....Troy, N. Y.1861
Do. New Jersey Central.....New York, 1860-70
Do. Dauphin and Susq. Coal Co. do.....1871
Do. Brunswick Canal Co.....do.....1857

Also, second mortgage bonds of many of the above companies, and—

7 per ct. bonds Saratoga and Wasb. N. York, 1862
Do. Mad River Railroad.....do....1866
Do. Troy and Boston.....do....1864
Do. Muscogee Railroad.....Savannah, 1862
Do. Huron and Oxford.....N. York, 1862
Also, Georgia 7 per ct. State stocks, interest payable semi-annually.....do....1872
City of Savannah 7 per cent. bonds, interest payable semi-annually.....do..1870-76
7 per ct. bonds of the Town of Huron, Erie county, Ohio.....do....1861
Do. Township of Waynsfield.....do....1862
10 per ct. City of Keokuk, Iowa, Keokuk, 1863
6 per cent, City of Memphis..Philadelphia, 1886
10 per cent. City of San Francisco.....1870
7 per cent. Atlantic Steamship Co..N. York, 1855
12 per cent. Improvement Scrip of the State of Wisconsin for improvement of Fox River.....do....1862
6 per cent. State of Illinois Liq. Bonds, issued 1849, interest paid semi-annually by J. Wardsworth.....N. Y. city, due 1865
2½ per cent. State of Indiana Bonds.....1866

Troy and Rutland railroad Stock, with guarantee of 4 per cent. dividend and one half surplus profits of this and Rutland and Wash. R. R.

Rutland and Whitehall Stock, with guarantee of 4 per cent. dividend by Saratoga and Washington Railroad.

Also, Stock in the Cumberland Coal and Iron Co.
Stock of the Cambria Iron Company.
Stock in the Western Vermont R. R. Co.
Stock in the Junction R. R. Co. of Ohio.
Stock in the Mad River R. R. Co.
Stock in the Southern Bank of Kentucky.
Stock in the Mechanic's Bank of N. Y.
Stock in the East River Insurance Co.

The Cold Spring Iron Works,

INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—

John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder. " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

Notice to Bridge Builders.

Office East Tennessee and Virginia R.R. Co.
Jonesborough, 28th October, 1852.

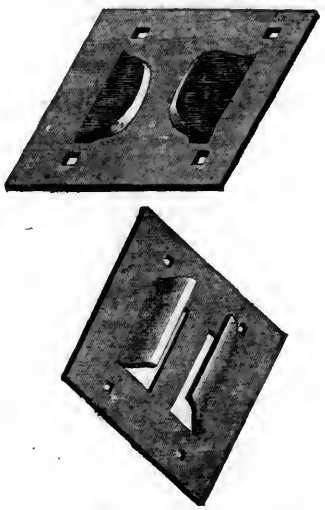
PROPOSALS will be received at this office until the 15th day of December next, for the superstructure of three single track Railroad Bridges, two across the Holston river, and one across the Watanga river, all on Pratt's or Howe's plan. The length of the bridges are 200, 300, and 400 feet respectively. The one of 400 feet is to be built with a draw of 50 feet. The bids must include covering, sideings, painting, and everything necessary to complete said Bridges.

The Board claim the right to reject the whole of said bids, if none are found to be satisfactory.

Proposals to be addressed to the undersigned.

By order of the Board.

WM. G. GAMMON,
Sec'y and Treas. E. T. & Va. R. R. Co.



Patent Wrought Iron Railroad Chair.

THE undersigned are now prepared to manufacture their Patent Wrought Iron Railroad Chair, at the rate of fifteen tons per day. They are made exclusively from best Trenton Iron, which received the prize medal for strength at the World's Fair at London.

The patent is for the CHAIR itself—which is formed by raising the lip out of the plate sufficiently high to receive the rail. It is obvious that while the strain upon the lip is so slight as to remove all danger of its breaking, it becomes less the more tightly the lip is made to clasp the rail. The cheapness and durability of the chairs, and the facility with which the track can be adjusted commend them to public favor.

SIZES AND PRICES.

A Chair 8 by 7½ inches		3-8	inch thick,	costs	25	cents.
"	"	7-16	"	"	27	"
"	"	1-2	"	"	29	"
"	"	5-8	"	"	33	"

Other sizes are made to order at equivalent rates. Sample Chairs will be forwarded, free of charge, on application to COOPER & HEWITT,
17 Burling Slip, New York.

December 1, 1852.

LOCOMOTIVE, TENDER, & RAILROAD CAR SPRING Manufactory.

THE undersigned, manufacturers of Locomotive, Tender and Railroad Car Springs, beg leave to inform Railroad Companies, Locomotive and Car Builders, that we have enlarged our Works, and are prepared to execute,

ON THE MOST REASONABLE TERMS,

any orders for LOCOMOTIVE, TENDER AND CAR SPRINGS, they may favor us with, OF THE BEST OF STEEL, all of which we have manufactured to order from SWEDE STEEL IRON.

McDANEL & HORNER,
Wilmington, Delaware.

December 1, 1852.

We respectfully call attention to testimonials in favor of our Springs from the following well-known gentlemen connected with Railroads:

Locomotive Works, Philadelphia, 1st Sept., 1852.

Messrs. McDanel & Horner.
Wilmington, Del.

Gentlemen: In reply to your letter of yesterday, with regard to the character of the springs which you have made for the locomotives and tenders constructed by us, we have much pleasure in stating that they have given entire satisfaction, and we have found them, upon trial with those made by others, to be superior in the essential qualities of elasticity and durability, combined with lightness, the result of employing the best material only, and having it properly manufactured.

We are using them exclusively under our locomotives and tenders, and can with confidence recommend them as being superior to any we have yet met with.

Yours respectfully,
NORRIS, BROTHERS.

—

This is to certify that we have for a number of years been using steel springs manufactured by McDanel & Horner, under our locomotives, tenders, passenger and freight cars on the Philadelphia, Wilmington and Baltimore railroad, I take pleasure in saying that they have always given entire satisfaction. Their durability and elasticity are superior to any others that we have used, and can confidently recommend their make of springs to all railroad companies, and others who may want a good article.

I. R. TRIMBLE,
Gen'l Sup't P. W. and B. R. R.

Wilmington, Sept. 20, 1852.

—

Superintendent's Office Central Railroad, Savannah, Ga., Oct. 15, 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

I have much pleasure in certifying to the superiority of your steel springs.

This company have for upwards of two years had in constant use your locomotive, tender and railroad car springs, (the latter in large numbers), and we have found them uniformly well finished, properly tempered and durable. Our orders have always been promptly filled, and your terms have been moderate.

Very truly yours,
MACPHERSON B. MILLER,
General Superintendent.

—

A considerable number of engine and car springs were furnished the Philadelphia and Reading railroad several years since, by Mr. John McDanel, before the company made such articles in their own workshops. These springs proved invariably of excellent quality, elastic and durable, and equal to the best in use during the above period

G. A. NICOLLS,
Engineer, etc., Philad. and Reading R. R.

Reading, Pa., Sept. 9, 1852.

—

Macon and Western Railroad, Macon, Oct. 11, 1852.

Messrs. McDanel & Horner,

Gents: This company have purchased and used car and engine springs of your manufacture. They have been tested under the same cars with springs from other approved makers, and, so far as appears to us, have proved themselves fully equal to any we have used.

Yours very respectfully,
EMERSON FOOTE, Supt.

—

Macon and Western Railroad,
Macon, Oct. 14, 1852.

Messrs. McDanel & Horner,

Dear Sirs: This company have used the springs made by your firm for several years under engine, baggage and freight cars, and have found them superior to any I have seen.

Yours respectfully,
THOS. DOUGHERTY,
Master Machinist M. and W. R. R.

—

Richmond, Va., Nov. 1, 1852.

Messrs. McDanel & Horner,

It affords me much pleasure to say, after some seven or eight years use of your steel car springs, I find them equal to any we have used, and have given entire satisfaction.

I am very respectfully yours,
THOS. SHARP,
Sup't R. F. and P. R. R.

—

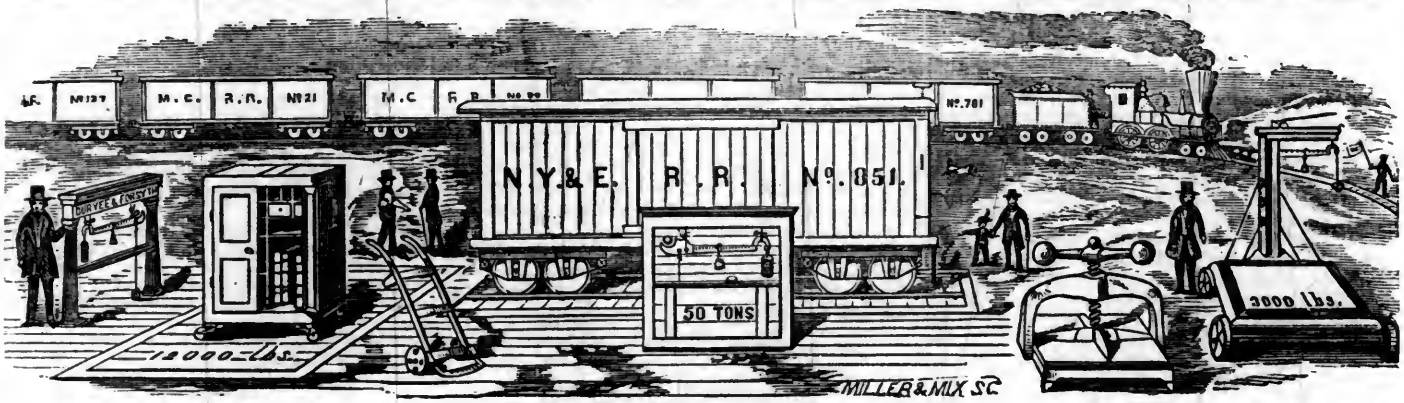
Petersburg, Va., Sept. 18, 1852.

Messrs. McDanel and Horner,

Dear Sirs: I have been for several years past using steel springs of your manufacture under a large portion of the cars that I have built for the different railroads in this vicinity, and I consider them as good in every respect as any steel springs I have ever used.

Very respectfully yours, etc.,
URIAH WILLS,
per Jas. J. Lillz.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practical mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as *'Durable and Accurate'* as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Fa'ls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 51] SATURDAY, DECEMBER 18, 1852 [WHOLE No. 870, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Review of I. D. Andrews Report to the Secretary of the Treasury 801
Report of Census 804
Pacific Railroad 804
Atlantic and St. Lawrence Railroad 806
Zanesville, Akron and Cleveland Railroad 806
Report of the Postmaster General 807
Central Military Tract Railroad 807
Railroad Items 807
Central Indiana Railroad 807
Terre Haute and Alton Railroad 808
State Policy of Illinois 808
Stock and Money Market 809
Mississippi Central Railroad 810
Railroads in Virginia 811
Bellefontaine and Indiana Railroad 812
Steubenville and Indiana Railroad 812

American Railroad Journal.

Saturday, December 18, 1852.

Report of the Secretary of the Treasury.

THE TRADE AND COMMERCE OF THE LAKES—THE TRADE OF THE UNITED STATES WITH CANADA AND THE BRITISH NORTH AMERICAN COLONIES—THE FISHERIES—THE COMMERCE OF BRITISH NORTH AMERICA—RECIPROCITY OF TRADE—THE CANALS AND RAILWAYS OF THE UNITED STATES—ETC., ETC.

It is a very common remark among the citizens of this nation,—most especially of the western, southern, and travelled portion of it—that this is a "great country," and it is a remark, to the truth of which all, with one voice, give their emphatic and hearty assent. We do it with a sort of elevation of head, and swelling of heart too, at once indicative of pride of country, implicit faith in the truth of the assertion, and affection for those honored institutions to which we owe our unexampled prosperity, our rapid increase in wealth and population, and our present high and dignified position among the nations of the Earth. And as we sometimes examine more closely into the true elements of that greatness in detail, and discover the springs of action which prompted the first colonization and settlement of this country by our forefathers—the love of civil and religious liberty—freedom from burdensome taxation—the right to till the soil and eat of its fruits—and the later maintenance of those rights when in danger of usurpation, by the pledge of their "fortunes, their lives and their sacred honors," what heart does not arise from the task with more lofty emotions of patriotism, with intenser feelings of gratitude to the great Governor that his lot was cast in this land, possessing every element of wealth, contentment and happiness. But the truth seems to be that our advance has been so palpable, that all are imbued with the idea of greatness generally, without any definite knowledge as to the exact compass or capacity of our resources. Any man can tell us we have ships on every sea, we have the largest lakes and longest rivers, each enjoying a flourishing commerce, of which any nation on earth can boast; we have boundless agricultural regions, of the richest possible soils, mines of gold, iron, copper, lead and silver unsurpassed, and that the privileges of all these possessions are open to the enterprise of every people under heaven who wish to participate in the blessings of our government, and the developement of the incalculable resources of its domains. Under these benign influences of government and an enlightened internal policy, industry and enterprise have been stimulated, and received their reward, and we have advanced till we consider ourselves as second to no other nation in the world in many respects, and are scarcely willing to acknowlege a superior in any.

We have said these are generally received ideas which have been inculcated by general observation. We believe too, that they are in the main correct. But they are the results of no combined organizations. There has been no system of commercial policy established and followed out in order to attain these results. There has been no interchange of sentiment and comparison of ideas or national combination of action, for the benefit of agriculture, science, arts, manufactures, the exploitation of mines or the prosperity of commerce.

Our present condition of unexampled prosperity, our position among the nations of the earth, beyond the *form* of our government and the rights guaranteed by it, have been brought about by the force of circumstances, and the condition of things in the Old World. These were inevitable results, which no action on our part, not involving a change in the form of our government could have prevented. Here was a land which offered an asylum to the oppressed and down-trodden, exiled and poverty-stricken of every nation under heaven, where industry met an abundant reward, where inventive genius was secure in its rights, where merit was the only road to preferment, honesty and respectability the only passport to society, and every man was noble, or not, according to the tenor of his conduct in life. Here was encouragement and stimulation for every trait in the character of man, attraction for heart-broken, wearied or discouraged persons of adventurous spirit in the over-crowded cities and districts of Europe. Like the needle to the pole, they yielded to the attraction, and came hither a conglomerate mass of ignorance and learning, of poverty and wealth, of vice and virtue, of all religions, of all forms of government, and of all classes of society; and here all was reduced to a level, life must be commenced anew, a new character to be established with the road to preferment alike open to all; a great interchange of feeling, experience, sentiment and sympathy was the result, tending to refinement and civilization. Of such materials is our country composed, under such influences has it advanced to its present position and by a continuance of the same spirit must it continue to prosper.

We cannot however, expect a long continuance of the same success from the same causes alone. As emigration continues to this and other new countries, labor in the old receives a more adequate reward, and the rights of the lower classes are regarded with more care.

The influence of liberty, as evinced by our prosperity, under liberal institutions, is being felt in other lands, till the despotic potentates of Europe feel that they can see in the distance but one alternative, liberality of policy in governing their own subjects, or a depopulation of the enterprising portion of their inhabitants. They will choose the former or become powerless through the latter policy. In either event we shall not receive our usual quota of immigration from Europe many years longer. We must then seek new fields from which to draw our immigrant population, or we must prepare to do by combined effort, organized system, enlarged policy, and enlightened legislation, on a liberal and comprehensive scale, what has been done for us heretofore by force of circumstances. We must organize for competition in the markets of the world, with the oldest nations in manufactures, commerce, and agricultural productions. Heretofore our safety has lain in the surety of a good return for almost any investment of capital, so scarce has

been the commodity, in the constant demands for and returns yielded by labor; in the immense demand for capital to be invested in legitimate business purposes and enterprises where it could scarcely fail of yielding rich returns, either directly or indirectly.

In order to perfect the requisite organization to enter the great commercial, agricultural and manufacturing strife with European nations, we must know what we are, that we may judge what we may be. We must examine our facilities, put our weapons in order, measure our resources and calculate the means and cost of success. And this inventory must be no *general* thing. We do not want to know *about* how much force we have for the field. We require exactness. We must deal with numbers, with statistical facts. In statistical matters we are sadly and comparatively deficient.—Where we say "*about*" Great Britain, France and Russia, "assert the fact" fearlessly and boldly, without fear of contradiction. This deficiency will not answer our purpose in the strife which is to come for the maintenance of the supremacy of the seas. Looseness in the manner of keeping accounts is no mark of shrewdness in a merchant. It is rather evidence that he works in the dark,as if it were impossible to go wrong, that he is guided by impulse rather than principle, that he does business by "guess" rather than system, and the presumption is that though all may go on swimmingly for a time, while prosperous gales favor his bark; when adverse winds and currents come, being without chart, compass or lead, he will be dashed upon the rocks a total wreck. As a nation we should know what we are doing. Bureaus of agriculture, commerce and manufactures, should be organized in the proper departments of Government, for the collection and proper arrangement of statistics. The returns from the commercial bureau should be made public monthly for the benefit of men engaged in commercial pursuits, and those of the other bureaus as often as any valuable information was received, the publication of which would result beneficially to the citizens. The British merchant is never left in the dark; the Board of Trade forms an important part of the government, and its monthly returns are looked for with more avidity on 'change than the budget of the Ministry or the Queen's Speech. It is not so with us, our regulations are faulty, our laws are deficient, and when we do not get our yearly returns from the Treasury department up to the 30th June previous, sometime in January of the next year, it has lost most of its immediate interest, and if by good fortune it chance to be correct, it is only fit for reference. It is so old as to be no sort of use to the merchant as a guide to his operations. So many months have passed that it cannot impart to his mind any information regarding the present stock on the market nor in fact of anything relating to the present. In these days of electricity and steam, six months is an age during which fortunes are made and lost, Empires reared or overthrown, gold mines discovered and States erected and populated. We make some pretensions to being a commercial nation, but this slow coach manner of putting forth what few returns our loose regulations admit of being collected, will never vindicate our character for commercial energy or enterprize.

These remarks have been called out by looking over an advance copy of a recent report by Hon. Secretary CORWIN of the Treasury, made in reply to the following resolution passed by the Senate of the United States during the Session of 1851:

Resolved: That the Secretary of the Treasury be requested to communicate to the Senate, as early as possible, at the next session, full and complete statements of the trade and commerce of the British North American Colonies with the United States, and other parts of the world, on land and by sea in the years 1850 and 1851, with such information as he can procure of the trade of the great lakes.

Fortunately, the resolution was directed to a Secretary of the Treasury familiar with the Lake and Colonial region, who felt an interest in their resources, their intimate commercial relations, and who was holding office under a President whose whole life had been identified with the struggle of lake, Canadian and Colonial trade, agriculture and commerce. The request of the Senate was met in the most liberal spirit. The resolution in itself broad and comprehensive was accompanied by instructions of the same tenor; elaborate on some of the more important points, and placed in the hands of I. D. ANDREWS, Esq., U. S. Consul at the port of St. John, N. B., for the collection, collation and preparation of the necessary information. An able report on the Colonial trade and Fisheries of the North American Colonies, prepared by the same gentleman in 1850 for the Treasury department, pointed to Mr. Andrews as the proper person to assume the responsibility of this more complicated and arduous duty. His labors were brought to a close and the report approved by the Secretary and presented to Congress previous to the adjournment of last session. That body so far approved of the matter contained in the report as to order at once thirteen thousand copies of it with accompanying maps, to be printed—an unusual mark of favor. It is now just emerging from the hands of the printer and will no doubt be sought for with avidity, as it is a valuable history of the lake trade, the commerce of Canada and the British North American Colonies, the Fisheries and the question of Reciprocity of trade with the Provinces. All these branches of the report are treated of separately and collectively, and illustrated by three original maps drawn expressly for this report. From the cursory examination we have been permitted to make of it we do not hesitate to pronounce it, by far the most valuable commercial report ever made to Congress, reflecting credit alike upon all engaged in its origin, conception of plans, consummation of object and gathering material. It is an exhibition of the resources of the lake and Colonial country, true in every sense, which cannot fail to astonish even those who are most intimately acquainted with those localities, but the surprise will be as grateful as it will prove astonishing.

We now propose to state the leading characteristics of Mr. ANDREW'S report, giving such results as may properly come within the scope of a newspaper article.

It strikes us that the conception of the plan of the whole report is singularly appropriate. First, is a report of the trade of the great lakes from Champlain to Superior. Each collection district, of which there are seventeen, is taken up separately, and described in detail as to its extent, harbor facilities, face of country adjacent, business of 1851 in detail, and comparison of totals with years previous. Each district is followed by an appendix of tables exhibiting the quantity and values of articles imported from foreign countries, and coastwise, whether in American or foreign vessels, the amount of foreign and coasting tonnage entered and cleared. The several lines of internal improvements passing through or terminating in, the districts are also noticed making altogether a sort of business history of the Northern frontier. The several lakes are also separately described, and their dimensions given, together with an accurate description of the surrounding country and its principal features, productions, etc. In a careful *review* of the trade of the lakes, the whole commerce is summed up in an argument, showing its importance to the people of the West, the people of the East, and to the existence of the foreign trade. The necessity of extending protection and safety to this commerce in the shape of improvements to rivers and harbors, is forcibly, though respectfully, urged upon Congress.

Following this portion of the report is a faithful account of the principal railways and canals of the United States and Territories, involving a fine geographical and topographical description of the face of the country. Tables accompany this part exhibiting the number of miles of railway in progress and in operation in each State, and the total in all the States, the area of each State in square miles, and the population at the date of the two or three latest census. Also a large table exhibiting in juxta-position the tolls, trade and tonnage of the Erie canal for a series of years, in comparison with the increase in population, trade, wealth and commerce, of the four principal Atlantic cities, and the total foreign commerce of the United States. This part of the report is accompanied by an excellent railway map showing the routes of all the railways in operation and progress. Next is a detailed history of the commerce and trade of Canada, for the years 1850 and 1851, with a general description of the chief characteristics of the country, its principal ports with their business, etc., accompanied by numerous tables showing the quantity, value and character of the imports and exports of that country, and a beautiful map of the great St. Lawrence Basin, drawn and engraved expressly for this report by T. C. KEEFER, Esq., Civil Engineer, of Montreal, Canada. This map gives a more correct idea of the position of this country, and the relation it holds to the European continent, and the actual distances from the several American to European ports, than any other it has ever been our fortune to see. On the whole, this is a most valuable portion of the work, especially at this juncture when there is so much talk of removal of all restrictions upon trade between the two countries, a question with reference to the decision of which, upon an enlarged, comprehensive and enlightened basis, this report was more specially ordered.

Following this, is a better view of the commerce of the British North American Colonies, including the Provinces of New Brunswick, Nova Scotia, Cape Breton, Prince Edward Island, New Foundland, Labrador, etc., with a full account of the American, Colonial and French Fisheries, in those localities, than has ever before appeared. The whole is illustrated by an excellent map of the Colonies, and numerous tables showing the details of exports and imports and the extent of the fishing business.

Besides these principal features of the report, there are several sketches of cities, such as Cincinnati, St. Louis and New Orleans, all intimately connected, in commerce, with the lake country.—Also, geographical descriptions of the Lake Superior country.

All this information has been gathered together and condensed to the smallest compass possible, and yet give a thorough understanding of the subject. Completed, the work will occupy about 800 pages of the usual size of public documents.

The lakes and their connections embrace a coast

line of upwards of 5,000 miles, of which 3,000 miles is American and the remainder British. They are extended over an area of about 95,000 square miles, and are estimated to drain an area of about 335,515 square miles, discharging their waters through the river into the gulf of St. Lawrence and thence into the Atlantic. These waters are all connected by steam and sail navigation, except lakes Superior and Winnebago, which require the construction of locks around unnavigable rapids. These structures are now in progress in both instances, and will no doubt soon complete the chain of uninterrupted lake navigation.

The total estimated value of exports and imports at all the American lake ports during the year,

	Value.	Tons enrolled.	Entered.	Cleared.
1851 was.	$326,593,335	215,975	9,469,506	9,456,346
1848	186,000,000	160,000	not given.	
1846	123,000,000	106,836	" "	
1841	65,000,000	56,202	" "	

These figures exhibit an increase of tonnage and value unparalleled in the annals of ancient or modern commerce. Of the three hundred and twenty-six millions in 1851, a little upward of twelve millions was foreign or Canadian trade. The whole lake trade may be summed up in different classes as follows, for 1851:

Coasting trade—Exports	$132,017,470
" " Imports	182,455,988
	$314,473,458
Canadian trade, exports, domestic produce	5,495,082
Foreign mdse., entitled to draw back	1,086,130
Foreign merchandise	1,626,548
Aggregate exports	8,207,760
Imports free of duty	94,464
In bond	1,593,324
Paying duty	2,224,359
Aggregate imports	3,912,147
Aggregate Canadian commerce, 1851	$12,119,877
" " " 1850	12,208,363
Decrease in 1851	$ 88,486
Revenue collected	$493,475
Aggregate value of foreign and coasting trade	$326,593,335
Tons of steam enrolled	77,061
" sail "	138,914
	215,975
Total tonnage entered	9,469,506
" " cleared	9,469,506
	18,925,852

It will be observed that the coastwise exports are valued considerably lower than the imports coastwise; under an uniform system of valuation they should show an exact balance, excepting, perhaps, a few cargoes which may find their destiny in the bottom of the lake. The discrepancy is accounted for by the different values set upon merchandise at the different districts. It is averaged at so much per ton, but the value put on it at the place of shipment may be far less than at that of destination, or *vice versa*. Now, whether the total value of the imports or exports shown by these figures is the nearer correct is a question about which will be found much diversity of opinion. We think, however, the aggregate valuation of the gross lake trade is not at all over estimated. It exhibits a most wonderful rapidity of developement of the resources of the west, during the three years ending with Dec. 31st., 1851. It exceeds the fondest anticipations of all the warmest friends of lake interests. It is gratifying to railway men to know that the wonderful impetus given to this trade in 1850, over the former periods is attributed to the influence of the newly opened railways, which act as feeders to the lake commerce by bringing what were before deemed remote sections of country within a few miles of market, and thus make lands valuable for production, which formerly were so far from easy routes to market as to remain uncultivated. For instance, there was received at tide water by the Erie canal in 1836, 30,823 tons of wheat and flour from across the lakes, and 97,729 tons, or 75 per cent. from the state of New York; while in 1851 of 457,624 tons of wheat and flour received at tide water, N. York only furnished about 11 per cent or 56,437 tons the balance having come from the western states and Canada. Again, in 1835, the state of Ohio exported over the lakes in wheat and flour the equivalent of 543,815 bushels of wheat; in 1840, 3,800,000 bushels; in 1850 under the influence of the short crops of 1849, 5,754,075 bushels and in 1851 the year of the opening and extension of many new lines of railway, the exports of the same articles reached the equivalent of 12,193,202 bushels of wheat. The total movements of grain and breadstuffs coastwise on the lakes in 1851 were as follows: Flour 1,962,729 bbls; wheat 8,119,162 bushels equal to about 18,000,000 bushels of wheat. To this may be added 2,860,170 bushels in trade with Canada, making the total movement of wheat and flour on the lakes equal to 20,800,000 bushels in 1851, and worth at the average price of 80 cents per bushel, $16,640,000. The movement in corn was about eight millions; oats 1,500,000, barley 360,000 constituting an aggregate movement in grain across the lakes of upwards of 30,000,000 bushels. At the very moderate average freight of 5 cents per bushel, this quantity would yield a freight revenue of $1,500,000.

The movement in provisions coastwise was about 70,000 bbls pork; 100,000 do. beef; 8,000,000 lbs lard; 2,000 000 do. tallow; 4,000,000 lbs butter, and 6,000,000 do. of cheese; 24,000 bbls eggs; 9,000 head of cattle; 20,000 do. sheep; 111,000 do. swine, and 68,000 bbls fish. In lumber the movement coastwise was 392.000,000 ft. sawed and from Canada, 128,065,000 feet, making a total of sawed lumber of 520,065,000 feet; in ashes the movement was 25,000 casks. These are some of the principal articles in relation to which an approximation to correctness can be reached under the present system of keeping accounts of the trade. We have not time to-day to notice any particular port or district, though the report represents the proportion of the above trade transacted by each of the different collection districts with singular fidelity. Owing to the loose manner of keeping the returns of this trade, many discrepancies occur as to quantities, but the general approximations are believed to be below rather than above the truth. In this respect and in the arrangement of the tables, we think it much the best report of the kind ever made, though it is not at all the thing we ought to be able to command in such a country as this. We must be able to command information respecting the growing trade of the west, which will enable the business men of the country to prepare for its transaction. If the effect of opening new routes in the west, is to affect the production as shown by this report to have been the case during the last three years, some outlet must be prepared for it to the ocean, commensurate with its importance.

The description of the different railway projects of the United States is the most novel, though by no means the least important feature in the report. So intimately are these railway routes connected with the internal commerce of the country, either as helpers or feeders, that it appears that no fair statement of the business of the interior, or rather the capacity of the interior, could be made without a reference to the more prominent railway projects. In this report, therefore, the system of railways and their philosophy, as a means for the development of the immense resources of the country, the dissemination of intelligence and civilization is taken up and considered at length, being interwoven with a concise history of the leading projects in each State, showing their length, route and cost. We cannot particularize at this time, but may hereafter draw upon the report for some tables exhibiting the effects of such improvements upon the growth of cities. The canals of the United States also, come in for a share of commercial influence, in this part of the report, and receive all due attention as valuable means of the facilitation of the transit, of heavy and bulky products. A large table shows the revenue of the New York State canals since 1820, and also their trade and tonnage for a long series of years, and the effect which the opening of such a channel has had on the growth of New York, as compared with Boston, Philadelphia and Baltimore, for the same series of years. In this number we will present the following recapitulatory table of railways.

TABLE showing the number of miles of railway in operation and in progress of construction in each of the United States:

States.	Miles in operat'n.	in progress.	Tot.
Maine	365	128	493
New Hampshire	514	42	556
Vermont	439	..	439
Massachusetts	1,128	79	1,207
Rhode Island	50	32	82
Connecticut	630	189	819
New York	1,148¼	874	2,022¼
New Jersey	242	85	327
Pennsylvania	1,215	915	1,130
Delaware	16	11	27
Maryland	433	75	508
Virginia	624	610	1,234
North Carolina	247	248	495
South Carolina	597	193	790
Georgia	857	794	1,651
Florida	23	...	23
Alabama	161	641¼	802¼
Mississippi	95	878	973
Louisiana	..	32	32
Tennesse	185	479¼	634¼
Kentucky	94	663	759
Missouri	..	515	515
Ohio	1,154	1,854	3,008
Michigan	427	.....	427
Indiana	755¼	933	1,688¼
Illinois	296	1,771	2,067
Wisconsin	50	390	440
Total	12,808¼	12,612	25.420¼

The average cost of the roads in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania and Maryland, says the report, is not far from $40,000 per mile, while in the other States it is not far from $20,000 per mile; therefore the average for the whole country will not exceed $30,000 per mile, including full equipment and everything necessary for their efficient operation. According to this computation the roads completed, say—

12,821¼ miles at $30,000, would cost	$384,630,000
12,628¼ miles in progress, at $20,000 would cost	252,560,000
Making a total of	$637,150,000

worth of railways, which it is believed will be finished and fully in operation in three years from this time. Five roads in Ohio, Michigan and Indiana, are mentioned as among those Western roads latest opened for traffic, and costing only about $20,000 per mile, whose earnings during the past year have amounted, per mile net, to from $2,116 to $3,541 per mile, or an average of over 14 per cent net on a cost of $20,000 per mile. The inference is that if all the other roads projected are finished and pay no more than half as well, their stock will be good for investment. Of the abovementioned lines in operation, nearly two thousand miles have been opened for travel since 1st January, 1852.

Canada contains an area of 160,405,212 acres, and had a population at the census of 1851 of 1,842,265 souls. This Province is now justly considered one of the most important of the British possessions. It enjoys an internal navigation of some 3,000 miles, and has many public works of great utility and value. The people of Western Canada especially, are an enterprizing, energetic race, and the efforts on their part, in securing improvements in navigation, have done much for the development of the resources of the Western country. The climate of Eastern Canada is variable & uncertain, subject to extreme cold unfavorable to the growth of cereal produce, but has a great lumbering and ship building interest. Western Canada, however, between Kingston and Lake Huron, is one of the best wheat growing sections in the whole country. During the last two years Western Canada has exported upwards of two millions barrels flour, and 3,000,000 bushels wheat, being equivalent to 13,000,000 bushels wheat.

The dimensions of Canada and the British North American colonies, and their population in 1851, were as follows:

	Area in acres.	Population.
Canada	160,405,292	1,842,265
New Brunswick	22,000,000	193,000
Nova Scotia (proper)	9,834,196	277,005
Cape Breton	2,000,060	
Newfoundland	22,040,000	101,000
Prince Edward Island.	1,360,000	62,678
Total	218,339,415	2,476,548

In 1830, the total population of these Provinces amounted to only 1,375,000. In 1806, the value of the whole export trade of these colonies was $7,287,940; in 1831, $16,523,510; and in 1851, $35,720,000. The tonnage cleared by sea in 1831 was 124,247 tons measurement; in 1831, 836,668, or 67 per ct. increase, and in 1851, 1,583,104 tons. The excellency of the timber grown in these colonies for shipbuilding has led to a large business in this trade for export. In 1832 there were built 33,778 tons of new ships; in 1841, 104,087 tons; in 1849, 108,038 tons; and in 1850, 112,787 tons. The aggregate tonnage owned and employed by the colonies in 1806 measured 71,943 tons: in 1830, 176,040; in 1836, 274,738; in 1846, 399,204; and in 1850, 446,935 tons.

The following table exhibits as nearly as can be ascertained, the natural products, domestic manufactures and foreign goods imported into the colonies from the United States during the year 1851.

	Natural products.	Domestic manuf.	Foreign goods, etc.
Canada	$2,024,188	$3,471,685	$2,712,675
New Brunswick.	869,683	335,515	325,702
Newfoundland	803,946	115,397	34,923
Nova Scotia	817,361	415,943	157,160
Prince Edward Island	77,858		

Aggregate of colonial imports from Great Britain United States, and other countries, for the year 1851.

	Great Britain.	United States.	Other countries.
Canada	$12,876,828	$8,936,236	$1,447,376
Nova Scotia	2,133,035	1,390,965	2,003,640
N. Brunswick	2,292,390	1,654,175	954,935
Newfoundland	1,600,750	998,735	1,655,695
Prince Edward Island	279,898	41,603	305,974
Total	18,878,706	12,678,279	6,191,405

Aggregate of colonial exports to Gt. Britain United States and other countries, for the year 1851.

	Great Britain.	United States.	Other countries.
Canada	$6,731,204	$4,939,280	$1,035,538
Nova Scotia	142,245	736,425	2,663,640
New Brunswick.	2,909,790	415,140	535,190
Newfoundland	2,162,755	99,970	2,538,680
Prince Edward Island	84 966	55,385	184,638
Total	11,568,925	6,210,060	6,877,831

The whole colonial trade for 1851 may be assumed as follows:

	Imports.	Exports.	Total.
Canada	$24,006,028	$15,993,972	$40,000,000
N. Brunswick	4,852,440	5,147,560	10,000,000
Nova Scotia	5,527,640	4,472,360	10,000,000
Newfoundland	4,609,291	4,490,709	9,000,000
Prince Edward Island	630,475	569,525	1,200,000
Total	39,625,874	30,574,126	70,200,000

Included in the exports in this table is an allowance for new ships exported, and a large sum for undervaluation of exports, amounting in all to about $7,400,000. There are slight discrepancies in the returns from United States and Canadian or colonial offices, which are explained in a note attached. They arise from the difference in valuations at the different offices of customs, goods generally being a little undervalued, if anything, at the place of export, and raised to their proper valuation where they are made to pay duty.

Our space compels us to bring this article to a conclusion without quoting from the report on the fisheries. We shall, however, draw from the whole report from time to time much valuable information both descriptive and statistical for the benefit of such as cannot get a copy of the whole work. We deem it of the utmost importance however, that every business man, editor and statesman, should be supplied with copies, and as many more of the citizens as may wish for them, as the matter contained in the report loses one half its efficiency if read without the maps designed to illustrate it.

It strikes us that our historical reading is very much impaired in its usefulness from the very fact of being slurred over in haste without reference to the fixing of localities in the mind by means of maps or globes.

At all events there is much food for reflection contained in this work; a large quantity of valuable statistical information and a species of geographical and descriptive delineation of a large portion of this country and the colonies, which will probably never appear in so good a shape again. The yearly returns will be kept up, no doubt, but this report will mark an era in the commercial history of the St. Lawrence Basin, and the British N. American colonies, and will long remain a handbook for reference among all statisticians, merchants, compilers, geographers and statesmen. We hope it is but a precurser to the adoption of a regular system of collection of commercial returns. It is also a service to the western and northern frontier, which was well deserved, and could come from no one with a better grace than Mr. Secretary CORWIN. Of the ability displayed by Mr ANDREWS in the collection of material and the compilation of the matter, we think there can be but one opinion.

N.

Pacific Railway.

The Iron Horse in Motion.—Yesterday witnessed the starting of the first locomotive in North America west of the Mississippi—the pioneer in whose tracks soon will follow others, and whose first breath is the omen pointing to the grand system which is to develop the almost infinite resources of a country so vast as that lying between the Mississippi and the Rocky mountains.

At precisely 7 o'clock, Mr. Charles Williams, the master machinist of the company, took his position on the locomotive, the "Pacific, No. 3," which had previously manifested a restless uneasiness and a desire to be in motion.

The whistle of the locomotive announced that the moment of departure had arrived, and after the bell had tapped the last call, the driving wheels commenced revolving, and locomotive, tender, three cars with iron rails, engineer, passengers and all, were on the road toward sun-down. They proceeded to a point about four miles west, the extent of the track as far as laid, where the rails were deposited, after which the 'train' returned to the depot.

A sumptuous collation, prepared by "the Sylph" was dispatched by the guests assembled, after which they returned to the city, having witnessed a spectacle, the grandest in its effects ever presented on the western shores of our river.

The locomotive continued in motion during the day, and drew several trains of cars loaded with rails to the extremity of the line, where the rails are being rapidly laid. It is anticipated that the track will be laid to the Sulphur Springs by Thursday next, when a daily train will connect the city with that point.

The day and event will long be remembered, and those who were so fortunate as to be eye witnesses of the starting of the first train of cars on the western shore of the Mississippi, may feel justly proud of the circumstance.—*St. Louis Intelligencer.*

Statistics of the United States.

The report of the Superintendent of the Census, recently laid before Congress, contains summaries of the highest importance in the leading departments of statistics. As a starting point, the population of the British islands Prussia, France, etc., is given, and a comparison instituted between the condition of these countries and the United States.

POPULATION, INCREASE, ETC., OF THE BRITISH ISLES.

By the census of 1851, it appears that the population of England, Ireland, Scotland, Wales and the islands, including persons in the army, navy, and merchant service, amounted to 27,619,866, of whom 13,537,052 were males, and 14,082,814 were females. This population is distributed as follows, viz:

	Houses.	Males.	Females.
England & Wales.	3,280,961	8,762,588	9,160,180
Scotland	366,650	1,363,622	1,507,161
Ireland	1,047,735	3,076,727	3,339,067
Islands in the British seas	21,826	65,511	76,405
Part of the army and navy out of the kingdom	.....	167,604	.....
	4,717,172	13,587,052	14,082,814

By the census of 1841, the population of Great Britain and the islands of Jersey, Guernsey, and Man amounted to 18,658,372. During each ten years from 1801 to 1851, the actual increase was as follows, viz; 1,479,562, 2,132,896, 2,184,542, 2,260,749, 2,227,438—being at the rate of 14, 18, 15, 14 and 12 per cent respectively. The actual increase of the population in fifty years has been 10,-

317,917; the rate per cent in fifty years, 98; the annual rate per cent being 137.

With respect to Ireland, and the returns of 1821, the number of inhabitants at that period was 6,801,827. In 1831, 7,767,401—increase 965,574; rate per cent 14, 19. In 1841, 8,175,124—increase 407,723; rate per cent 5, 25. In 1851, 6,515,794—decrease 1,659,330; rate per cent 20. By this statement we perceive that the population of Ireland increased from 1821 to 1841 at the average rate of about one per cent per annum, while a decrease of 1,659,330 from 1851 to 1851, indicates a most appalling diminution of population, amounting to two per cent per annum, or twenty per cent for the entire ten years, a reduction amounting to the total emigration from the whole United Kingdom from 1839 to 1850.

During ten years, the population of the entire kingdom of Great Britain and Ireland increased from 26,833,496 to 27,452,262, or at the rate of a little more than half a million in ten years. In the last fifty years, England and Wales increased 102 per cent—males 105, females 97·50; Scotland 78 per cent—males 84, females 73. The population of the United States during the past fifty years has increased at the rate of 337 per cent, and in ten years intervening between the last two censuses, increased from seventeen and a fraction millions to over twenty-three millions, or 36 per ct. During the same period, (leaving Ireland out of view,) the population of Great Britain increased at the rate of 12 per cent during ten years, or 1 2-10 per cent per annum.

By the last census, it appears that the number of *houses* in the United States occupied by free persons was 3,363,427, and the proportion of houses to population nearly the same as shown from the British reports to obtain in that country.

In comparing the population of Great Britain and Ireland with the inhabited houses, it appears that the whole number of houses in Great Britain amounts to 3,669,437, being nearly one house to each six persons. In Ireland, the number of inhabited houses amounts to 1,047,735, being in the proportion of two houses to each 13 persons.

By the Prussian census of 1839, the population of that country was 16,331,187.

The population of Belgium, on the 31st December, 1845, amounted to 4,298,560; on the 15th Oct. 1846, to 4,337,196.

In the cities of Belgium the houses inhabited amount to 170,455. and those uninhabited to 9,302. In the rural communes, the inhabited houses number 629,393; the uninhabited 20,411. Total number of inhabited houses 799,848; uninhabited 29,713.

The population of France has been as follows:

Year.	Total.	Annual increase per ct.
1801	27,349,003	....
1806	29,107,425	1·28
1821	30,461,875	0·31
1831	32 569,223	0·69
1836	34,540,910	0·60
1841	34,240,178	0·41
1846	35,400,486	0·68
1851	35,781,628	0·21

From the foregoing statement it will be seen that France, with a population of more than 35 millions, has increased in the number of her people but little more than the two States of New York and Pennsylvania, with not more than one-third her population, in the same period.

MORTALITY.

For general estimates, adopting the current classification of the States, the American census exhibits the following ratios of mortality, disregarding the ages at death:

	Annual deaths per cent.	Ratio to the number living.
New England States	1·55	1 to 64
Middle States, with Ohio	1·39	1 to 72
Central slave States	1·38	1 to 73
Coast planting States	1·37	1 to 73
Northwestern States	1·24	1 to 80
United States, total	1·38	1 to 73

EXPECTATION OF LIFE.

Completed age.	Massachusetts. Males.	Fem.	Maryland. Years. M.	Fem.	England. Years. M.	Fem.	France. Years. M.	Fem.
0	38·3	40·5	41·8	44·9	40 2	42·2	38·3	40·8
10	48·0	47·2	47·3	49 5	47·1	47·1	47·0	47·4
20	40·1	40·2	39·7	42·1	39·9	40·8	40 0	40·1
30	34·0	35·4	32·9	35·7	33·1	34·3	34·0	33·4
40	27·9	29 8	25·8	29 5	26·6	27·7	27·0	26 6
50	21·6	23·5	20·2	22·7	20·0	20·1	19 9	19·6
60	15·6	17·0	14·4	16·0	13 6	14·4	13·3	13 2
70	10·2	11·3	9·1	10·5	8·5	9·0	8·1	8·1
80	5.9	6·4	7·2	8 0	4·9	5·2	4·8	4·8
90	2·8	3·0	3·9	4·3	2·7	2·8	3·2	3 2

Another very interesting subject is the classification of inhabitants according to the countries of their birth, which shows that of the free inhabitants of the United States, 17,736,702 are natives of its soil, and that 2,210,828 were born in foreign countries; while the nativity of 39,237 could not be determined. It is shown that 1,965,518 of the whole number of foreign born inhabitants were residents of the free States, and 245,310 of the Slave States. It is seen that the persons of foreign birth form 11.06 per cent of the whole free population. The countries from which have been derived the largest portions of these additions to our population appear in the following statement:

Natives of Ireland in the	U. S. in	1850		961,719
Do.	Germany	do.	do.	573,325
Do.	England	do.	do.	278,675
Do.	British America	do	do.	147,700
Do.	Scotland	do.	do.	70,550
Do.	France	do.	do.	54,069
Do.	Wales	do.	do.	29,868
				2,115,806
All other countries				95,022

The proportion in which the several countries above named have contributed to the aggregate immigrant population is shown in the subjoined statement:

Ireland	43 4 per cent.
Germany	25 9 do.
England	12 6 do.
British America	6.68 do.
Scotland	3.17 do.
France	2.44 do.
Wales	1.34 do.
Miscellaneous	4 47 do.
	20.0 per cent.

This view of the living immigrant population is important as serving to correct many extravagant notions concerning it which have attained extensive currency.

Another interesting branch of this subject is that which concerns the inter-migrations of our native citizens among the States. It is found that out of 17,736,792 free inhabitants, 4,116,792 have emigrated and settled beyond the States of their birth.—Three hundred and thirty-five thousand natives of Virginia, equal to 26 per cent. of the whole have found homes outside of her own borders. South Carolina has sent forth 163,355, which is 36 per ct. of all citizens of that State living in the United States at the date of the census, and forms the astonishing proportion of 58 per cent. of those remaining in the State of their nativity. South Carolina has lost 261,575 free inhabitants, equal to 31 per cent. by emigration. Among the Northern States, Vermont and Connecticut have contributed most largely to the settlement of other parts of the country. Their proportion, about 25 per cent. of their native citizens, would perhaps exceed that of either of the Southern States already mentioned, were the number of slaves in the latter admitted as an element of the calculation.

STATISTICS OF INSANITY, PAUPERISM, BLINDNESS, ETC.

The number of white mutes in the United States amounts to 9,021, and the colored to 632, of whom 491 are slaves. The number of persons destitute of sight in the United States is 9,702, of whom 7,997 are white, and 1,705 colored, of the latter 1,211 are slaves.

The number of indigent persons who have received the benefit of public funds for their relief amounts to 134,972, of this number 68,538 were of foreign birth, and 66,434 Americans. Of the number receiving support on the 1st day of June, there were 36,916 natives and 13,437 foreigners, making 50,353 in all. The entire cost of these individuals for the year was $2,954,806.

The entire number of paupers relieved by the public funds in England and Wales for nine years, from 1840 to 1848 inclusive, amounted to 13,193,435, equal to 1,649,178 perons per annum. In 1848 the number relieved was 1,876,541, by which it appears that one person in every eight was a pauper. The total public expenditure for the poor in England and Ireland in 1848 amounted to $42,750,000.

From the returns, it appears that the whole number of persons convicted of crime in the United States, for the year ending the 1st day of June 1850, was about 27,000. Of these 13,000 were native and 14,000 foreign born. The whole number in prison on the first day of June was about 6,700, of whom 4,300 were native, and 2,460 foreign. Near four million youths were receiving instruction in the various educational institutions of the country on the first of June, 1850. The teachers number more than 115,000, and the colleges and schools near 100,000.

WEALTH OF THE UNITED STATES.

The following is the valuation of the real and personal estate of the inhabitants of the U. States for the year ending June 1, 1850:

	Assessed Value.	True or Est'd Value.
Maine	$96,765,868	$122,777,571
New Hampshire	92,177,959	103,652,835
Vermont	71,671,651	92,205,049
Massachusetts	546,003,057	573,342,286
Rhode Island	77,758,974	80,508,794
Connecticut	119,088,672	155,707,980
New York	715,369,028	1,080,300,210
New Jersey*	190,000,000	200,000,000
Pennsylvania	497,039,649	722,476,128
Delaware	17,442,640	18,652,053
Maryland	208,563,566	219,217,362
District of Columbia	14,018,874	14,018,872
Virginia	381,376,660	430,701,684
North Carolina	212,871,413	226,800,470
South Carolina	283,867,709	285,257,698
Georgia	335,116.229	335,425,714
Florida	22,784,835	22,862,270
Alabama	219,476,150	228,304,332
Mississippi	208,422,167	228,951,138
Louisiana	220,165,172	233,908,764
Texas	51,027,456	02,740,475
Arkansas	36,428,675	39,841,025
Tennessee	189,437,623	201,246,686
Kentucky	291,387,554	301,638,456
Ohio	433,872,632	381,628,456
Michigan	30,877,223	59,787,255
Indiana	152,870,399	202,650,264
Illinois	114,782,645	156,595,006
Missouri	98,595,463	137,247,707
Iowa	21,690,642	23,714,638
Wisconsin	26,715,525	42,056,595
California†	22,123,173	22,161,872
	5,998,983,281	7,122,145,697
Minnesota (not returned in full.)	....	....
New Mexico	5,174,471	5,174,471
Oregon	5,063,474	5,063,574
Utah	986,083	985,083
Total	6,010,207,309	7,133,369,725

* In New Jersey, as the real estate only was returned, the above is partly estimated.

† Only thirteen counties in California are returned.

CHURCHES.

The number of churches in the United States is 36,011, being 1 to every 646 of population, and each church able to accommodate on an average 384 persons. The total value of church property amounted to $86,416,639.

The following statement exhibits the relative value of the edifices of the different denominations.

Denominations.	No. of Churches.	Aggregate Accommodations.	Total Value of Church Property.
Baptist	8,791	3,130,878	$10,931,382
Christian	812	296,050	845,810
Congregation'l	1,674	795,177	7,973,962
Dutch Reformed	324	181,986	4,096,730
Episcopal	1,422	625,213	11,261,970
Free	361	108,605	252,255
Friends	714	282,823	1,709,867
German Reformed	327	156,632	965,880
Jewish	31	16,575	371,600
Lutheran	1,208	531,100	2,867,886
Mennonite	110	29,000	94,245
Methodist	12,467	4,209,333	14,636,671
Moravian	331	112,185	443,347
Presbyterian	4,584	2,040,316	13,369,884
Roman Catholic	1,112	620,950	8,973,838
Swedenborgian	15	5,070	108,100
Tunker	52	35,075	46,025
Union	919	213,552	690,065
Unitarian	243	136,367	3,268,122
Universalist	494	205,462	1,767,015
Minor sects	325	115,347	741,980
Total	36,011	13,849,886	$86,416,639

AGRICULTURAL.

STATEMENT showing the number of acres of improved and unimproved land, in farms, cash value thereof, and average cash value per acre in each State, etc.:—

	Acres of improved land.	Acres of unimproved land in farms.	Cash value of land improved and unimproved.
Maine	2,039,596	2,515,797	$54,861,748
N. Hampshire	2,251,488	1,140,926	55,245,997
Vermont	2,601,409	1,524,413	63,367,227
Massachusetts	2,133,436	1,222,576	109,076,347
R. Island	356,487	197,451	17,070,802
Connecticut	1,768,178	615,701	72,726,422
New York	12,408,968	6,710,120	554,546,642
New Jersey	1,767,991	984,955	120,237,511
Pennsylvania	8,628,619	6,294,728	407,876,099
Delaware	580,862	375,282	18,880,031
Maryland	2,797,905	1,836,445	87,178,945
Dist. Columbia	16,267	11,187	1,730,460
Virginia	10,360,135	15,792,176	216,401,441
N. Carolina	5,453,977	15,543,010	67,891,766
S. Carolina	4,072,651	12,145,049	82,431,684
Georgia	6,378,479	16,412,900	95,753,445
Florida	349,049	1,236,240	6,323,109
Alabama	4,435,614	7,702,067	64,323,224
Mississippi	3,444,358	7,046,061	54,738,634
Louisiana	1,590,025	3,939,018	75,814,398
Texas	639,107	14,454,669	16,398,747
Arkansas	781,531	1,816,684	15,265,215
Tennessee	5,175,173	13,808,849	97,851,212
Kentucky	11,368,270	10,972,478	154,330,262
Ohio	9,851,493	8,146,000	358,758,603
Michigan	1,929,110	2,454,780	51,872,446
Indiana	5,046,543	7,746,879	136,385,173
Illinois	5,039,545	6,997,867	95,133,290
Missouri	2,938,425	6,794,245	63,225,543
Iowa	824,682	1,911,382	16,657,567
Wisconsin	1,045,499	1,931,159	28,528,563
California	62,324	3,831,571	3,874,041
Minnesota Ter.	5,035	23,846	161,948
Oregon	132,857	299,951	2,849,170
Utah	16,333	30,516	311,799
New Mexico	166,201	124,370	1,653,952
Aggregate	118,457,622	184,621,348	3,270,733,093

	Average cash value per acre.		Average cash value per acre.
Maine	$12 04	Mississippi	$5 22
N. Hampshire	16 28	Louisiana	13 71
Vermont	15 36	Texas	1 09
Massachusetts	32 50	Arkansas	5 88
R. Island	30 82	Tennessee	5 16
Connecticut	30 50	Kentucky	6 91
New York	29 00	Ohio	19 93
New Jersey	43 67	Michigan	11 83
Pennsylvania	27 33	Indiana	10 66
Delaware	19 75	Illinois	7 99
Maryland	18 81	Missouri	6 50
Dt. of Columbia	63 03	Iowa	6 09
Virginia	8 27	Wisconsin	9 58
N. Carolina	3 23	California	0 99
S. Carolina	5 08	Minnesota ter'y.	5 61
Georgia	4 19	Oregon	6 58
Florida	3 99	Utah	6 65
Alabama	5 30	N. Mexico	5 69

Average cash value per acre, including States, Districts and Territories.....$10 70

One hundred and fifty-one millions of dollars are now invested in agricultural implements and machinery; of this sum New York has invested $22,084,926; Pennsylvania, $14,722,541; Louisiana, $11,576,938 (perhaps to a great extent in machinery for crushing sugar cane;) Ohio $12,750,585; Kentucky, $5,169,037; Virginia, $7,021,772.

DOMESTIC ANIMALS.

According to the census returns of 1840, there were in the United States 4,335,669 horses and mules; 14,971,586 meat cattle, 19,311,374 sheep, and 26,301,293 swine; of 1850 4,335,358 horses, 559,229 asses and mules, 28,360,141 horned cattle, (including 6,392,044 milch cows, and 1,699,241 working oxen,) 21,721,814 sheep, and 30,316,603 swine.

The increase in horses, mules and asses during the ten years has been 559,053. Many suppose that the great extension of railroads has a tendency to dispense with the use of large numbers of horses; but one very good reason for the small apparent increase in the number of horses, exists in the fact that the enumeration of 1850 omits all in cities and includes all or mainly such as are employed in agriculture or owned by farmers. In New York, where there are less than a thousand mules, there appears to be a decline in the number of horses and mules together of 26,566; in Pennsylvania, of about 13,000; in New England, of 17,000, or more than twenty-five per cent, while in all these States railroad conveyance has almost superseded the use of horses for travelling purposes. On main routes we would more readily attribute the apparent diminution to the omission to enumerate the horses in cities and towns than to any superseding of horse power, which the opening of railroads would often bring into requisition in various other operations. In Ohio, and the new States of the Northwest, the increase of horses has kept pace with that of the population. The four and a quarter millions of these noble animals in the United States constitute a proportion of one to five of the inhabitants. New York has one horse to seven persons; Pennsylvania, one to six and six tenths; Ohio, one to four; Kentucky, one to three free inhabitants. The number of horses in the United States is more than three times as large as that in Great Britain. The number of mules is 556,070, of which but 30,000 are found in the Northern States.

The aggregate number of milch cows, working oxen and other cattle in 1840, was 14,971,586; in 1850, 18,355,287. The increase, therefore, between the two periods, was 3,383,701, or about twenty per cent. They appear to be distributed quite equally over the Union. The amount of butter gives an average of something over 49 pounds to each milch cow. The average production of cheese to each cow is 16¼ pounds.

The increase in the number of sheep between 1840 and 1850 was 2,309,108.

It is a very gratifying fact that, though the number of sheep has increased in ten years, but twelve per cent, the aggregate weight of their fleeces has augmented forty-six per cent.

In 1840 there were 19,311,374 sheep, yielding 85,802,114 pounds of wool equal to 1 84-100 pounds per head.

In 1850 the average weight of each fleece was 2 43-100 pounds, from which it would appear that such an improvement had taken place in the various breeds of the American sheep as to increase their average product about thirty-two per cent. throughout the United States. And a critical analysis of the returns of sheep and wool proves not only that our breeds are capable of such improvements, but that it has actually taken place.

The following table exhibits the relative production of a number of leading articles according to the census returns of 1840 and 1850.

	1840.	1850. (crop of 1849.)
Wheat, bushels	84,823,272	100,503,899
Rye, "	18,645,567	14,188,637
Maize, "	377,531,875	592,326,612
Oats, "	123,061,341	146,678,879
Rice, lbs	80,841,422	215,312,710
Tobacco, lbs	219,163,819	199,752,640
Cotton, "	790,479,275	987,449,600
Buckwheat, bush	7,291,743	8,956,916
Barley, "	4,161,504	5,167,016
Potatoes, bush. sweet and common	108,298,060	104,055,989
Hemp, tons,	95,251¼	35,093
Flax, lbs.		7,715,961
Silk cocoons, lbs	61,552½	14,762
Sugar cane, lbs	155,100,809	247,581,60
Sugar maple, "		34,249,886

Atlantic and St. Lawrence Railroad.

A petition signed by the directors of the Atlantic and St. Lawrence railroad company, and our citizens generally, is in circulation, asking congress to establish a new collection district at Island Pond Junction, "at the point or place where the American and Canadian companies unite upon the line of the Portland and Montreal railway."

This is a measure that will become absolutely indispensable, on the completion of the line to Montreal, as a large revenue business must accumulate at this point.

The fine weather of the last few days has given great despatch to the laying of track, which has now reached the Connecticut river, and the locomotive will enter Vermont the present week.—Between the Connecticut river and Island Pond a distance of 16 miles, the sleepers are laid for more than half the entire line.—*Portland Advertiser of the 11th.*

Ohio.

Zanesville, Akron and Cleveland Railroad.—We are informed that Mr. Grant, engineer of the Zanesville, Akron and Cleveland railroad has just completed a preliminary survey of the route of this road to this city. The route surveyed after leaving Millersburg in Holmes county, passes down the valley of Killbuck to the Walhonding; crosses the latter stream about four miles west of Coshocton; passes through Roscoe, thence down the valley of the Muskingum to Dresden, intersecting the Steubenville road a few miles above Dresden, thence through Dresden to Zanesville.

Mr Grant, reports the line from Cleveland to Zanesville as 140¼ miles in length with gentle grades, with a large portion of level line, of easy curvature, and can be constructed very cheaply. No doubt is felt as to the interest which can be combined upon this road, carrying it to completion. —*Zanesville Gazette.*

Report of the Post Master General.

According to the report of Hon. S. D. Hubbard, Postmaster General, the number of post offices in the United States, at the close of the fiscal year, ended June 30, 1852, was 20,601; postmasters appointed during that year, 6,255. There were 1,719 post offices established, and 614 discontinued during the year.

From the end of the fiscal year to November 1, 1852, 520 post offices have been established, and 236 discontinued; so that the whole number in operation at the latter date was 21,191. At its close there was in operation in the United States 6,711 mail routes, their aggregate length being 214,284 miles, and employing 5,266 contractors. Annual transportation of the mails on these routes 58,985,728 miles, at an annual cost of $3,939,971, being about 6 7-10 cents per mile; 11,082,768 miles were performed on railroads, at a cost of $1,275,520, being about 11½ cents per mile; 6,353,409 miles in steamboats, at a cost of $505,815, being about 8 cents per mile; 20,698,030 miles in coaches, at a cost of $1,128,986, being about 6½ cents per mile; and 20,850,621 miles in modes not specified, at a cost of $1,029,650, being about 4 9-10 cents per mile.

The inland service shows an increase of 17,994 miles in mail routes; of 5,713,476 miles of annual transportation, and of $518,217 in the annual cost—the railroad service alone being increased 2,514,061 miles, at an increased cost of $290,501.

There were six foreign mail routes in operation on the 30th of June, of the aggregate length of 18,349 miles—annual transportation 652,406 miles.

The cost of ocean steamer service for the year 1852 was $1,896,250; for 1851 $1,023,250.

The gross receipts of the department for the year ending June 30th were $6,925,971 28. But of this only $4,226,792 90 were from letter postages and stamps, and $739,246 36 from newspapers and periodicals. The receipts from postages were less by $1,388,334 43 than those of the preceding year, being a decrease of 22 per cent. since the new law took effect. Still the Postmaster General does not desire a return to higher rates.

The expenditures of the department for the last fiscal year were $7,108,459 04; those for the present year are estimated at $8,745,777 20. The estimated receipts, including $1,200,000 appropriations, are $7,417,790 83; leaving a deficit of $1,327,986 38, to be provided for by direct appropriation. A still larger appropriation will be required for next year.

The increased speed attained on various great mail routes is noticed by the P. M. General. The following is given as the receipts for postage on several lines of mail steamers during the last year:

By Collins' line, New York and Liverpool	$228,867 61
By New York and Bremen line, touching at Southampton, England	77,219 87
By New York and Havre line, touching at Cowes	80,804 08
By Charleston and Havana line	11,658 99

Several topics of no general interest are touched upon, and the report then speaks of the application of the Havre and Bremen lines of steamers for increased pay, on the ground that while the Collins' line receives $30,000 a trip, they get but $12,500 a trip for the Havre line and $16,666 for the Bremen line. They consider that the increased commerce and immigration from Germany since the line was established, entitle them to additional aid.

Several postal conventions with foreign countries are noticed, and the report then proceeds to consider the necessity for increased commissions to postmasters on account of the increased labor under the new law. The following is recommended for an office collecting postages to the amount of $3,000.

Allow on $100,	50	per ct.	commission	$50 00
Do.	300,	40	" "	120 00
Do.	2,000,	33⅓	" "	666 66
Do.	600,	12½	" "	75 00
				911 66

The whole number of paid and unpaid letters which have passed through the post offices of the United States during the last fiscal year, was 95,790,524. Of this number 32,672,765 were unpaid; 18,448,510 paid by money; 31,897,750 paid by stamps; and 3,146,000 free.

The Postmaster General recommends to Congress to remedy the evil existing in Philadelphia on account of the want of a suitable Post Office building.

Post Office Railroad Statistics and cost for the year 1852.

States.	Transp'n. Miles.	Cost.
Maine	177,528	$15,397
New Hampshire	220,272	16,498
Vermont	270,660	31,508
Massachusetts	1,276,912	101,320
Rhode Island	86,112	8,612
Connecticut	565,365	47,238
New York	2,837,276	262,830
New Jersey	307,820	49,122
Pennsylvania	866,606	71,165
Maryland	597,064	312,700
Ohio	672,632	108,674
Virginia	366,946	72,593
North Carolina	263,016	52 571
South Carolina	411,528	52,010
Georgia	820,071	116,989
Michigan	601,120	83,958
Indiana	215,904	22,511
Illinois	106,704	9,164
Kentucky	136 864	8,840
Tennessee	83,616	5,742
Alabama	155 688	28,180
Mississippi	43,316	5,950
Louisiana	1,248	150
Total	$11,082,768	$1,275,520

Central Military Tract Railroad.

Mr. J. W. Brooks, the popular Superintendent of the Michigan Central railroad, has been elected President of the Illinois Central Military Tract railroad.—*Detroit Tribune.*

In copying the above, the Albany Evening Journal says: "Mr. Brooks is rapidly reaping the reward of his industry and intelligence. Ten years ago, with an enviable but limited reputation, he went from New England to Rochester to assume the superintendency of the Auburn and Rochester railroad. He discharged the duties of that office with so much skill and energy, that he attracted the attention of the then recent purchasers of the Michigan Central railroad, who appointed him Superintendent of that great work. The responsibilities imposed upon him were vast and gigantic. But he was equal to them all; and in five years he has probably performed as much hard work as any other man in America. He comes nearest to disproving the maxim that 'no one can do impossibilities,' of any person of our acquaintance. This new field of labor required just such a man; and we trust that while he labors so faithfully for others, he may be able to gather a rich reward for himself."

Reading Railroad.

The admirable management of the passenger trains upon our railroad, affords accommodation for travellers that are excelled by those of no other road in the United States. Reasonable fares, comfortable and elegant cars, careful engineers, polite and attentive conductors, convenient hours of starting, and punctuality to the minute in running time, which constitute the sum total of the advantages of railroad travelling, are *fixed* appurtenances of the passenger trains of our road, that the traveller is always certain to enjoy. So perfect are all the arrangements of these trains, that the life of *not a single passenger* in them has been lost since the opening of the road; and the few accidents of lesser magnitude that have occurred, were invariably the direct result of the imprudence of the sufferers. This is saying a great deal, but the facts bear us out in our assertion. These studied attentions to the wants of the public, have had their legitimate effect, in greatly augmenting the passenger travel over the road; so that the company now find profitable use for two daily trains the year round.—*Reading Gazette.*

Railroad Items.

The Central railroad company have commenced putting down iron on the track from Lasalle to Bloomington, and expect to finish the line so that the cars can run upon it by the first of March next.

The engineers of the Alton and Terre Haute road were five miles west of Hillsboro on the 28th ult., on their way from Alton to Hillsboro, permanently locating the road.

The receipts from passengers alone on the Cleveland, Painesville and Ashtabula railroad, including its extension to Erie, Pa., since its opening, have been $1,000 per day, or $30,000 per month. The whole distance is 196¼ miles, and the entire cost about $2,100,000. This is enormous, and shows the great importance and necessity of the Lake Shore line of roads.

The Dundee Record states that arrangements have been effected between the Canandaigua and Elmira and New York and Erie railroad companies, by which the road from Jefferson to Elmira is surrendered to the former company, and is to be run in connection with the Canandaigua and Elmira and Niagara Falls roads, for ten years. The cars will run through to New York from the Falls, on this line in July next.

The Baltimore and the Richmond papers are making great efforts to carry steamship lines, the first southward, the second to Antwerp.

Indiana.

Central Railroad.—The contractors on this road are pushing it forward as expeditiously as the weather will permit. Commencement has been made at this place, and at Cambridge city, in laying down the rails, and we are gratified to learn that the iron necessary to complete the road has been contracted for, and will be delivered as fast as it can be put down. This is an important road, and its completion at an early day may be expected as it is in the hands of energetic men.—*Indiana Daily Journal.*

Lake Superior Iron Business.

We learn by the Lake Superior Journal that the Iron Mountain and Lake Superior railroad has been pushed forward with energy under the superintendence of Mr. Ely, and the hardest part of the work has been done. The route has been cut out from the Lake to the Mountain, considerable grading and grubbing has been done, and the road is to be finished early next summer. By railroad, it is estimated the ore can be delivered on the docks at Marquette, for from 50 cents to $1 00, per ton, according to the quantity transported. The iron from it is acknowledged to be better than any imported, and the ore is to be had in any quantity at 50 cents a ton over and above the actual cost of transportation.—We understand Lake Superior iron has the preference here over any other for bands on the head of piles in pier building, a test which thoroughly tries the tenacity and strength of the metal.

It is only about eight years since the Lake Superior iron region was brought into notice, and the low price of iron together with the preference given so generally to the copper business in the Northwest, and the lack of a ship canal at the Saut, have retarded the developement of the resources of the country and its settlement. Still quite a village has sprunk up at Carp river, mills and foundries have been built, and other improvements have been made of importance to the growth and business of that region. A Marquette corespondent of the Journal writes:

"The Marquette Iron Works will commence again under new and favorable auspices, the whole concern having gone into the hands of enterprising Clevelanders. The company have on hand a large quantity of coal for winter operations and are prepared with every facility to carry on their work successfully. They mean to put on to the road, for carting or rather sledding down ore as soon as the snow falls, some fifteen horse teams and hope to get a supply on hand for a year to come. The snow road from the iron mountain to this place is always beautiful in winter, and equal to any plank road for smoothness.

The Jackson Iron Works under the charge of Mr. Eaton, located near the iron mountain, are just commencing again to work blooms. They have a

large quantity oi coal in store for their winter operations, and they will have a fine lot of blooms for shipment in the spring. The last sales of Lake Superior iron in market have greatly encouraged those engaged in the business to produce as much as possible.

American Railroad Journal.

Saturday, December 18, 1852.

State Policy of Illinois.

Some fifteen years since, the State of Illinois undertook the construction of an elaborate system of internal improvement. Two objects were proposed to be effected: the ordinary one of opening convenient channels of intercommunication between different portions of her territory; and the additional object, of confining within the State all the apparent advantages supposed to result from such works; in other words, to give to her roads such direction and termini as would tend to build up *exclusively* its own towns and cities. In accordance with this policy, a number of points were selected which were to become the sites of such *future* cities; and these weare made the *exclusive* termini of the roads projected. It was supposed that the laws of trade might be made to yield to political considerations, and that the public might be made to serve the personal advantage of the lucky dwellers in the favored seats of future opulence and commerce.

The result of this Quixotic experiment is, unfortunately, too well known. As might have been expected, it proved a total failure, involving not only the loss of millions, but bringing discredit and disgrace upon the State. After expending vast sums, the State found herself unequal to the further prosecution of the proposed works, which were, one by one, abandoned, and miles upon miles of the old grades are now covered with dense forests. All of the old work that can now be turned to account, has passed for a mere trifle into private hands. Only one work, the Illinois canal, out of the whole commenced, has been completed, and this has been effected by a private company, into the possession of which it has passed—the State retaining only a possible interest in the same.

As soon as the State emerged from the embarrassment which she brought upon herself, one of her first acts was to remodel her constitution, by which she forever prohibited herself from repeating her former folly. She is now by law incompetent to the construction of works of public improvement; and to leave to her legislature as little direct agency as possible in such matters, her constitution provides that the authority to construct railroads shall be given by a general law of the State, and requires a subsequent legislature to enact a suitable law for this purpose.

This has in part been effected, but unfortunately her dearly bought experience has yet failed to bring with it correct notions upon the legitimate sphere of legislation in commercial or business affairs. The idea of controlling the direction, and course of trade, by legislative interposition, still finds supporter.; and although by the act of remodeling her constitution, she pronounced herself incompetent to engage in the construction of channels for such trade, the legislature claims to pronounce upon the expediency of any proposed work, and to determine the route and direction of commerce—the very thing that was the cause of all her previous misfortunes. It was the fault of the policy described, that it was the work of *politicians*, not of business men seeking to provide for already existing wants. It would be just as wise in a legislature to attempt to prescribe the model of a ship, as to define and limit the routes of commerce. This body is just as incompetent to decide upon one as upon the other. It may often be good policy to render pecuniary assistance, but in matters that appeal solely to the reason and experience of business men, the opinions of such should be conclusive.

The State of Illinois, then, by refusing to allow the Mississippi and Atlantic railroad company to construct their road, are only enacting, on a less harmless scale, one of the follies of 1837, and which contributed more than all others to saddle the State with an enormous debt, for which she has nothing to show but a few miles of graded road long since abandoned.

Suppose the Alton and Terre Haute to be built, what would be the result? Would it add to the business or commercial importance of Alton?—Only in the same degree that the Erie railroad has built up Piermont! The road would add to the population and business just in proportion to the additional number of people it would require to superintend and operate the road. It is now too late to attempt to render Alton a rival of St. Louis, or to materially increase its present commerce. The reason is, that people prefer going to St. Louis to trade. It has been decided that St. Louis is the proper site of the commercial depot of that portion of the Mississippi valley contiguous to it. It is too late in the day to raise the question of the propriety of this decision. It is undoubtedly a correct one, or it would not have been made.

The people of Illinois go to St. Louis to trade, because they find it for their interest to do so. It would consequently be adverse to their interest to *compel* them to go to Alton. What is the object in endeavoring to force trade to that city? Simply to build it up. For this purpose other portions of the State are to be taxed, and privileges accorded to one section of the State refused to another. Granting the assumption that Alton could be rendered a large town by compelling railroads to make it their termini, the advantage gained would cost more than it would come to. As well might this be done by imposing a *direct* tax upon the people of the state, as to do it indirectly, by forcing them to take their products to a market where they would be forced to sell them at a sacrifice.

We certainly regret that the commendable enterprise of Alton will meet with no better return. But such are the laws of trade. We cannot expect that cities like St. Louis will be scattered about in wild profusion through the west. A rival to this city within a circuit of one hundred miles is not to be thought of. All within this distance must recede before the rising greatness of the former. Such is always the influence of towns. Witness how Boston has swallowed up the trade of all other Massachusetts towns, that were once of much greater comparative importance than at the present time. But it is no use to quarrel with such a result. In a country like the United States no human power can make it different. Any interference with the laws of trade is unnatural, and is sure to meet in the end with signal disappointment.

We have written the above with the best wishes possible for the success and progress of Alton; but we must of course deprecate the adoption of any policy, which is calculated apparently to promote this success, by doing injustice to others, and which must, in the end, only result to the injury of the very interest sought to be promoted.

Terre Haute and Alton Railroad.

We copy in another column, this morning, an article which appeared several weeks since in an editorial form, in the *Railroad Journal*, of New York. In doing so, we deem it proper to remark that the taunt and raillery which it contains, against the people of this State, are not only ill-timed, but exceedingly out of place, unless it can be shown that Mr. Brough's projected road across the State will lead to a larger expenditure of money in its construction, and, when made, will confer greater benefits upon it, *than the making of two roads, one on each side and parallel to it, and which it will destroy.* The Illinoistown and Vincennes, and the Terre Haute and Alton road, are both under contract, and in process of construction, but are doomed to destruction by the building of Mr. Brough's road between them. The people of Illinois have wisely preferred the two to the one road, and the Editor, who, in his *sanctum*, and without the least personal knowledge of the true grounds and merits of the controversy, shall thus presume to spend his contemptuous leer, must, to say the least, be very ready and indiscriminate in the use of such weapons. It may be he knows our people's local interests better than they do themselves,—if he does, however, perhaps this mode of argumentation may not at once convince them of their error.

The question between the people of Illinois and Mr. Brough, has been repeatedly decided by our Legislature, and under those decisions the St. Louis and Vincennes, and the Terre Haute and Alton companies, have gone to work in the construction of their respective roads. Important rights have been vested, and what was once fairly a question of policy, has become and is a question of justice also. Will the people, will the Legislature, will the Courts, suffer the perpetration of the injustice threatened by Mr. Brough, and his associates? We answer, under the circumstances, they will not?

Upon the whole, we are led to look upon the *Journal's* article as a part of the machinery to be used by Col. Brough, in another attempt upon our Legislature at its approaching session. It is clearly intended to induce the impression that he desires no further legislation from our State, but is determined to build his road at all events, and upon his own hook. We place no faith in such statements, and feel perfectly satisfied that Mr. Brough, notwithstanding what the Railroad Journal says, will be on hand at Springfield, during the winter, importuning our Legislature for a charter as industriously as ever. We call upon the friends of a sound State policy to mark our words and watch his movements.

We wish no better evidence of the correctness of our course, in reference to the railroad controversy in Illinois, than the above article, copied from the Alton Telegraph, the leading advocate of the "State policy." All that we contend for is, that railroads shall be *allowed* to be built where they are *needed.* This is exactly our position. The Telegraph, on the contrary, opposes this doctrine, and gives as a reason in the case under consideration, that the Mississippi and Atlantic road *would kill the Terre Haute and Alton and the Ohio and Mississippi roads.* How? Simply by drawing off the business of the latter! Should such fears be well founded, all we can say is, that these roads should not be built. If these projects have not sufficient inherent strength to stand upon, the sooner they are abandoned the better. If they depend upon a monopoly secured by an iniquitous State legislation, which is soon to be corrected by the prevalence of more enlightened and liberal views, the argument against their construction is still stronger. *Legislation* will never furnish business to a railroad, and if the latter cannot secure a compensating traffic without legislation, certainly it cannot, with.

The Telegraph censures us for advocating a *straight line.* Had we ventured to say as much against the Terre Haute and Alton project, as is

contained in the article copied from that paper, we certainly think we should have given reasonable cause of offence. What impression will be created in the mind of a capitalist, upon finding in the columns of the leading advocate of the State system, a direct admission that the above road will become worthless, upon the construction of the straight line. Now, no one *believes*, whatever may be the fact, that the State policy will be persisted in more than a year or two longer. The friends of this policy with whom we have conversed, say that they are willing to withdraw their opposition so soon as the building of the Terre Haute and Alton road shall be secured. Under these admissions, and with this conviction, who will invest in this project? No one in New York, certainly. Well may this project pray to be saved from its friends!

We take no such sweeping ground as this. The Mississippi and Atlantic road is not a rival of the Ohio and Mississippi railroad, and there is no reason why the best feeling between the two should not exist. The case is different we admit, with the Terre Haute and Alton. The termini of this and the Mississippi and Atlantic would be the same—for the business and travel of the former would not reach its destination short of *St. Louis*. The Alton papers admit that the freight brought down by the Alton and Sangamon railroad passes directly thro' to St. Louis, and that that city has been building a work for the benefit of the latter.

But the commercial result of a railroad may have nothing to do with the question of income of a road. The Terre Haute and Alton road, if built, would, in every respect but in the name, be a St. Louis road. That city, and not Alton, would reap the chief benefit of its construction. The road would, nevertheless, we think, be fair property, from an abundant local traffic it must command. It traverses a very fertile and productive country, and will be sufficiently removed from other roads to command a large business. If these considerations are not sufficient to justify its construction, it should not be built, as it would prove a losing concern both to stockholders, among the largest of which are the citizens of Alton, without being productive of the anticipated advantage to that city.

With regard to the insinuation, that we are leagued with Mr. Brough, and aiding him in carrying out his views, we would say, that the Editor of the Telegraph is as much in communication with that gentleman, and as much interested in the result of his labors, as we are. This, we take it, is a sufficient disclaimer of interested motives. Personally, we are entirely indifferent as to his success, except so far as his success may vindicate a principle for which we have always contended.—The entire railroad system of the country demands the construction of the short line, and we should certainly be wanting in the duty we owe this great interest, not to do what we can toward securing to them so manifest a right.

Pennsylvania.

Pittsburg and Connellsville Railroad.—On the 6th instant, the stockholders of the Pittsburgh and Connellsville railroad company elected the following board of managers;

Wm. Larimer, Jr., E. D. Gazzam, A. M. Hill, Henry Walter, Daniel R. Davidson, Walter Bryant, Henry Blackston, C. Rug, H. D. King, Wm. B. Curry, A. W. Marks, B. F. Jones. The board organized by electing Wm. Larimer, Jr., President, William B. Curry, Treasurer, and H. D. King Secretary.

Stock and Money Market.

The Stock market continues very active with large operations, though prices of some of the leading fancies are not so high as last week. Money is abundant with an active demand for good securities for investment.

The principal public sale during the week has been Mr. Draper's sale of the Buffalo and Corning railroad bonds, which commanded the following prices:

$30,000 Buffalo and Corning railroad Stevens first mortgage, 101; £25,000 do. do., 101¼; $3,000 do. do., 96; $27,000 do. do., 95½; $29,000 do. do., 96¼; $16 000 do. do., 95¾.

The following table will show the coinage of the Mint of the United States and its branches for the eleven months ending Nov. 30, 1852:

Mints.	Gold.	Silver.	Copper.	Total.
Philadelphia.	45,734 933	693,608	42,758	46,471,299
N. Orleans..	4,130,000	144,000	——	4,274,000
Charlotte N. C.....	356,849	——	——	356,849
Dahlonega Ga.	413,981	——	——	413,981
Total...	50,685,763	837,608	42,758	51,566,129

The deposits at the several mints during the corresponding time in 1851 were:

	U. S. Gold.	Other gold.	Total.
Philadelphia .	$41,506,411	$669,598	$42,176,009
New Orleans.	7,656,909	140,352	7,797,261
Charlotte.....	301,402	.....	301,402
Dahlonega...	313,981	.....	313,981
Total....	$49,778,703	$809,950	$50,538,653

The deposits of gold for the present year are $1,330,364 in excess of those to the same date of 1852, of which $340,202 were in foreign gold, principally coin, and $990,162 in American gold.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE
AMERICAN RAILROAD JOURNAL.

NEW YORK, DECEMBER 18, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100¼
U. S. 6's, 1856	111¼
U. S. 6's, 1862	116¼
U. S. 6's, 1862—coupon	117
U. S. 6's, 1867	121
U. S. 6's, 1868	122
U. S. 6's, 1868—coupon	121¼
Indiana 5's	102
Indiana 2½	61
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	98
Illinois 6's, 1847	84
Illinois 6's—interest	56
Kentucky 6's, 1871	111
Maryland 6's	111
New York 6's, 1854-5	109
New York 6's, 18 0-'61-'62	117
New York 6's, 1864-'65	120
New York 6's, 1 y., 1866	122
New York 5½'s, 1860-'61	114
New York 5½'s, 1865	113
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	112¼
New York 5's, 1866	117
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	——
Ohio 6's, 1856	108
Ohio 6's, 1860	111¼
Ohio 6's, 1870	117
Ohio 6's, 1875	117
Ohio 5's, 1865	106
Ohio 7's, 1851	105½
Pennsylvania 5's	98¾
Pennsylvania 6's, 1847,-'53	101
Pennsylvania 6's, 1879	99½
Tennessee 5's	92
Tennessee 6's, 1880	109
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	104
St. Louis	97½
Louisville 6's 1880	97½
Pittsburg 6's, 1869-1871	103½
New York 7's, 1857	108
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	103½
New York 5's, 1890	105
Fire loan 5's, 1886	——
Philadelphia 6's, 1876-'90	109½
Baltimore 1870-'90	109
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	114
Erie 2d mortgage, 7's, 1859	106½
Erie income 7's, 1855	101
Erie convertible bonds, 7's, 1871	102½
Hudson River 1st mort., 7's, 1869	109
Hudson River 2d mort., 7's, 1860	104½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	93
Reading mortgage, 6's, 1860	100½
Michigan Central, convertible, 8's, 1860	111
Michigan Southern, 7's, 1860	101
Cleveland, Col. and Cin. 7's, 1859	123
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	108
Ohio Central 7's, 1861	98

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Dec. 9.	Dec. 16.
Albany and Schenectady	114¼	113
Boston and Maine	107½	110
Boston and Lowell	109	109½
Boston and Worcester	105	106½
Boston and Providence	89½	92
Baltimore and Ohio	93½	98
Baltimore and Susquehanna	30½	34
Cleveland and Columbus	129	132
Columbus and Xenia	—	—
Camden and Amboy	150	—
Delaware and Hudson (canal)	128	130
Eastern	98½	99½
Erie	97½	95½
Fall River	—	—
Fitchburgh	104½	106½
Georgia	—	—
Georgia Central	—	—
Harlem	75	73½
" preferred	111½	111½
Hartford and New Haven	129	129
Housatonic (preferred)	35	35
Hudson River	76½	75½
Little Miami	—	140
Long Island	55	47
Mad River	—	99
Madison and Indianapolis	111	111
Michigan Central	101½	113½
Michigan Southern	135	134½
New York and New Haven	115½	115½
New Jersey	131	131
Nashua and Lowell	—	—
New Bedford and Taunton	117	117
Norwich and Worcester	54½	53½
Ogdensburgh	27½	27½
Pennsylvania	49½	49½
Philadelphia, Wilm'gton & Balt.	37	39½
Petersburg	—	—
Richmond and Fredericksburg	105	105
Richmond and Petersburg	35	35
Reading	100½	100½
Rochester and Syracuse	126	125½
Stonington	58	56½
South Carolina	122½	122½
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	142½	14
Vermont Central	17½	17
Vermont and Massachusetts	19½	22½
Virginia Central	40	40
Western	105½	105½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

Baltimore and Ohio Railroad.

The business of this road continues to exhibit a steady and gratifying increase. The revenue for the month of November has been $140,949 41, of which $114,081 43 were from the main stem, and $26,867 98 from the Washington Branch. This is an increase over the corresponding month of last year of $22,919 71, of which $18,974 76 was on the main stem, and $3,944 45 on the Washington branch.

We learn from the Patriot "that at a stated meeting of the board of directors of the Baltimore and Ohio railroad, held yesterday, the subject of opening the road to Wheeling, was introduced by Mr. Swann, who announced that it was his intention to *run a train through from Baltimore to Wheeling* on the 31st inst. The cars would leave Baltimore on the evening of the 31st, so as to reach Wheeling at 4 o'clock on the evening of the 1st of January, according to its pledge heretofore given, that the road should be opened on that day."

Mississippi Central Railroad.

To the Editor of the Railroad Journal:

Holly Springs, Miss., Nov. 26, 1852.

As the people of this State are about commencing what they deem an important and valuable line of railroad, I desire, through the medium of your Journal, to call public attention to the subject of railroad construction in Mississippi, the adaptedness of our territory to such works, and the ability of our people to construct and supply to them, a lucrative traffic.

The line of the Mississippi Central railroad extends from *Canton*, Miss., to Jackson, Tennessee, a distance of about 230 miles, and will connect at the former place with the New Orleans and Nashville road, and with the Mobile and Ohio railroad at the latter, thus giving to New Orleans a direct route to the mouth of the Ohio river. Of the whole line, 180 miles will be embraced in Mississippi, and the remainder in Tennessee.

Not being in possession of sufficient statistical information in reference to Tennessee, I shall confine my communication entirely to the Mississippi portion of the road.

The accompanying table has been taken in part from the assessment or tax roll of Mississippi, and in part from the census, both of 1850. Our lands are assessed for taxation every four years. You have therefore in the table the assessed value of the taxable lands for 1850. As to personal property, our taxation is mostly specific, not *ad valorem*, so that to ascertain its value I was compelled to resort to the Federal census of 1850. My statistics in reference to *lands* are from the tax roll, and as to personalty from the census. They are all for 1850.—I give you the sources of my information that you may test its accuracy.

There are 60 counties in the State of Mississippi through 7 of which this road will run, viz: Marshall, Lafayette, Yallabusha, Carroll, Holmes, Yazoo and Madison. The assessed value of the *taxable* land in these counties is $12,244,762, being a fraction over one-fifth of that of the whole State. They contain 316,441 acres of Government or vacant land, and 129,706 acres held by the State by forfeiture for taxes, or as school lands, nearly all of which are also vacant. They contain 56,865 white, and 73,769 slave population, amounting to 130,634 souls, being nearly one-fifth of the white, and one-fourth of the black population of the State. There were grown in these counties in 1850, (a light crop year) 118,056 bales of cotton, more than one-fourth of the whole State crop. These counties that year raised 4,831,711 bushels corn, nearly one-fourth of the State crop. In the same year the personal property was worth $37,112,437, more than one-fourth of the whole State. The sales of merchandize were $1,974,392, and their State tax was $44,915, being each about one-fifth of the whole State. These statistics show the great preponderance of the wealth of these counties, when compared with the whole State. There are also 9 counties, which adjoin those through which the road will run, viz: Tippah, Pontotoc, Chickasaw, Chocktaw, Desoto, Panola, Tallahatchie, Sunflower and Washington, possessing in 1850 $12,890,490 taxable real estate, 1,043,059 acres Government or vacant land, 166,496 State land also vacant, 64,389 white, and 47,509 slave population, 96,074 bales cotton, 4,324,220 bushels corn, $24,872,005 personal property, selling $945 926 merchandize, and paying a State tax of $34,898. There are three other counties, Issaquena, Attalla and Leak, that also lay contiguous to the counties through which the road will run, that are not embraced in any calculations, as they will trade but little with this road. Of the 9 counties above named, DeSoto, Sunflower and Washington will use the road but little, whilst Chickasaw and Chocktaw will be almost wholly dependent on it. Taking a distance of 28 miles on each side of the road, will embrace, *on an average*, as absolutely tributary to the road, two-fifths of the trade, travel, population and wealth of the 9 contiguous counties above specified. Adding this two-fifths, as in the table, to that of the counties to be pierced by the road, we have for the 180 miles in this State the sum total of the wealth, population and productions within 28 miles of the road and tributary to it, viz: Assessed value of taxable lands $17,401,970, Government or vacant lands 727,665 acres, State lands 196,304 acres, white population 82,621, black 92,773, total population 175.394, bales cotton 156,401, bushels corn 6,561,401, value of personal property $47,108,439, sales merchandize $2,352,762, State tax $58,873

Such in 1850 were the resources for this road as exhibited by the statistics. It is necessary for a moment to look behind them to ascertain some other facts. A large portion of the country through which the road will pass was as late as 1835 inhabited by the Indians. Speculators bought and still retain large quantities of the land, which is not yet populated. In addition to this all lands in this portion of the State i. e. the Chickasaw Cession, are exempt from taxation for five years after purchase from the general Government, so that many thousands of acres are now being opened that were not assessed in 1850, and did not yield any production. *Certainly not one-half of the land capable of supporting a population was occupied in* 1850 *within the* 28 *miles of the road, and in less than five years from the completion of the road, we can safely rely on a population of not less than* 350,000, *and double our present wealth.* Wheat is grown very successfully over a large extent of this country—corn, sweet potatoes and fruits are found in the greatest abundance—Carroll and Holmes counties will yield immense quantities of lumber. The country is most admirably adapted to the raising of sheep; their flesh is very fine and their wool of good quality. Yet for want of market facilities the citizens sell nothing but cotton, and are compelled to invest all their labor in its production. We have no factories, no mills, no foundries, nothing in a word but negroes and *cotton*.

Commencing at Canton, the line of the road runs directly north for 35 miles, whilst the New Orleans and Nashville road from the same point, runs for many miles but little north of east. There is consequently no competition between these roads.—East of our road throughout the whole extent of the State, there is not even the semblance of a navigable stream, between the road and the Mobile and Ohio railroad, which latter road runs parallel to ours, at an average distance of about 70 miles.—Such is the competition on the east. On the west at an average distance of about 75 miles is the Mississippi river. Between this river and the road, at an average parallel distance of about 25 miles runs the Yazoo river. This river affords a constant but expensive navigation to Yazoo city, from which a line drawn due east would strike the road about 10 miles above Canton. This stream is navigable for some 5 months in the year to Greenwood, in Carroll county, about 22 miles west of the road, and some 60 miles north of Canton. A short distance above Greenwood is the confluence of the Yallabusha and Tallahatchie rivers, where the Yazoo first takes its name. Flat boats can descend the Yallabusha for a short time in the year, but steamboats find an exceedingly uncertain navigation, seldom running the stream and never I believe above Grenada, where the road will cross it. The Tallahatchie runs north at an average distance of 25 miles from the road, until it makes a sudden easting in Panola county, and continues that direction to the point where it is crossed by the road in Lafayette county, above which point, boats never pass. From obstructions at the mouth of the Yazoo, from the exceedingly winding course of these rivers, from high freights, and still higher insurance, it may be safely estimated that all the country for a distance of 25 miles west of the road will be tributary to it.

The road will have a still greater scope of country in the east to support it. It will have an extent, on the whole, of at least 56 miles of the most populous, wealthy, and productive portion of Mississippi, dependent on it.

A word as to the topography of the bed of the road.—From Canton for a distance of 50 miles, the country is almost a level, and when we speak of "a level" in this country we mean a level. The next 35 miles is undulating, but would in the south or east be regarded as a beautiful country for a road. The whole of the balance of the distance to the Tennessee line is level, with the exception of about ten miles, which is slightly broken. Two companies are now surveying the route, and have this week completed their first survey and are now reviewing their work. It is estimated that the whole grading can be effected at a cost of about $3,000 per mile on an average. The right of way is almost universally given to the company. Timber is most abundant and will cost but little. No rock is encountered. It is supposed that the road can be constructed and equipped for at most $12,500 per mile even at the present high price of iron. Four streams only are to be crossed. The Big Black, not navigable, 10 miles from Canton; the Yallabusha, 90 miles from Canton, at the head of navigation; the Yockanapatopy, 120 miles from Canton, not navigable, and the Tallahatchie, 150 miles from Canton, at the head of navigation. None of these streams are fifty yards wide, no drains will be required, and each of them can be bridged for $10,000. No tunnel is required. It is proposed to place a portion of the road under contract in March or April next.

One million and a half have already been sub-

scribed in this state toward the capital stock. If I am not much mistaken, I believe you will agree with me that the local trade and travel alone will make this a good paying project.

As to the 50 miles in Tennessee, I can only say, that it passes through a country very nearly resembling that described in Mississippi. The company have obtained an unreestricted charter through the whole of the state of Tennessee. It is proposed to construct a road from Louisville to Memphis, and if ever this should be done, we will extend our road beyond Jackson some thirty miles, intersect it at that point, and thus with it, make the most direct line from New Orleans to Louisville, while by the Mobile and Ohio road, she reaches in an almost direct line, the mouth of the Ohio river. This road will cross the Memphis and Charleston railroad, either at Holly Springs, or about the State line of Tennessee.

The annexed tabular view of the population and production of the counties dependent on the road, will, it is believed, be found valuable for future reference; the reflections and conclusions to be drawn from them, show irresistibly the necessity of this work in the developement of a region so rich, so extensive, and so easily adapted to its construction. The success of the road as a commercial enterprise is just as certain. In other sections, involving heavier expenditures of capital, the ultimate profits of such undertakings may be problematical, here, they are demonstrated. Very respectfully,

H. W. WALTER.

Co's through which road will run.	Assessed value of taxable property.	Government lands, acres.	State lands—acres.	White population.	Slaves.	Bales of cotton.	Corn—bushels.	Value of personal property.	Sales of merchandize—amount.	State tax.
Tippah....	$1,341,479	19,000	23,187	15,814	4,924	12,032	818,390	$2,275,594	$153,164	$4,104
Pontotoc...	1,518,261	.....	8,021	12,144	4,966	9,091	657,362	3,530,874	205,025	3,143
Chickasaw.	1,588,846	32,573	13,380	9,884	6,481	8,308	598,942	3,713,025	206,406	5,054
Chocktaw..	645,801	195,946	9,360	8,434	2,978	4,466	401,108	1,446,082	70,590	2,310
De Soto....	2,654,476	*40,000	8,056	9,499	9,593	20,125	753,741	4,020,000	100,530	7,113
Panola.....	1,598,608	38,144	21,986	5,624	7,331	8,910	426,647	3,940,300	115,479	4,809
Tallahatchie	376,616	272,815	47,233	2,098	2,547	4,977	174,730	2,000,000	30,188	1,407
Sunflower..	450,659	250,000	16,113	348	754	1,964	36,000	400,000	20,000	864
Washington	2,755,750	194,000	19,157	553	7,945	26,218	427,300	3,545,230	44,544	6,094
	12,800,496	1,043,059	166,496	64,389	47,509	96,074	4,324,920	24,872,005	945,926	34,808

* Estimated—no census returns having been made as to this county.

	Co's through which road will run.	Assessed value of taxable lands—1850.	Government lands, acres.	State lands—acres.	White population.	Slaves.	Bales of cotton.	Corn—bushels.	Value of personal property.	Sales of merchandize—amount.	State tax.
	Marshall..	$2,558,000	None.	6,925	14,272	15,417	32,766	1,228,250	$8,335,023	$334,175	$9,389
	Lafayette..	1,148,152	480	13,900	8,353	5,719	10,288	561,575	3,241,436	125,183	3,790
	Yallabusha	1,147,462	111,788	18,869	8,671	8,601	14,489	637,540	4,772,916	355,391	5,091
	Carroll ...	1,666,994	32,873	65,980	8,680	9,812	18,069	727,345	5,284,935	341,203	5,945
	Holmes....	1,440,227	112,135	13,389	5,556	*7,000	12,582	*580,000	4,146,911	183,383	5,023
	Yazoo.....	2,016,594	47,687	4,440	*7,000	*12,000	*15,000	*500,000	*6,000,000	418,645	7,457
	Madison..	2,267,243	11,448	17,103	4,333	13,843	14,862	791,460	5,331,216	206,412	8,220
Add 2.5 of 9 contiguous Co's..		12,244,762	316,441	129,706	56,865	73,769	118,056	5,026,170	37,112,437	1,974,392	44,915
		5,156,193	411,221	66,598	25,755	19,004	38,434	1,730,690	9,996,002	378,370	13,958
Grand total for road..		17,401,970	727,665	196,304	82,621	92,773	156,490	6,845,860	47,108,439	2,352,762	58,873

To the above seven counties, through which the road will run, I have added two-fifths of the wealth, population and products of the nine counties below, which adjoin the above seven counties. On a careful estimate I have found that a line drawn 28 miles from the road and parallel with it, will embrace said two-fifths. This two-fifths will be dependent on the road.

Co's through which road will run.	Assessed value of taxable property.	Government lands, acres.	State lands—acres.	White population.	Slaves.	Bales of cotton.	Corn—bushels.	Value of personal property.	Sales of merchandize—amount.	State tax.
Tippah....	$1,341,479	19,000	23,187	15,814	4,924	12,032	818,390	$2,275,594	$153,164	$4,104
Pontotoc...	1,518,261	.....	8,021	12,144	4,966	9,091	657,362	3,530,874	205,025	3,143
Chickasaw.	1,588,846	32,573	13,380	9,884	6,481	8,308	598,942	3,713,025	206,406	5,054
Chocktaw..	645,801	195,946	9,360	8,434	2,978	4,466	401,108	1,446,082	70,590	2,310
De Soto....	2,654,476	*40,000	8,056	9,499	9,593	20,125	753,741	4,020,000	100,530	7,113
Panola.....	1,598,608	38,144	21,986	5,624	7,331	8,910	426,647	3,940,300	115,479	4,809
Tallahatchie	376,616	272,815	47,233	2,098	2,547	4,977	174,730	2,000,000	30,188	1,407
Sunflower..	450,659	250,000	16,113	348	754	1,964	36,000	400,000	20,000	864
Washington	2,755,750	194,000	19,157	553	7,945	26,218	427,300	3,545,230	44,544	6,094
	12,800,496	1,043,059	166,496	64,389	47,509	96,074	4,324,920	24,872,005	945,926	34,808

* Estimated—no census returns having been made as to this county.

Railway Improvements.--Railway Comforts.

A short time since, an article appeared in the *N. Y. Tribune*, alluding to the *improvements* in railways, and calling for more *comforts*.

Rapid as has been the improvements in railways, no one can safely say that the standard of perfection has already been attained. Indeed, the wayfaring thousands who daily throng our numerous railways, loudly call, if not for greater speed, at least for greater comfort. Heretofore, the friends of our rapid growing railway system have been greatly engrossed in providing improvements in speed, capacity, etc. The passenger comforts have hardly obtained equal attention. In this day of luxury, however, when our railways are fast becoming *the great carriers*, and competition between lines will increase, the comfort of passengers will become matter of more attention.

The *Tribune* has suggested an excellent improvement in the way of sleeping in cars. The plan proposed, however, is a mere initiative. Experience will dictate and demand, and competition will require, something better and more luxurious than a *shelf* in a railway car, to lay our bodies on for sleep. To what extravagance railway companies will yet go in the way of elegant beds, we will not now venture a prophesy. In our free land, such things will well regulate themselves.

But our improvements in railway comforts must not stop with beds and ventilators. Not a traveller who has been compelled to swallow even a "hasty plate of soup," at the risk of being left by the train, but has longed for a good meal at his leisure. Eating *stations* must be dispensed with, and kitchens and dining rooms become *locomotive*. Passenger trains must be provided with a restaurant car, in which all the passengers can at any time eat what they like at their leisure. Gentlemen will fully appreciate an *attache* of this kind, while to ladies, especially when travelling with children, it is almost indispensable.

By the use of such conveniences, not only will the comfort of passengers on railways be greatly increased, but a saving also of time and money will accrue to both the traveller and railroad company.

The foregoing suggestions are offered for the consideration of practical railway men, that they may improve and use them for the greater convenience and comfort of the travelling world.

A. L. F.

Extension of the Orange and Alexandria Road to Lynchburg.

A bill which has passed the house of delegates for this object is made the order of the day in the Senate Wednesday next. We have ever sought to advocate in this journal every improvement which we deemed essential to the prosperity of Virginia, and it is with reluctance that we oppose any scheme which is deemed important to its interests by any section of the commonwealth. We cannot however suppress the expression of our regret that the extension of the Orange and Alexandria railroad to Lynchburg should be urged at this time. It is not a road of general state interest, and cannot even by its warmest advocates be classed with those leading lines upon the completion of which the friends of internal improvements have agreed as essential to the prosperity of the commonwealth, and to its relief from the burthen of taxation under which it labors. It will in fact tap at a vital point some of the most important of those works, in which the state has already an immense interest. The trade of the James River canal, the South Side and Danville railroads, cannot but be injuriously affected by the extension of the Orange and Alexandria railroad to Lynchburg. The state has an interest in the South Side railroad of $803,500 and in the Danville railroad, of $1,200,000. Richmond has subscribed $250,000 to the latter road. Is it not a most suicidal policy to establish a road which may render valueless all the interests which the state and citizens have embarked in these roads and convey to Baltimore and northern cities, the enormous trade which the people of Virginia have been heavily taxed to obtain for their own benefit?

If the success of this scheme does not produce this result, it will be because of another disaster which we fear will follow, and that is, such irreconcilable division and discord among the friends of internal improvements, that all the great leading lines of improvements will be defeated this winter, and their farther prosecution deferred for an indefinite period. It cannot be expected that those who honestly believe that farther appropriations to the leading lines are to enure to the benefit of Baltimore and other northern cities, will agree to make such appropriations. It is asking a little too much of Virginia, in the present state of her finances to tax still more heavily, an already heavily taxed people for the benefit of other states. And why press a measure which is to produce such results? Is there any such urgent sectional necessity, is there any overruling state necessity for the extension of the Orange and Alexandria railroad to Lynchburg, which should place it in the forefront of all the great leading lines of the state, at the imminent risk, if not the certainty, of stopping them all in mid progress, and leaving the state half a century behind the age in her public works? We earnestly hope that the region of country which urges the extension of the Orange and Alexandria railroad, and which is now in the neighborhood of several important improvements, will at least defer to a more appropriate season pressing a project which, while it may increase the avenues of a small sec

tion to market, will have the effect of depriving the largest portion of the state for years to come of all facilities for travel and trade.

It is a poor way to remedy a mistake by persisting in it. A system that needs legislative interposition to give it business, had better be abandoned. As such support is sure to be withdrawn, the longer it is extended, and the greater the amount invested, the more disastrous will be the consequences. If the Richmond and Danville and the South Side roads, require support, let this be directly given, instead of by the more indirect and oppressive way of taxing commerce.

But no such disastrous consequences as are anticipated by the Republican would result from the construction of the above road. It might take some travel that otherwise would pass over to them, but it would tend to develop other kinds of business, that would more than compensate for the loss. It is often a great mistake to suppose that because a new project may divide with an older one a part of the business of the latter, that the influence of the former is injurious. The direct reverse may be the fact. Every new road adds so much to the aggregate dusiness of a community, that the traffic of all increases with the number built. Such we are confident would be the result of the construction of the above project, even so far as the Danville and South Side roads are concerned.

Railroads *will* be built upon the rontes indicated by the wants of commerce and travel, and any attempts to thwart or defeat such projects must not only in the end be useless, but while persisted in can only result in harm.

So long as a state, or community, is employed in attempting to *defeat* works supposed to be prejudicial to its interests, it will make no forward move. The defeat of a road is taken for success. So long as such attempts are persisted in no progress will be made. The Pennsylvanians might have built the Sunbury and Erie road, while they have been attempting to prevent New York from running her lines through their state. The result is that the latter have built their roads by a sort of *hocus pocus* charter, which has more *equitable* than *legal* strength. The time spent in attempting to defeat this work is so much lost in the race. Before the Sunbury and Erie road shall be completed, commerce will have become accustome to other channels, from which it will be hard to divert it.

Canal from Wilmington to the Chesapeake Bay.

It is stated that application will be made to the next legislature of Delaware for the charter of a company to construct a canal uniting Wilmington with the Chesapeake Bay. The canal will commence at some point on the Christiana, between Wilmington and Newport, and extend to some point on the Chesapeake or its branches, possibly Elk river. It is intended to be deep and broad enough to accommodate a large class of sailing vessels. The stock, it is stated, has been already subscribed by capitalists of Baltimore, New York and Philadelphia.

New York.

Attica and Olean Railroad.—The Wyoming Co. Mirror states that the railroad from the village of Attica to Olean is to be constructed immediately, under the direction of a company of Boston capitalsts, who have taken the whole work at one million and a half, buying $800,000 of the stock, and requiring only $100,000 to be subscribed on the line of the road, issuing the bonds of the company for $500,000.

Bellefontaine and Indiana Railroad.

H. V. Poor, Esq.,

Dear Sir: I have the pleasure to inform you that another link in the Bellefontaine and Indiana railroad was closed to-day; being that portion of the line between Sidney and Bellefontaine, a distance of 22¼ miles. The locomotive Ohio, manufactured at the Taunton works—by the way, one of the most perfect machines I have ever examined, paid a visit to Sidney, and returned here this evening.

In a few days, the track-layers will commence laying track eastward from Bellefontaine, and another party will commence laying eastward from Marion.

Our company, like many others in the west, have been retarded in their operations by delay in the arrival of iron from Europe, and we cannot open the entire line quite as soon as we anticipated a year ago, but we hope to present a continuous line sometime this winter.

Our Indiana friends must earn *that dinner*, as they will undoubtedly finish to our State line, this month. Well, we must submit gracefully, and comfort ourselves with the reflection, that they began their work a year before us, and had only 83, instead of 118 miles to construct.

I understand that in a few weeks another portion of the Dayton and Michigan road, from Troy to Sidney, is to be put under contract, and pushed forward with the utmost vigor. In the meanwhile, until its completion, the trade of the *upper* part of the Miami Valley, will find its most convenient outlet eastward over the Bellefontaine and Indiana road. When the Dayton and Michigan road is finished to Sidney, a still larger business will seek the same route. There is a single mill, between this place and Sidney, now prepared to ship 100 barrels of flour per day over this road. But when the grand junction shall be effected at the State line, and this direct route opened with a continuous railroad from Terre Haute to New York, Boston, Philadelphia and Baltimore, you will hear of some business on a western railroad; and see some of it too. In 1854, we shall have the chain finished to St. Louis, by the completion of the line across Illinois. Legislative difficulties have delayed that portion of the great chain, but I think that nothing can now occur to prevent its steady and rapid prosecution. Yours, respectfully,

Marion, Dec. 15, 1852. R.

Illinois.

The Kane Co. Democrat says that ten miles of the Chicago and Aurora railroad between Aurora and Big Rock, is graded and now ready for the ties; and what is highly commendable in the company, they fence the road as fast as they build it. They now have about three hundred men at work, and the materials for the bridge across Fox river are all out and ready to be put together.

Steubenville and Indiana Railroad.

The laying of iron on this important link of Central line of railway has already commenced near Steubenville. It is scarce a year since the first pick was struck on this line. The fact that the laying of iron has already commenced, and that all of the heavy work is in an advanced state of progress, show that the energetic management of the company is equal to the great importance of this line of railroad. The day is not far distant when a continuous line of iron rails will pass through the central portion of Pennsylvania, Ohio, Indiana, Illinois, and Missouri. The Steubenville and Indiana railroad is an importaut link of this great chain.

New York.

Lake Ontario, Auburn and New York Railroad.—The line of this road extends from Little Sodus Bay on Lake Ontario, by way of Auburn, to the Cayuga and Susquehanna road, at a point abont 6 miles south of Ithica. Its whole length is about 73 miles, and its cost will be $1,200,000. The whole line is under contract and the work of construction is being rapidly urged forward. The iron for the road is to be manufactured by Scranton & Platt, at their extensive works in the Lackawanna valley.

The objects proposed to be effected by the construction of the above road, are; the accommodation of the local traffic of a rich and fertile portion of Central New York, the opening of an outlet, northwardly, for the Lackawanna coal fields, and to constitute a part of a *new* line of road from lake Ontario to New York, by way of Auburn, Oswego, Scranton and the Delaware Water Gap.

The construction of the proposed road from Scranton to the Water Gap, is regarded as of great importance by the roads in Western New York, running from north to south. As all these expect to engage in a large coal traffic, a road from the coal fields to New York would, it is believed, secure to them a large amount of return freight for their coal trains. We understand that measures are in progress for the immediate commencement of this last named project.

Heavy Forgings.

THE undersigned are now prepared to manufacture all kinds of Heavy Forgings, such as,
STEAMBOAT & SUGAR-MILL STRAPS,
BEAM STRAPS,
CRANK & CAR AXLES.
LOCOMOTIVE FRAMES,
WROUGHT IRON DRIVING WHEELS, &c., &c., &c., at the lowest market prices.
READING STEAM FORGE CO.,
N. & A. MIDDLETON. Sole Agents,
Ridge Road & Callowhill-sts.,
Philadelphia.

N. B. Particular attention paid to the Manufacture of LOCOMOTaVE TIRE, which is warranted equal to any manufactured in the country.

Edge Tools.

THE Underhill Edge Tool Company manufacture from the best of Steel, and Warrant every variety of Edge Tools for the New England, Southern and Western trade, including Axes, Adzes, Picks and Chisels; all of which are constantly kept on hand at their Warehouse, 53 Kilby street, Boston.
WM. S. SAMPSON, Agent.
December 18, 1852.

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

Railroad Iron.

5000 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
December 4, 1852. 4t

Railroad Iron.

5000 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
December 4, 1852. 4t

Change of Hours.

—o—

MONTREAL & NEW YoRK AND Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜

FALL AND WINTER ARRANGEMENT.

ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P.M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3·50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M.

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad. and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

Notice to Contractors.

OHIO AND MISSISSIPPI RAILROAD,

FROM CINCINNATI TO ST. LOUIS.

SEALED PROPOSALS will be received at the Office of the Company, in the City of Cincinnatt, until Thursday, the *Sixth day of January next*, for the *Grading, Masonry and Bridging* of 115 miles of the OHIO AND MISSISSIPPI RAILROAD, extending from the intersection with the Jeffersonville and Columbus Railroad, in Jackson county, to Vincennes, in Knox Co., Indiana, comprising all the work on the Road not at present under Contract.

The above contains a large amount of heavy work, including two Tunnels and five large Bridges.

Profiles, Plans and Specifications will be exhibited on and after the 20th inst., at the office in Cincinnati, for the entire line, and in Vernon and Vincennes for the respective divisions, and all necessary information will be given by Mr. D. Hardenbergh and Mr. N. A. Gurney, Division Engineers on the line.

The right is reserved of accepting such proposals as shall be deemed best calculated to secure the prompt and faithful execution of the work. Contractors will be required to commence work immediately.

Proposals will also be received at the same time aud place, for the furnishing and delivery of the Cross Ties required between Aurora and Vincennes, and laying Track from Cincinnati to Vincennes.

O. M. MITCHEL, *Consulting Eng. & Com'r.*
DANIEL MORTON, *Chief Engineer.*
H. C. SEYMOUR & COMPANY.
Cincinnati, Dec. 10th., 1852.

To Railroad Contractors.

SEALED PROPOSALS, addressed to either of the undersigned, will be received at Hillsborough, Highland county, Ohio, until the 1st day of February next, at noon.

For the Graduation and Masonry of the Middle Division of the Cincinnati, Hillsborough and Parkersbugh Railway, extending from Hillsborough, Highland county, to a point near Jackson, Jackson county, Ohio, about 56 miles.

The line will be ready for examination early in January, and Profiles and Specifications of the work will be exhibited at the Engineer's office, in Hillsborough, for one week prior to the 1st day of February.

This Railway forms the recognized continuation across Ohio, of the Baltimore and Ohio, and North Western Virginia Railways, and being located as a link, in the great through line between Baltimore and St. Louis, will be found in every way worthy of the attention of able and enterprising contractors.

The remainder of the line to the Ohio river will be ready for contract about the 1st day of May next. JAMES M. TRIMBLE, President.

ELWOOD MORRIS, Chief Engineer.

RAILROAD CAR AND COACH TRIMMINGS.

Doremus & Nixon,

No. 21 PARK PLACE,

AND

18 MURRAY STREET,

IMPORTERS

OF PLAIN AND FIGURED MOHAIR PLUSH;

Printed and Uncut do. do. entirely new designs;

ALSO GERMAN OIL CLOTHS FOR HEAD LININGS,

Enameled with Gold and Silver and Velvet Printed.

☞ These Headings are the most beautiful ever shown, having been made expressly for **American Cars.** D. & N. are sole Agents.

ALSO, PATENT PARIS COTTON FELT.

☞ This is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin.

It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair.

ALSO, BROCATELLES and MOQUETTS.

ALSO, CURLED HAIR.

N. B.—We have the Plush and Linings *in bond for exportation.*

DOREMUS & NIXON.

November, 1852.

Superior Cast Iron Gas and Water Pipes.

THE Subscriber is prepared to contract for the supply of CAST IRON PIPES required by Gass or Water Companies, Corporations, etc., delivered in any Seaport in the Union, on reasonable terms. These Pipes are cast on the most improved principle by the best Founders in Scotland, from a superior quality of Pig Iron remelted, are guaranteed to resist a pressure of 300 lbs. to the square inch, or greater if necessary, and to be soft enough to drill easily and freely. Full information regarding price, and references to parties in the United States now using the Pipes, can be obtained on application to the Agent in New York.

WILLIAM ROY, Junr.,
21 Renfield st., Glasgow, Scotland.

J. M. EADIE, Agent,
26 Front st., New York. 1y50

Locomotive Engines.

DANFORTH, COOK & CO., Patterson, N. J., having erected an extensive shop, with the most approved machinery and tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various tools suitable for furnishing repair shops.

The business of machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1y49

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY, CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON,
NATHANIEL CONKLING,
D. K. MINOR, } of New York.
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN,
JAMES CLOWDSLEY } of California.
JAMES ALLEN,

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity. and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W, COPELAND,
Consulting Engineer, 64 Broadway.
Aug. 28, 1852 6m*

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent- WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

REFERENCES:
Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 39

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
" Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Sheet Iron, Cut Nails, Spikes and Brads, Nail and Spike Rods, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.



WHITE'S SUSPENSION BRIDGE, OF WOOD OR IRON.

A Model may be seen at the office of CHARLES T. GILBERT, *80 Broad St. N. Y.*

Length of span, anything short of 1,500 feet with perfect safety for every kind of travel. The above cut represents a Wooden Bridge with a roof. The arrangement for the Iron Bridge is such as to avoid all the bad effects of changes of Temperature. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, Proprietors, *Cambridgeport, Mass.*
Office next door to the Athenæum.

The Cambria Iron Company,

ORGANIZED under the laws of Pennsylvania, with a capital of $1,000,000, propose embarking in the manufacture of Railroad Iron, at *Johnstown, Pennsylvania.* The location they have secured offers advantages superior; it is confidently believed, to any other in this country. Iron Ores, semi-bituminous Coal, Limestone, and nearly every article required for the manufacture of Iron, exist, in inexhaustible quantities, on the spot; and these deposits are now worked, and the minerals delivered, cheaper than at any other known point now occupied for the manufacture of Iron. The Pennsylvania Canal and Central Railroad pass through the property, and cross each other at the spot where the mineral veins are most thoroughly opened out; and which location, for its other advantages for facility of manufacturing, and vicinity to a populous borough, has been selected for the establishment of Railroad Iron Works, and for the erection of other Blast Furnaces, in addition to those now in operation.

The attention of capitalists disposed to embark in an enterprise which offers a remunerating profit, even on the low prices of iron current before the rise of the last six months, and which promises to be very lucrative while anything like present rates prevail, and also of Railroad Companies desirous of making arrangements for Iron Rails to be delivered in 1853, is called to this enterprise.

Out of the capital named above, the sum of $360,000 has been devoted to the purchase of about 30,000 acres of land, upon which there are six blast furnaces, which cost, including the personal property accompany them, $350,000. Three of these furnaces are now in successful operation, and by next spring, with an outlay of about $6,000, the other three can go into blast; and at the present price of pig iron, these six charcoal furnaces would realise a net profit of six per cent on $1,000,000 capital.

The company contemplate erecting four more blast furnaces, for smelting with coke the iron ores at Johnstown, and also works for manufacturing railroad iron. To do this, they will require subscriptions in all to the amount of $600,000, and to carry on most profitably the manufacture and disposal of rails, the whole chartered capital should be raised. Subscription lists, providing that no subscription shall be binding unless *bona fide* subscribers for the amount of $600,000 are obtained by the 1st January next, and pamphlets descriptive of the advantages of the locality and estimates of costs, can be had of the undersigned.

D. M. WILSON, Newark,
EDWARD F. GRANT, New York,
SAMUEL H. JONES, Philadelphia,
JOHN HARTSHORN, Boston,
T. F. SECOR, New York,
G. S. KING, Johnstown,
P. SHOENBUGER, Pittsburg,
RHEY, MATHEWS & CO., Pittsburg,
or at the office of the Provisional Committee, at
SIMEON DRAPER'S, 46 Pine st.

The subscriber is prepared to enter into contracts to deliver RAILROAD IRON to Companies requiring it in 1853. SIMEON DRAPER.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

SIMEON DRAPER, No. 46 Pine-st., offers for sale, a variety of RAILROAD BONDS and STOCKS; also CITY, TOWN and COUNTY BONDS, among which are—

1st Mortgage Convertible—
7 per ct. bonds of Canandaigua and Corning R.R., payable in.....New York, 1860
Do. Cleveland, Columbus and Cin. do....1859
Do. Buffalo, Corning and New York do....1867
Do. Western Vermont Railroad.....do. 1861-71
8 do. Michigan Central.....Boston, 1860
Do. Peoria and Oquawka,.....New York, 1862
1st Mortgage—
7 per ct. bonds, Corning & Blossburg do.....1871
Do. Mansfield and Sandusky.....do.....1860
10 per ct. bonds do..... do...1855-7
Do. New Albany and Salem.....do..1858-62
7 per ct. Vermont Valley.....do.....1860
6 do. East Tennessee and Georgia...do.....1880
7 do. Seaboard and Roanoke.....do.....1860
Do. Troy and Bennington.....Troy, N. Y. 1861
Do. New Jersey Central.....New York, 1860-70
Do. Dauphin and Susq. Coal Co. do.....1871
Do. Brunswick Canal Co.....do.....1857
Also, second mortgage bonds of many of the above companies, and—
7 per ct. bonds Saratoga and Wash. N. York, 1862
Do. Mad River Railroad.....do....1866
Do. Troy and Boston.....do....1864
Do. Muscogee Railroad.....Savannah, 1862
Do. Huron and Oxford.....N. York, 1862
Also, Georgia 7 per ct. State stocks, interest payable semi-annually.....do....1872
City of Savannah 7 per cent. bonds, interest payable semi-annually.....do..1870-76
7 per ct. bonds of the Town of Huron, Erie county, Ohio.....do....1861
Do. Township of Waynsfield.....do....1862
10 per ct. City of Keokuk, Iowa, Keokuk, 1863
6 per cent, City of Memphis..Philadelphia, 1880
10 per cent. City of San Francisco.....1870
7 per cent. Atlantic Steamship Co..N. York, 1855
12 per cent. Improvement Scrip of the State of Wisconsin for improvement of Fox River.....do....1862
6 per cent. State of Illinois Liq. Bonds, issued 1849, interest paid semi-annually by J. Wardsworth.....N. Y. city, due 1865
2½ per cent. State of Indiana Bonds.....1866

Troy and Rutland railroad Stock, with guarantee of 4 per cent. dividend and one half surplus profits of this and Rutland and Wash. R. R.

Rutland and Whitehall Stock, with guarantee of 4 per cent. dividend by Saratoga and Washington Railroad.

Also, Stock in the Cumberland Coal and Iron Co.
Stock of the Cambria Iron Company.
Stock in the Western Vermont R. R. Co.
Stock in the Junction R. R. Co. of Ohio.
Stock in the Mad River R. R. Co.
Stock in the Southern Bank of Kentucky.
Stock in the Mechanic's Bank of N. Y.
Stock in the East River Insurance Co.

The Cold Spring Iron Works,

INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—
John Kinsman, Esq., Superintendent Eastern Railroad, Salem. Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder. " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

Anthracite and Charcoal Pig Iron.

800 Tons No. 1 Glendon Anthracite Pig Iron.
1000 " No. 2 " " "
1000 " Forge " " "
200 " No. 1 Stockbridge Charcoal "
100 " No. 2 " " "
500 " Forge Katahdin " "

For sale by
GEORGE W. A. WILLIAMS,
5 Liberty Square, Boston.

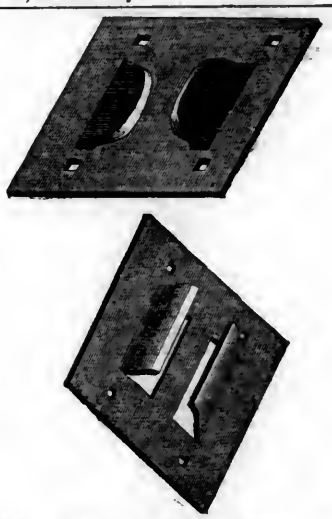
December 11, 1852. 3m

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*



Patent Wrought Iron Railroad Chair.

THE undersigned are now prepared to manufacture their Patent Wrought Iron Railroad Chair, at the rate of fifteen tons per day. They are made exclusively from best Trenton Iron, which received the prize medal for strength at the World's Fair at London.

The patent is for the CHAIR itself—which is formed by raising the lip out of the plate sufficiently high to receive the rail. It is obvious that while the strain upon the lip is so slight as to remove all danger of its breaking, it becomes less the more tightly the lip is made to clasp the rail. The cheapness and durability of the chairs, and the facility with which the track can be adjusted, commend them to public favor.

SIZES AND PRICES.

A Chair 8 by 7½ inches 3-8 inch thick, costs 25 cents.
" " " 7-16 " " 27 "
" " " 1-2 " " 29 "
" " " 5-8 " " 33 "

Other sizes are made to order at equivalent rates. Sample Chairs will be forwarded, free of charge, on application to COOPER & HEWITT,
17 Burling Slip, New York.

December 1, 1852.

LOCOMOTIVE, TENDER, & RAILROAD CAR SPRING Manufactory.

THE undersigned, manufacturers of Locomotive, Tender and Railroad Car Springs, beg leave to inform Railroad Companies, Locomotive and Car Builders, that we have enlarged our Works, and are prepared to execute,

ON THE MOST REASONABLE TERMS,

any orders for LOCOMOTIVE, TENDER AND CAR SPRINGS, they may favor us with, OF THE BEST OF STEEL, all of which we have manufactured to order from SWEDE STEEL IRON.

McDANEL & HORNER,
Wilmington, Delaware.

December 1, 1852.

We respectfully call attention to testimonials in favor of our Springs from the following well-known gentlemen connected with Railroads:

Locomotive Works, Philadelphia, 1st Sept., 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

Gentlemen: In reply to your letter of yesterday, with regard to the character of the springs which you have made for the locomotives and tenders constructed by us, we have much pleasure in stating that they have given entire satisfaction, and we have found them, upon trial with those made by others, to be superior in the essential qualities of elasticity and durability, combined with lightness, the result of employing the best material only, and having it properly manufactured.

We are using them exclusively under our locomotives and tenders, and can with confidence recommend them as being superior to any we have yet met with.

Yours respectfully,
NORRIS, BROTHERS.

This is to certify that we have for a number of years been using steel springs manufactured by McDanel & Horner, under our locomotives, tenders, passenger and freight cars on the Philadelphia, Wilmington and Baltimore railroad, I take pleasure in saying that they have always given entire satisfaction. Their durability and elasticity are superior to any others that we have used, and can confidently recommend their make of springs to all railroad companies, and others who may want a good article. I. R. TRIMBLE,
Gen'l Sup't P. W. and B. R. R.

Wilmington, Sept. 20, 1852.

Superintendent's Office Central Railroad, Savannah, Ga., Oct. 15, 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

I have much pleasure in certifying to the superiority of your steel springs.

This company have for upwards of two years had in constant use your locomotive, tender and railroad car springs, (the latter in large numbers), and we have found them uniformly well finished, properly tempered and durable. Our orders have always been promptly filled, and your terms have been moderate.

Very truly yours,
MACPHERSON B. MILLER,
General Superintendent.

A considerable number of engine and car springs were furnished the Philadelphia and Reading railroad several years since, by Mr. John McDanel, before the company made such articles in their own workshops. These springs proved invariably of excellent quality, elastic and durable, and equal to the best in use during the above period G. A. NICOLLS,
Engineer, etc., Philad. and Reading R. R.

Reading, Pa., Sept. 9, 1852.

Macon and Western Railroad, Macon, Oct. 11, 1852.

Messrs. McDanel & Horner,

Gents: This company have purchased and used car and engine springs of your manufacture. They have been tested under the same cars with springs from other approved makers, and, so far as appears to us, have proved themselves fully equal to any we have used.

Yours very respectfully,
EMERSON FOOTE, Supt.

Macon and Western Railroad,
Macon, Oct. 14, 1852.

Messrs. McDanel & Horner,

Dear Sirs: This company have used the springs made by your firm for several years under engine, baggage and freight cars, and have found them superior to any I have seen.

Yours respectfully,
THOS. DOUGHERTY,
Master Machinist M. and W. R. R.

Richmond, Va., Nov. 1, 1852.

Messrs. McDanel & Horner,

It affords me much pleasure to say, after some seven or eight years use of your steel car springs, I find them equal to any we have used, and have given entire satisfaction. I am very respectfully yours,
THOS. SHARP,
Sup't R. F. and P. R. R.

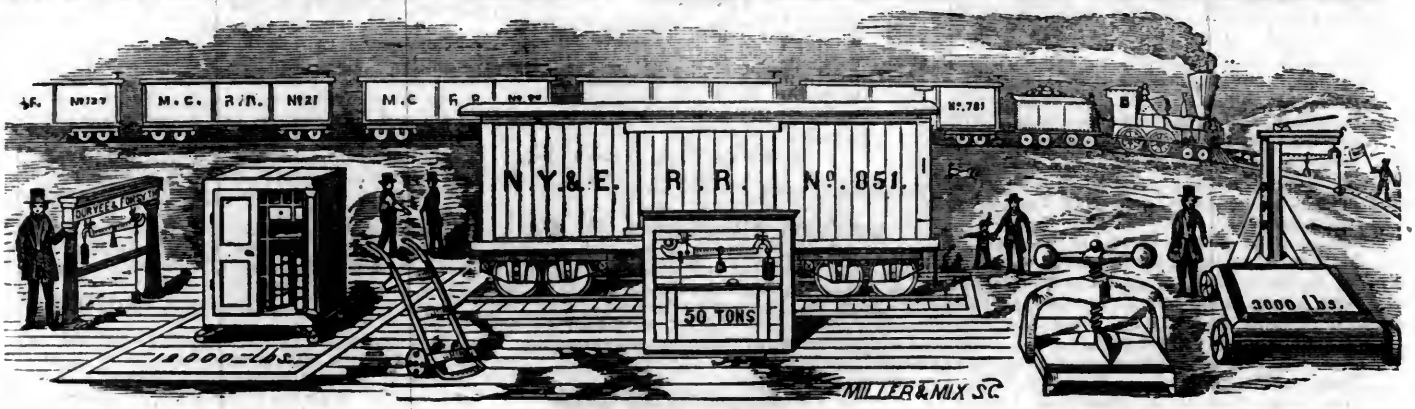
Petersburg, Va., Sept. 18, 1852.

Messrs. McDanel and Horner,

Dear Sirs: I have been for several years past using steel springs of your manufacture under a large portion of the cars that I have built for the different railroads in this vicinity, and I consider them as good in every respect as any steel springs I have ever used.

Very respectfully yours, etc.,
URIAH WILLS,
per Jas. J. Lills.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates;* Warehouse Trucks: Manifest Presses and Books; also, COVERT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted,* to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practical mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as *'Durable and Accurate'* as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Millier & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.	Michigan Southern,
	American Express Co.,

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons: capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We hav also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS or the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for ther security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st,

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII., No. 52] SATURDAY, DECEMBER 25, 1852 [WHOLE No. 871, VOL. XXV.

PUBLISHED BY J. H. SCHULTZ & Co., 136 NASSAU ST.

PRINCIPAL CONTENTS.

Shall the Duty be removed from Railroad Iron? 817
Virginia Central Railroad.....818
Railroads in Pennsylvania.....820
Railroad from Wheeling to Cleveland.....820
Journal of Railroad Law.....820
Lake Ontario, Auburn and New York Road...821
Commercial Convention at Baltimore.....822
Railroads in Western New York.....824
Stock and Money Market.....825
The Railroad System beyond the Mississippi..826
Philadelphia Trade with Canada.....826
Railroads in Arkansas.....857
Geneva and Ithaca Railroad.....827
Cincinnati, Lebanon and Xenia Railroad.....827
Franklin and Warren Railroad.....827
Texas Western Railroad.....828
Vicksburgh, Shreveport and Texas Railroad..828

American Railroad Journal.

Saturday, December 25, 1852.

Shall the Duty be Removed from Railroad Iron?

The price of Railroad Iron has now reached $65 per ton, with assurances, from the best authority, that it will go up to $75 or $80, before a re-action takes place. Under such prices, it becomes a grave question whether something cannot be done to reduce the present cost of this article to our railroads. Unless this can be effected, only one alternative is left to many of our companies, which is, to abandon the further prosecution of their works, to wait for a more favorable state of the iron market.

There is only one source from which immediate relief can be obtained; and this is, the removal of the duty, which now amounts to some $15 per ton.

Assuming that the removal of the present duty would reduce the cost of rails in an equal degree, let us briefly examine the arguments in favor of, and the objections to, such a step.

The principal objection will come from the domestic iron manufacturer, as it can be easily shown that the government will be the gainer, as far as its revenues are concerned.

We take the ground, also, that it will be for the interest of the iron manufacturers to allow rails to come in duty free, as the most obvious and effectual method of securing an increased consumption of every other variety of manufacture.

We presume it will be admitted that the construction of a railroad creates a consumption which otherwise would not exist, for three or four times the amount that goes into rails. If it can be shown, therefore, that the effect of the removal of the duty would be to stimulate importation, it would also in vastly greater ratio, increase the demand for ordinary bar; our manufacturers, therefore, cannot do better than to surrender to the foreign maker one article, the use of which necessarily creates a domestic demand for three or four times as much of other kinds, the manufacture of which, at present prices, is fully protected.

We must continue to import largely. Our domestic establishments cannot, for years to come, supply the demand. This is certain. Such being the fact, is it the dictate of the plainest common sense to surrender the most difficult branch of the manufacture, for the purpose of fostering an interest, the wants of which will far exceed our capacity to supply?

As already stated, all our works in operation, and all we can construct for years, will not supply the demand. The present rise was not foreseen, and has not been provided for by a corresponding increase of new works. The causes of the advance, and those which must keep the price to a high figure for some years to come, are not well understood.

We have now some 14,000 miles of railroad in operation. A very considerable portion of this whole extent has been opened within two or three years. In 1849 and 1850, at least 10,000 miles of railroad were commenced nearly simultaneously. The construction of these engrossed both the capital and industry of our people. While these works were in progress, comparatively little attention was paid to the development of our resources, and the construction of works that naturally follow in the wake of a railroad. So long as these works were in progress, their effect was to exhaust, without adding to the means of our people. As soon as they were opened, however, by the facilities they offered to cheap transportation, they at once rendered these means available. The farmer having 1,000 bushels of corn to sell, was enabled to turn it at once to account, at high prices, what before perhaps had no commercial value. His ability to purchase and consume is exactly measured by the extent of his ability to sell. This fact explains the reason of the extraordinary impulse given to our foreign commerce, and to every branch of domestic industry within the past two years. Our railroads have just commenced their work. A few sections of country only are opened to a market. What we now witness is but a foretaste of what is to come. Only a small portion of our great producing regions have yet completed their works. We can only compare the present with the future, by comparing the works already in operation with those that will come into use in a very few years more.

Railroads, therefore, are the direct source of our present prosperity. Without them, iron would be still more of a drug, than it was even a few years since. If our manufacturers have been lifted out of the slough of despondency, and threateneed ruin, their salvation is directly attributable to these works.

While our roads were in *progress*, the consumption of iron was comparatively small. Our warehouses were overloaded with it, and prices remained for years at what was claimed to be ruinously low figures. So soon, however, as our people, by the completion of our roads, were relieved from this duty, and allowed to turn their attention to other matters—to the opening of coal and iron mines, to increased agricultural operations, to the erection of manufacturing establishments, to the building of the cities and villages, which spring up like magic under the stimulating influence of railroads, and to the supplying of a thousand wants that had been postponed for more pressing calls—the stocks of iron on hand were almost instantly cleared off, and a demand created that has carried prices up nearly one hundred per cent. This great demand was not anticipated, for the reason that in many respects, the past has nothing like the present, which differs from what has been, as much in *kind* as *degree*. Past lights and precedents are no longer sufficient guides. This altered condition of things must be met by an appropriate change in our views and policy.

If we already manufactured a large quantity of railroad iron, we admit that a step which threatened to break down a large interest, should be preceded by the utmost deliberation. But such is not the case. We have four or five establishments only, engaged in the making of rails. These would be equally well and profitably employed upon mer-

chant bar. No injurious consequences would result to any existing interest by the removal of the duty on rails; on the contrary, we contend, for the reasons already stated, that all would be benefitted.

The great argument against such a step will be thus stated: "The present is a good opportunity to commence the manufacture of rails. By the time that prices are reduced to the recent low figures, our establishments, with their enlarged means and experience, will be able to compete, under reasonable protection, with the foreign maker, which has not been the case at any former period." To this we answer, it is for the interest of all our makers that our railroads should be constructed at the lowest possible cost, for the purpose of placing them within the means of every portion of the country. Our great want in the United States are *roads*. Our *producing* regions are removed hundreds and thousands of miles from the points of *consumption*. Production and means of transportation go hand in hand. We cannot use our products, nor make available our resources, until we can provide outlets to markets. The construction of railroads, therefore, should be *untaxed*; a proposition which we contend it is for the interest of every branch of industry in the United States to assert and maintain.

With the continuance of the present abundance of money, and with a fair price of railroad bar, we shall use at least 350,000 tons within the next 12 months. The duty on this amount at present rates would amount to nearly $5,000,000; or $4,200,000, allowing that we manufacture 50,000 tons in this country. This immense sum will go into an already overflowing treasury; and as it will remain there in *specie*, this amount withdrawn from the channels of business may seriously interfere with the ease in the money market, rendering it more difficult for our companies to supply their wants upon fair terms.

But as large as is the revenue collected upon railroad bar, we contend that it is equally for the interest of the National Treasury, that the duty should be removed. The present enormous receipts, beyond all precedent and expectation, are directly attributable to the influence of our railroads, in increasing the ability of our people to purchase by increasing their ability to sell. So obvious and well-admitted is this fact, that were it the purpose of government to increase its revenues, it could not adopt any course that would so effectually secure this object, as to encourage railroads.

We believe the view we have taken of this subject to be correct, and one that will secure respect and attention from Congress, if properly presented. An effort will be made to remove the duty the present session. The most effectual way to secure this result, is for each company to act directly upon its immediate Representative in Congress. For at least three-fourths of our Members of Congress, no step would be so popular with their constituents as this; and we are satisfied that prompt and efficient action, in the manner we have pointed out, will secure the desired result.

One argument will be urged against the removal of the duty, which may have some apparent, though no real, weight; and this is, the cry that the removal of the duty will only inure to the benefit of "*rich corporations*," and not of the poor, laboring, man. This is a mere fallacy, for the *laboring* man bears the whole burden of constructing our railroads. Where one mile is undertaken as an investment for capital, fifty at least are for the incidental advantages that are expected to result from them. The farmers of an agricultural district want a railroad; but they can secure one only as they put enough of their own means into the work, as will render future advances to be made by capitalists, perfectly secure. If there be any loss, the former must sustain it. The *capitalist* takes good care that enough be paid in, to make him entirely safe. The removal of the duty on rails, therefore, would inure entirely to the benefit of our less wealthy and laboring classes, and not to capitalists. Those most entitled to aid would reap the proposed advantage.

Virginia Central Railroad.

SEVENTEENTH ANNUAL REPORT.

The business of the road has been steadily on the advance, since the last annual meeting—the addition to the receipts being more than could be attributed to the extension of the road to Woodville as only an additional distance of between 7 and 8 miles were opened on 15th March.

The receipts for the present year ending on the 30th September, are $176,485 69, those of the previous year were $143,810 64, being an increase of $32,684 05. For detailed information in relation to the receipts and disbursements, reference is made to the very full tabular statements of the treasurer, which will be found in the appendix.

The whole of the work under charge of this Co., on the east side of the Blue Ridge is now completed, except the bridge over Mechum's river, which is expected to be finished in a few weeks, when the cars will run to the point of connection with the Blue Ridge railroad, which is under the direction of the state.

The progress of the state work is such as to justify the expectation, that the greater portion east of the tunnel at Rockfish gap, may be opened during the next year, but the very great difficulties of construction at some points may cause a further delay. The grading of the road between Waynesboro' and Staunton, is now nearly completed, and steps are about to be taken to bring that into operation early next summer, when it is hoped there will be but a short portage intervening across the mountain, to form a connection with the road on the east side.

Extension West of Staunton.

In the last report which was made to the stockholders, they were informed that the location of the road between Staunton and Covington was then being made with great care to ascertain the best route. The corps of engineers engaged in that service completed the location of 20 miles of the most difficult and expensive part on the eastern end, the grading and masonry of which was put under contract on the 18th December, to be finished by the first of July, 1853. The work on this section has progressed very well, and the board have decided to offer another section of 15 miles to contractors, on the 14th of November, which will be 36 miles west of Staunton near Panther gap. This point is regarded a favorable one at which to rest, offering a convenient connection with roads leading to the different springs, and the work being lighter than the first twenty miles, may be finished nearly as soon, though begun at a later period.

Since the last annual meeting, the survey of the route from Covington to the Ohio river has been completed by Mr. Shaw, the engineer who had charge of that duty under the direction of the board of public works. This work being a continuation of the Central line of railroad communication to the western states, is one in which this company must feel a deep interest, no matter by whom it may be constructed; it is therefore with great satisfaction the board remind the stockholders of the very favorable character of the line, the cost of which when completed will be about $21,000 per mile, including the building of depots and stocking the road with cars and motive power. It is not proposed to go into any detailed statements on this subject, as they can be better understood by reference to Mr. Shaw's report, which has been published; but it may not be amiss to state, that from the mouth of the Kanawha, coming eastward for 200 miles, there is not any grade exceeding 20 feet to the mile. At the crossing of the Alleghany, coming eastward there will be two miles of 92 feet to the mile at one point, admitting of the convenient use of assisting locomotives to aid the trains over the mountain, being then brought within 20 miles of the point to which the James river canal is expected to be soon completed.

With reference to the transportation of the heavy productions of the valleys of the Ohio and Mississippi, it will be thus seen that the James river canal, and the railroad from its terminus to the Ohio, present a line, which, for its directness, the mild temperature of location, and its general capacity for cheapness of transportation, is unequalled by any which aims at connecting the west with the Atlantic.

Regarded as a line of transit for passengers touching at Cincinnati, or passing through the state of Kentucky, who are destined to Washington or any of the northern cities, this central Virginia route, composed of the Covington and Ohio section, the central road to Gordonsville, and the Orange and Alexandria road, will be unsurpassed by any more northern line; and as relates to the travel south of the Ohio river, it is only necessary to examine the map* which accompanies this report to see that from its geographical position it can have no serious competitor, when the connections are made which are now in contemplation.

A glance at the map of the U. States is enough to show that the great outlet for Kentucky, Ohio, Indiana and Tennessee, ought to be through Virginia to the Atlantic; and the want of a good thoroughfare for that object, as well as for the interests of Virginia herself, has long been a subject of deep regret, but the movements recently made and being made by these states in the work of improvement and inter-communication, has demonstrated more clearly not only that the central railroad line through Virginia is called for as a great medium of travel and commerce, but that when made it must be a source of great profit from the investment.

Big Sandy connection with Kentucky, etc., etc.

The Lexington and Big Sandy railroad company and the Maysville and Big Sandy company, are now actively employed in operations, contemplating a connection with the prong of the Covington and Ohio road at Big Sandy. Maysville, it will be seen, is on the line from Richmond to Cincinnati by the Big Sandy connection, and from thence the roads contemplated and constructing give a direct communication with St. Louis. From Maysville to Lexington the road will soon be completed, and from Lexington to Louisville is now done; but a still more direct line to that city is likely to be made by the opening of a road from Frankfort to Paris, by which the distance will be shortened some 15 or 20 miles.

A railroad is projected from Memphis to Lexington, through Clarksville to Bowling Green, thence by the Lexington and Big Sandy road, and by the Central Virginia route to Washington, is nearer by 58 miles than any other route which can be travelled, and when all the advantages of its southern location are considered, there can be no doubt but it must command all the travel south of the Ohio and east of the Mississippi as low down as Memphis.

Avoiding the necessity of crossing the Ohio is an advantage of great importance. If the trade or travel from the region south of the Ohio river should take a route by any road entering the state of Ohio, it will be observed that the river will have to be crossed twice. The engineer of the Maysville and Sandy railroad, estimates that the crossing of the Ohio river *once* is equal to 50 miles on a railroad, and looking to the probability that bridging of that stream might be found very difficult, if not impracticable, that estimate will not be regarded as too much, whether the detention or the expense be considered.

By reference to the best sources of information, the distance from Memphis to Washington city is 954 miles by Clarksville, Danville, Staunton, Gordonsville and Alexandria, shorter by 58 miles than any road south of this line, and making only fair allowances for the difficulties of steamboat naviga-

* NOTE.—It may be proper to state that the various connections exhibited on this map are taken from a map prepared by the engineer of the Lexington and Danville railroad.

tion, crossing of the Ohio, and both grades and curves of inferior character, we cannot doubt but that the greater portion of that immense tide of travel ascending the Mississippi as high as Memphis must be arrested and take this quicker and shorter southern route. The incalculable advantages of this line from Memphis, to Lexington in Kentucky, are so striking, that well informed men believe it must be made, and become the route of travel from the lower Mississippi to the Atlantic cities.*

Kanawha Branch and its connection with Ohio and the Lakes.

Not the least interesting aspect in which the Virginia Central line of railroad presents itself is, that from Point Pleasant there is only a gap of about 80 miles in length, to bring the terminus of the Kanawha branch in connection with Sandusky, on Lake Erie, by the Sandusky, Mansfield and Newark road, communicating in its course with the whole net work of railway in Ohio, Indiana and Michigan.

This important connection is discussed by Ellwood Morris, Esq., the engineer of the Cincinnati, Hillsborough and Parkersburg road, in his report of June 28th, 1852. He says:

"By means of a branch which (under our charter) may be constructed from our line in Jackson county, through the important town of Galliopolis, the distance from Cincinnati to Richmond will be only 577 miles (and from Cincinnati to Galliopolis 138 miles,) this branch intersecting the Scioto and Hocking valley railroad, near Oak Hill, will, by the proposed continuation of that line to Newark, (about 80 miles) give the city of Richmond access to Lake Erie, at Sandusky city, in a total distance of 668 miles, and at the same time a complete connection with the entire railroad system of the west, north of the Ohio river."

The connection here spoken of, it will be recollected, is by filling up the gap between Galliopolis and the Scioto and Hocking Valley road, and then a continuation of that road to Newark, from whence to Sandusky the road is now finished. In addition there is a good prospect of another connection with Ohio, viz: by the proposed road from Galliopolis by Jackson to Chillicothe, which Mr. Charles B. Shaw is at this time engaged in locating; thus we find that there are two lines in Ohio proposed to be connected with the Kanawha terminus, and two in Kentucky ready to be connected with the Big Sandy terminus.

Justly important as the extension of the Central road to the Ohio has always been regarded, it has become far more so from what the States just named have done, and are prepared to do, if they can only be cheered with the hope of our meeting them at the State line.

The President of the Lexington and Big Sandy railroad company, in a letter to the President of this company, of June 18, written from Louisville, says:

"If met by you, we shall prosecute our work with great vigor, so as to have a line through from this city to Richmond in as short a time as possible—we hope not longer than three and a half to four years, and the work to be so complete as to enable a traveller to go through in 24 hours.

"This city has taken a million of stock from this to Nashville, and the work will be prosecuted with much energy. A branch will take (70 miles from here) a more westerly direction to Memphis, and thus will Richmond be connected with the west and southwest by a continuous line of railroad."

The President of the Maysville and Big Sandy railroad company, in a letter to the Hon. Wm. S. Archer, by request forwarded to the President of this company, says:

"Through the Maysville line you are on the most eligible and most direct line from Richmond and Norfolk to Cincinnati, and thence both to Louisville and St. Louis. There is a good feeling at Cincinnati, and Newport opposite, and along the line in behalf of a railroad from Maysville to Newport, for which a favorable charter is granted: and you are aware that a company is already organised to construct a road from Covington (also like New port opposite Cincinnati) to Louisville, while the whole line from Cincinnati to St. Louis direct is under contract.

"Take a map and look at the line from St. Louis via Cincinnati to Richmond, consider its general directness, its easy grades on the whole, compared with those of any other line uniting the west with the Atlantic seaboard, and that from the centres of the west, Richmond and Norfolk are the nearest seaports on the Atlantic—consider these things, together with the fact, that you have or may or will have a water line from Richmond to the Kanawha or possibly to the Ohio, and could I exaggerate the immense importance of the scheme of which my line is a small but indispensable link?

"If Virginia had given reliable assurance of her purpose to push on the 'Central' to the Sandy, the whole line from Newport to Sandy would be instantly under way, and completed at farthest in three years, as I hope the link hence to Portsmouth will be in less than two. But as things stand, we are not justified in extending our line beyond Portsmouth. But of all things, we long to hear of Virginia giving absolute assurance of her purpose.—Let her do that, and we will bridge the Sandy in two years, and you will enjoy a rolling tide of trade and travel from the west and southwest only surpassed by that, if at all, which pours over the New York roads and canals."

The same gentleman in a letter of very recent date to the president of this company, written from Maysville, after speaking most enthusiastically of the reunion of Virginia and Kentucky, says, "our Kentucky enterprises are held in check by the doubts engendered by your delay in determining the terminus of our road. If your great state were pledged in tangible form to the consummation of the Central to Sandy, we could more easily raise means to complete the line hence all the way to Sandy, than even to Portsmouth, a little more than half way."

Can it be that the anxious wishes of our friends in the west, to pour their rich treasures into our lap will be spurned? It must not be forgotten that at Maysville, a connection can be made through Ohio with the northern roads, though attended with the disadvantage of increased distance, besides crossing the Ohio twice, but the continued postponement of their ardent wishes, may cause Kentucky to turn from us in despair; your board therefore earnestly hope that the present golden opportunity of securing the trade of the valleys of the Ohio and Mississippi, will not be lost by the legislature, which will soon reassemble.

Gauge of Covington and Ohio Road.

Before dismissing the subject of railroad connection with the Ohio, your board think it proper to remark that the width of track, which may be adopted between Covington and the Ohio, is an important matter which ought not to be overlooked, not as affecting the interests of the Central railroad company, but those of the commonwealth of Virginia, and perhaps of the whole Union. It is not designed to discuss the abstract question of what gauge is intrinsically best. The opinion of engineers of great reputation, both for science and practical knowledge, might be quoted, to show that the gauge of the Central road is best; the fact might be adduced, that the great majority of roads in this country and England, are 4 feet 8½ inches wide, those that are now worked most prosperously—and some very recently built, but the question would seem to be settled by the fact, that all the roads in Ohio and Kentucky, that are proposed to be connected with this, are of 4 feet 8½ inches width, and that the policy of Virginia requiring roads *to be connected* which are in contact with each other, cannot be carried out if the Covington and Ohio road is of a different width from the Central.

It may be said that uniformity of gauge has not been found so eminently essential, since roads, strictly speaking, that are *connected* having the same gauge, have transhipped and reloaded at their respective termini. Distrust existing between two companies, or the difficulty of settling responsibility, may have produced that practice in some cases, but the expense, delay and damage attending transhipment, are so obvious, that they need no argument to illustrate. To secure the trade of the west, it may become important to concentrate on the Virginia line, every advantage. It might be conceded that in ordinary practice there would be separate depots, and trans-shipment, yet the roads should be so constructed, that on extraordinary occasions, cars might be run from one to the other.—The urgent demands of a state of war, would not admit of the delay attendant on transhipment.—This railroad line must become a great national highway. In time of war, suppose arms or ammunition had to be transported from Washington or Norfolk, to St. Louis, the lakes, or some southern port, or that provisions or cavalry had to be transported from the interior to the Atlantic, ought not our roads to be constructed so as to admit of as little delay as possible? The delay consequent on the transhipment of a few regiments of horse, might produce the most disastrous consequences; we therefore conclude, that the gauge of the Covington and Ohio road, ought to be the same with the Central, and the Orange and Alexandria roads.

Relaying the Road from the Junction to Gordonsville with an edge Rail.

At the annual meeting of the stockholders, the board of directors were granted authority to take the necessary measures for relaying the road from Junction to Gordonsville, with a rail weighing not less than fifty one pounds to the yard. That measure so much called for by the best interests of the company, was most opportunely undertaken, as results have proven. A committee of the board, consisting of the president, and Mr. D. Anderson, repaired to New York in the month of February last. The price of railroad iron being then at nearly about the lowest state of depression, a contract was made with Messrs. Baily & Brothers, English manufacturers of the highest reputation for the quality of their workmanship, for the whole quantity required to relay the road from Junction to Gordonsville, and to complete it to Staunton, at the very low price of forty dollars per ton.

Since that time, iron has advanced from 12 to $15 per ton, and it is proper to say that the credit of Messrs. Baily & Brothers, has been maintained not only in the quality of the iron sent us, but by their continued promptness in delivering it, in spite of the very great advance over the price they receive.

In connection with this subject, it is gratifying to state, that the company's bonds maintain a high standing in the markets; none have been sold for less than 90 per cent., whilst one-third of the cost of the iron purchased was paid for in bonds at par.

Tributaries to the Road,

The McAdamized road from New Market in Shenandoah, to Gordonsville, is now in operation the greater part of the distance, and will soon be completed. It must bring a large accession of trade and travel to the road.

The plank road from Lexington to Staunton will be finished before the end of the year, which, by the increased comfort and expedition in travelling, will increase the number of our passengers.

The Orange and Alexandria railroad is now in operation within a few miles of Culpeper courthouse, and your board feel no doubt but that too is destined to increase the travel on this road.

Profits for the year from the 30th Sept., 1851, to 30th September, 1852.

It appears from the statements of the treasurer marked B, that the aggregate receipts from all sources were $176,485 69 for the year ending the 30th September, 1852, from which deducting the ordinary charges of administration, which there appear under the heads of salaries, miscellaneous expenses, depot expenses, repairs of road and train expenses, there will remain the sum of $74,902 24, which though expended in the purchase of new locomotives, cars, etc., necessary for the extended operations of the road, may be taken as an exhibit of the net profits for the year.

The capital employed in earning this sum consists of,

* As before remarked there will be only two miles at the Alleghany crossing with grades as high as 92 feet whilst on the Baltimore and Ohio road there are many miles with grades of 116 feet in a much colder climate, and more difficult curves than on the Central Virginia line, all of which besides crossing the Ohio cause detention equal to an increased number of miles, as conceded by all engineers, A passenger taking this line at Memphis will gain much, not only by the increased speed of a railroad over a steamboat line, but by avoiding the increased distance of the river between that city and Cincinnati.

Cost of eastern extension and buildings in Richmond, excluding grounds purchased for future use	$348,254 41
Cost of road from Junction to Gordonsville	411,275 70
Cost of road from Gordonsville to Woodville	363,322 95
	$1,122 853 06
Equipment of engines and cars	192,454 93
	$1,315,307 99

$74,902 24 is nearly 6 per cent on this sum.

E. Fontaine, President.

Richmond, October 15, 1852.

Pennsylvania.

The Lehigh Register gives the following account of railroad movements in that quarter:

"The early completion of the Cattawissa railroad, has, within the past few weeks, become a fixed fact. The company has passed into the hands of New York capitalists, whose ample means will enable them to push forward this great connecting link in the chain of railroads with energy to an early completion.

"We understand that an arrangement was completed on Thursday last, by which all the interests of the Williamsport and Elmira railroad company passed into the hands of the parties interested in the Cattawissa road. The prospect, therefore, of Baltimore being benefitted by a connection of this road with the Susquehanna road must be abandoned. The New York capitalists who have hold of the Little Schuylkill and Susquehanna, have brought about this event, to prevent the Elmira railroad from falling into the hands of the Baltimore and Susquehanna company. It is a rivalry between New York and Baltimore for the lake trade, and for the business connection of Northern Pennsylvania. Meanwhile, Philadelphia has commenced work in earnest on the Sunbury and Erie railroad. The Minehill and Schuylkill Haven railroad will be extended to Ashland and from thence to Sunbury. Thus it will be seen that by the time the Baltimoreans reach Sunbury from Harrisburg, the Philadelphians will be there to meet them, and by the time that both those interests combined reach Williamsport, they will find the New Yorkers there by the Cattawissa and Lehigh and New York locomotives.

"The work on the Cattawissa road has been let to a company of contractors, who are to have the connection between Cattawissa and Tamaqua, with a branch to Mauch Chunk, completed by the first of January, 1854. We think that Philadelphia will yet be compelled to adopt the Allentown route, for the heavy planes between Ashland and Sunbury will do very much to prevent that project from becoming available. But from every recent indication we may safely say that the Cattawissa railroad will be made now, whether Philadelphia assist or not.

"We learn too that arrangements have been made to put under contract the whole line of the Delaware, Schuylkill and Susquehanna railroad from Easton to Mauch Chunk and Tamaqua. This road will intersect the Beaver Meadow road at Mauch Chunk. The Beaver Meadow road intersects the Cattawissa at the mouth of the Quacake. The Cattawissa intersects the great Sunbury and Erie road at Williamsport. The whole forming a continuous road from Erie to New York."

A correspondent of the Miner's Journal, Pottsville, writing from Tamaqua, also, has the following upon the subject:

"There is quite a railroad spirit prevailing here at present. It is confidently asserted that the Cattawissa railroad will now be pushed forward to completion without delay. The Little Schuylkill company will place the extension of their road under contract some time during this winter. It will extend six miles north of Tamaqua and intersect with the Cattawissa road, they will also probably open a road to their lands in Mahanoy, and thus bring into market the rich deposits of coal in the eastern section of the Mahanoy basin.

"Upon the completion of the Cattawissa and the Mahanoy branch roads, there will, undoubtedly, be a road opened through the Mahanoy Valley to the Lehigh, thus giving us a continuous railroad *via* Easton to New York. Judging from present manifestations, business will open here briskly in the spring; at least, so far as improvement is concerned, and there will be more activity than we have ever known in Tamaqua."

Railroad Law.

A case of somewhat new impression was tried before Arbitrators in this city, on Friday, Dec. 3d, between Lemuel H. Draper of Milford, and the Western railroad company.

The plaintiff claimed damages for injury to himself and property on the 24th day of June last at the crossing near Washington Square, occasioned by the carelessness of the flagman in the employ of the defendants.

It appears that on said 24th day of June, Draper was driving an omnibus from Milford to Worcester; that when he approached the railroad crossing, the flagman held his flag so as to denote that a train was about to cross the road, and Draper stopped his team.

As an engine passed over the travelled road, the flagman passed off to the east, holding his flag in such a way as to signify that it would be safe to pass. Draper started, and when about getting his horses upon the track, the flagman rushed forward and swung his flag in such a way as to frighten Draper's leaders. which, turning suddenly, brought the axle of the omnibus in collision with a hydrant, precipitating Draper among the horses, (three of whom fell) and breaking his leg.

The hearing was had before Hon. A. H. Bullock, E. H. Hemenway, and J. S. Scamnell, Esqs., as Arbitrators. Numerous witnesses were called, who fully confirmed the above statement. Some interesting questions of law arose in the case, one of which is, whether a railroad corporation has any right, under the law, to establish a flagman and rely upon any efforts of his, in order to show reasonable care on the part of the corporation.

One thing at least is perfectly clear, that when a flagman is established, and he first misleads the traveller, and then manages so carelessly as to cause an accident instead of preventing one, the corporation should be liable for the act of the agent. Such a view was sustained by the Arbitrators, and judgment was rendered for the plaintiff for $1,500 and $90,02 costs.—*Worcester Transcript, 10th.*

New Route for a Railroad from Wheeling to Cleveland.

We are pleased to learn that the branch of the Cleveland and Wellsville railroad from Bayard's station to the Steubenville and Indiana road at Urichsville, has been surveyed, the stock raised, and the road already under contract, to be pushed through as speedy as possible. This places our connection with Northern Ohio in a very advantageous position, and will lead to measures securing that trade to Wheeling beyond all contingency, and that by one of the cheapest routes in the State. From Wheeling to Urichsville, there are four charters for the line of road, under either of which it can be constructed, and we rejoice to know that persons are engaged in it who will no longer suffer the advantages it possesses to lie unused.

The work now on hand is to run the road from Wheeling to the mouth of Short creek, thence up Short creek to Cadiz, where it will meet a branch of the Steubenville and Indiana road, and either unite with that or follow the Stillwater track to Urichsville, where it will cross the Steubenville and Indiana road, uniting with the Bayard branch of the Cleveland and Wheeling road, and also with the road from New Philadelphia to Wooster, thus opening a direct line to Chicago and the whole northwest.

By this route we penetrate the center of Harrison, one of the richest agricultural and manufacturing counties of the state, including in the range the rich towns of Mount Pleasant, Georgetown, and Cadiz. We reach the fine agricultural county of Tuscarawas, and the heart of the wheat country of Wayne, Holmes, Richland and Ashland, at the shortest possible distance, and over an easy and perfect grade.

The distance from Wheeling to Urichsville is 54¼ miles, as surveyed by Mr. Blickensderfer, now engineer of the Steubenville and Indiana road. in 1849, the cost of the whole road, with the following grades, $1,217,955.

Level	10.12 m.
Under 10 feet per mile	16,39.
From 10 to 20 feet	17,16.
From 20 to 40 feet	11,09.

Commencing at Urichsville the line shows the following character; it follows up Stillwater to the mouth of Standingstone, up that run to its source about half a mile north of Cadiz, a distance of 17¼ miles, the total rise of which is 250½ feet. At this summit there willl be required a tunnel of 1200 yards, which by raising, the grade to 60 feet for 3 miles could be reduced to 600 yards, and a grade of 40 feet per mile at each end for a distance in all of about 6¾ miles. No other grade on the route exceeds 25 feet to the mile. The line continues down Short creek at a regular slope for 24 miles to the Ohio river.

To this road there can be no objection or opposition—the right of way will be freely given for the whole line, the trade extensive and subscriptions large. We have no doubt all the subscriptions taken for the Wellsville route, below Warren, amounting to about $10,000, would readily be transferred to that route. We have also no doubt but the citizens of Wheeling and probably of Cleveland, would readily transfer their stock, and as the city has not subscribed to the Central Ohio road, that it might be disposed to throw that subscription into this road as it could not fail to pay largely. The local trade alone is estimated, by our most careful operators at 7 per cent. on its whole cost. The people along the line to Urichsville, are rich, and would take, we believe, $200,000 of the stock. —*Wheeling Gazette.*

Journal of Railroad Law.

CASUALTY AND CRIME;—DIFFERENCE IN THEIR CONSEQUENCES.

In the case of *Benjamin M. Yarrington and wife vs. the New York and New Haven Railroad Company,* tried last week in the Superior Court of this city, the charge of Judge Paine, in relation to the subject of damages, has given occasion to some degree of censure. But the doctrine complained of, as laid down by the Judge, to wit: that a company is liable for the *negligent,* but not for the *wilful* injuries, caused by their agents, is believed to be sound both in law and in equity. A master is bound to employ competent and careful servants—and if he does otherwise, is liable for the consequences resulting from his short-coming. But he is not to be implicated in the crimes into which those servants may be impelled by malice or passion—for it is rarely possible to anticipate and prevent such occurrences.

In this case, Mrs. Yarrington was on her way to Stamford, and when near Portchester, the down train came into collision with the forward car of the up train, in which Mrs. Y. was travelling. The baggage car was knocked into the passenger car—and the lady was buried under the rubbish. She was extremely ill for a month, and has not yet recovered her accustomed health. Messrs. Gerard and O. Hoffman appeared for plaintiff, and Messrs. Cutting and Hamilton for defendant.

"The Court charged that if this collision occurred in consequence of the negligence of the defendants or their agents, then the company is liable in this action. If it occurred from any negligence on the part of the conductor, the defendants are liable, unless the conductor wilfully intended to produce the collision. If, however, he intended to violate the rules of the company, and to go on out of time, contrary to what he know to be the regulations of the company, but without intending to run his train against the down train, that state of things will not prevent the company from being liable.

The question of negligence is entirely for the Jury. In cases of the kind where injuries have been sustained, it is for the company to explain why and how it happened, and exonerate them-

selves if possible. If the jury believe that the conductor did not intend to run against the other engine, then, as it is admitted, he did violate the rule of the company; and there can be but little doubt about his negligence, inasmuch as he went on, knowing a train was due, and had a right to the road, and by going on he incurred unnecessary damages in an improper manner. It is true, he sent word to the conductor of the down train to wait, but this would have been against the rules of the road, and he must therefore either violate them himself, or cause them to be violated by others. This question of negligence is, however, entirely for the jury, one of fact alone and within their province.

In relation to the damages: if the jury think the plaintiff, Mr. Y. is entitled to recover, he is not entitled to any damages for expenses, which fall upon him consequent upon the injury to his wife, and not such as payment of physicians or nurses, or counsel fees in this suit. The damages must be compensatory for the injuries sustained by the wife alone. Neither is this a case for exemplary damages; but the wife is entitled to ample damages for all her injuries, for all her past sufferings of body and mind, for her privations and inconveniences, and for what she may be subjected to hereafter in consequence of these injuries. The duty of the jury is to ascertain, as near as possible, what will be the just compensation and indemnity to the wife for her injuries. The jury must do her full justice, and that, too, without doing any injustice to the company itself."

The jury returned a verdict for plaintiffs in the sum of $2,500.

LIABILITY FOR LUGGAGE.

It appears by the following Cleveland case, that the Supreme Court of Ohio has decided the law of luggage substantially in accordance with the rules we have recently reported, as laid down by the courts of New York and Massachusetts.

And to these might be added the decision of the Supreme Court of Maine, in the case of Pudor vs. the Boston and Maine railroad company, 26 Maine 458; which was an action against a common carrier for the loss of a box alleged to contain medical books, medecines, surgical instruments and chemical apparatus—and in which it was held that the plaintiff's testimony in regard to the contents of his trunk should be limited to clothing and personal ornaments.

It may also be added, that in order to charge a common carrier, as such there must be a *delivery* of the article for transportation to the carrier, his servants or agents; and if the delivery is made to a servant, it must be to one who is entrusted to receive the goods, and not to a person engaged in other duties. Freight, as distinguished from mere luggage, should be delivered to the freight master or his assistants.

"A case of some interest to transportation companies, was decided in the Supreme Court of Cleveland on Friday last. Hugh McFadden brought suit against the steamboat Niagara for the loss of a trunk. On the trial before the Jury, McFadden proved that on the 1st of May last, he embarked on the Niagara with his family at Detroit, taking passage and paying fare, for Cleveland. He had three trunks. One of them contained wearing apparel, together with $2,500 in gold coin. This trunk he claimed, from the evidence, to have delivered to the Porter of the Niagara, stating that its contents were valuable, that he wanted it taken in special charge, and paying the Porter a quarter of a dollar for that purpose, and that this trunk was lost. On the point of whether any such trunk was ever delivered there was much conflicting testimony. The main question was whether the plaintiff could recover for the gold in the trunk.

Judge Andrews, in his charge to the Jury, held that in pursuance of the New York and Massachusetts modern authorities, money contained in an ordinary travelling trunk, and taken along by the passenger as baggage, was not recoverable in case of loss, any further than as designed for travelling expenses—that in order to create such liabilities on the part of a boat or transportation company, the unusual contents of such trunk should be made known to the carrier, so that freight, if demanded, might be received in proportion to the risk; that where a trunk with such contents was received, not as mere baggage, but as freight, the carrier would be liable, although he had no notice of the particular contents of the trunk, but that a mere gratuity paid by a passenger to the porter as a perquisite for taking care of a trunk, did not, in the absence of any further proof, vary the liability of the carrier.

The Court further held that if it appeared from the evidence that this money was being transported for purposes of future investment, and no part of it was intended to be used as travelling expenses, that under the circumstances the boat would not be liable for any portion of the money.

The Jury, under the charge of the Court, returned a verdict of $269, the value of the wearing apparel, disallowing the $2,500 claimed for loss of money in the trunk."

Virginia Central Railroad.

We give this week the annual report of this company. Next week we shall give some extracts from the annual report of the Chief Engineer.

Lake Ontario, Auburn and New York Railroad.

This company was organized in August last with a capital of $1,500,000, to construct a railway from *Fair Haven*, on Ontario Bay, (Little Sodus) 14 miles southwest of Oswego, southwest via Auburn to a point of intersection with the Cayuga and Susquehanna railroad, near Ithaca, a distance of 73 miles, with a view to connections through to New York and Philadelphia, via Scranton, Pennsylvania, and the Delaware Water Gap. The enterprize was undertaken contemporaneously with another beyond the Lake, viz: a railroad from one of the easternmost points of Georgian Bay, via Peterboro' to Cobourg, a distance of 98 miles, and connected with a steam ferriage to and from Fair Haven, a distance of 70 miles; and was prompted also by other railroads in process of construction in Canada, which are designed to command for Lake Ontario the travel and commerce of the Northwest. And as the tendency of such travel and commerce was discovered to be towards the city of New York by the most direct avenue, one from Ontario Bay over the route indicated, was resolved upon in connexion with the interests of the Lackawanna iron company, whose principal works are at Scranton, Pennsylvania, making New York in 293 miles from the Lake.

Preliminary investigations were made by a committee touching the nature and extent of the commerce of Canada west, and the facts were reported as follows:

Entries of American goods at the following Canadian ports during the years 1848, 1849 and 1850.

	1848.			1849.			1850.		
	£	s.	d	£	s.	d.	£	s.	d.
Kingston	75,947	8	9	69.011	12	10	124 760	10	10
Bath	34,059	19	3	3.949	10	5	4,314	16	10
Belleville	11.182	8	8	21,296	5	8	23,910	4	4
Pictou	3,029	17	1	7 509	3	11	7,915	6	4
Colborne	453	9	11	172	11	4	1,014	2	4
Grafton	262	8	5	672	9	7	1,291	8	0
Cobourg	13,067	10	8	17,105	19	7	21.811	1	1
Bondhead	817	2	0	760	6	3	937	0	11
Toronto	197,225	5	3	326.863	17	9	634,722	17	2
Oakville	6,914	15	0	7,768	18	1	10.391	7	10
Wellington	302	9	10	676	17	8	4,383	2	5
Hamilton	235 344	13	5	280,758	5	4	396.782	14	10
Dalhousie	6,263	6	7	6,684	2	1	14,394	10	8

The committee then give the exports of 1850 as the same were cleared from the same Custom Houses:

Kingston	£87 562 7s 1d
Bath	9 028 5s 9
Belleville	50 484 16 6
Pictou	3.562 4 0
Colborne	552 11 0
Grafton	1,208 0 0
Cobourg	13.646 8 5
Bondhead	9 971 8 9
Toronto	67 557 4 11
Oakville	41.651 8 0
Wellington	13 469 7 6
Dalhousie	79,528 1 9

Having ascertained where the exports cleared from, the committee came upon this shore of the lake, to see where they were entered, in order to determine which way they were tending. They found the entries to be as follows:

Port of Buffalo Creek	$446,900
Port of Lewiston	61,807
Port of Rochester	100,189
Port of Oswego	2,087 622
Port of Sacket's Harbor	26,137
Port of Cape Vincent	53,079
Port of Ogdensburg	211,925

From this it was seen that the tendency of this trade was towards the seaboard.

Simultaneously with the organization of a company to construct the northern link in the proposed chain to New York, a company was organized in Philadelphia to construct a road from that city to the Delaware Water Gap, via Easton; and the opening of negotiations with the Morris and Essex and the Somerville railroad companies, to gauge their track so as to form in line with the roads northwest of the Delaware, and uniting with the Lake Ontario, Auburn and New York railroad at the north. Under this new arrangement the Lackawanna and Western road which now unites with the Erie at Great Bend, is to be laid, via Montrose and the Apalachian valley, to unite with the Cayuga and Susquehanna railroad at Owego, and thus to form a direct line from Lake Ontario to New York and Philadelphia, by traversing the following distances:

From Lake Ontario to Owego	94 miles.
" Owego to Delaware river	115 "
" Delaware to New York	84 "
Making an aggregate of	293 miles.

which, at a speed of 30 miles per hour, may be performed in 9 hours and 46 minutes.

So much for the claims put forth by the company about which we are writing. Whether they are supported by facts or not depends upon the accuracy of their statistics, which we have no reason to doubt, and the ability and disposition of all the companies whose roads constitute the proposed line to carry out the arrangement indicated. It is a grand scheme, having many parts which must work together in order to effect the objects of the first-mentioned structure, and thus open the light commerce and travel of Lake Ontario to the city of New York.

The directors of the Lake Ontario, Auburn and New York railroad company represent, that from the estimates of their Chief Engineer, they have good reason to expect that they can construct their 73 miles of road, (including right of way) for $16,000 per mile, or at a cost of $1,168,000. They have put the grading and masonry thereof under contract, and contractors are now briskly at work with a heavy force, under stipulations to have the track ready for the ties and iron in the fall of 1853, and the company have also contracted for their iron.

It will be seen, therefore, that another important railroad line is to be opened from the Canada border, and one which must command more or less o the growing business of the northwest.

Southern and Western Commercial Convention at Baltimore.

This Convention, which we believe we have already noticed, was held on the 18th instant, Hon. Wm. C. Dawson, of Georgia, presided. The convention was well attended and is represented to have been a spirited affair. Below we give the opening address, presented by the Editor of the Republican, and the resolutions, which will convey a good idea of the objects and results of the Convention.

We have invited you to meet us, in the city of Baltimore, in order to consider questions of interest to the sections of country whence you come, as well as to ourselves. It is our duty as well as our pleasure to seize the earliest moment to thank you for the alacrity and good will with which you have so cordially responded to our call.

Gentlemen, we have summoned you here to-day, to lay, with proper services, and to cement with hearty feeling, the corner stone of a great National Exchange. Many circumstances have lately combined to direct public notice towards the city of Baltimore as the most suitable mart for the productions in which your parts of the Union are so deeply concerned. When the census of 1850 was first published, and it was seen that the population of Baltimore had augmented in a larger proportion within the preceding ten years than that of any other Atlantic city, men asked themselves the question why this had occurred, and found no solution save in the facts that there was a zealous stir of enterprising activity among our people, fostered by the hopeful prospect of future progress,—that our Internal Improvements were tending to develop a region fraught with wealth, not only to our State but to other sections, and that Baltimore, in truth, *was the original and natural terminus of our great internal trade, indicated by nature herself in the geography of our country.*

And is not this true? It will be allowed by every one who recalls the history of colonial and revolutionary times and remembers that Baltimore town, in those days, was the spot whence the adventurer and the soldier set forth, wending their way westward by Fort Cumberland, until they penetrated that wilderness which has been subdued and civilized by the courageous enterprise of your hardy ancestors. It was from Baltimore town, then already a place of significance at the head of the finest inland navigation in the world, that the pioneer and trader sailed forth with trains of pack horses, to bear their luxuries and necessaries into the wilderness in order to exchange them for the peltries which were, at that time, almost the only "circulating medium" of the region. Maryland, lying like a wedge between Pennsylvania and Virginia, and having in its centre another wedge, in its magnificent bay and river, whose affluents penetrated its northwesternmost corner, afforded the easiest levels as a channel of trade for passing the mountains and reaching the navigable waters of the Ohio; and thus our State became the chief line of American travel, and our city the chief depot between the shores of the Atlantic and the vallies beyond the Alleghany range. Baltimore, therefore, is fairly to be regarded as the natural and earliest historical friend and commercial ally of the West. It was so in the days when Washington and Braddock pursued the line of travel I have indicated,—and in periods when the common interests and common sense of men pointed out a trail for trade, independently of all extraneous influences.

But, gentlemen, it is not to be denied that although Baltimore, very soon after the adoption of the Constitution of the United States, was acknowledged to be the great flour and tobacco mart of the country, as well as, perhaps, the best market for provisions—she still, in time, found that her commerce diminished, while that of other sections, which apparently were not entitled to such advantages became proportionably enlarged. This may be attributed to three causes:—the opening of the navigation of the Mississippi, which gave its mouth as a vent for internal commerce;—the introduction of steam on that river and its tributaries as the motive power for trade and travel;—and the construction of the Erie canal, backed by the masterly system of internal improvements of New York, which has tapped the lakes and western waters, developed its own immense interior resources, and poured the wealth of the northwest into the lap of its thriving metropolis. Thus, the old trade, which, in earlier days concentrated at Pittsburgh or Wheeling, and pursued its slow journey over the mountains in the "Conestoga wagons,"—which were the successors of "pack-horse caravans,"—was gradually absorbed and taken away by the ingenuity of an opulent rival.

But, you are aware, gentlemen, that Baltimore was no laggard in seizing the means of reasserting her natural supremacy in the internal commerce of North America. We perceived the cause, and we endeavored to apply the remedy. We saw that art, skill and capital, had striven to overcome nature and distance, and we resolved to make the same elements of success restore nature to her original rights.

Accordingly, about a quarter of a century ago, many of our opulent and enterprising citizens determined to make that gigantic internal improvement which, on the 1st day of January, 1853, is to signalize the opening of a new year by wedding the Ohio and the Chesapeake, and securing an uninterrupted intercourse, which shall place the western citizen and his valuable produce on the Atlantic coast within fifteen hours!

This great work has been long delayed. There were many reasons. It was the pioneer railway of the Union as Baltimore had been the pioneer port in western intercourse. The art of construction had risen from mere speculation to a science during the period of its building; and besides we had to encounter manifold impediments and financial difficulties, all of which it would be idle to recount. Nevertheless, so confident were we of the worth of our enterprise that we have not suffered ourselves to be doubted by any obstacles. We have mined our way through mountains, and we have taxed ourselves heavily, both as Baltimoreans and Marylanders, until with the true labor of resolved faith, we have succeeded in completing the enormous task.

It is under such circumstances, fellow-citizens of the South and West, that we ask you to come hither and tell us that our judgment was right—that our opinion of the channel of trade was correct—and that we have not labored in vain for the friendship of those sections to which nature had originally allied us, and to which art has once more happily restored us after so many years of unnatural estrangement!

But, gentlemen, while, in Baltimore, we have been striving to make this work, by the expenditure of private and public means, other cities have not hesitated to attempt outgeneraling us in our efforts to regain your favor. Boston, New York, Philadelphia, have all striven to grasp the whole, or, at least, to gain a considerable part, of the wealth that your industry produces. Yet, in this instance all their art,—all their ingenuity,—could not effect two results, without which their attempts must be unavailing. They could not destroy the geographical facts that Baltimore was not only the natural channel of trade, but that it was, also, the central point of the seaboard Union, in instantaneous intercourse with the National Capital,—and that its railway is the shortest, directest, and most economical communication between the Ohio and the Sea.

In order to illustrate our position, let me ask you to look when you have time at any skeleton map of the United States, on which the great lines of railway are laid down. You will instantly observe, that, while Boston, New York and Philadelphia stretch out their iron arms with longing towards the West, every grasp they make drags your produce over a longer road, and, of course, at a higher cost, than we shall, after the first of January, 1853. Nor is this all. While seeking to communicate with the Ohio, we have not been unmindful that there were Northern streams and Lakes which might contribute to Baltimore's prosperity, and afford many articles of value to our Southern friends. And, accordingly, we have hastened to thread the Valley of the Susquehanna, with a road approaching completion, which, uniting with the Erie railway in the State of New York, will place the lake, at Dunkirk, thirty-nine miles nearer to Baltimore than to New York city by the present channel of intercourse. Nay, you will observe something more, by the inspection of such a map. You will find, that, Geography having made Baltimore the great, natural, central entrepot of the Union on tide water;—the great receptacle of internal produce and foreign distribution;—we have gradually completed or projected a connected system of railways, steam communication, canals, and vessels, diverging northeastwardly, to Philadelphia, New York, Boston and the New England States generally; Northerly, through the Valley of the Susquehanna into the hearts of Pennsylvania and New York; Westwardly, by the Patapsco and Potomac vallies, through Virginia, to the Ohio, in the direction of St. Louis; Southwestwardly, to Winchester, Washington and Richmond; Southwardly, by steamers and rail to Portsmouth, Weldon, Wilmington, and, shortly, to Charleston; Southwardly again, by steamer direct to the last named port; and finally, Eastward, to the Ocean, by lines of ships communicating with England and Germany, Holland, France, the West Indies, the Spanish Main, New Orleans, Savannah, Mobile, the British Northern Possessions, New England, both coasts of South America, and the golden shores of California.

This map will show you, then that all these various lines of trade, domestic and foreign, converge at Baltimore, like the spokes of a wheel making our city the great central axle of a trade, whose circumference should touch and gather the production of every section.

Securing, therefore, our natural geographical right, to a large share of the produce of those vallies which drain the western slopes of Virginia and Pennsylvania, the states of Kentucky, Ohio, Tennessee, Missouri, Illinois and Indiana;—holding, moreover, a close intercourse with the broad lakes and their fruitful borders, through the valley of the Susquehanna;—may we not justly say to you gentlemen that our central position and facilities for transportation—make us obviously a nationat entrepot, and will force the north to regard Baltimore as the best exchange for the disposal of its manufactures, and its best market for you?

The answer, we think, is ready in the colossal fortunes already realized from southern purchasers by enterprising eastern and northern men who had the sagacity to detect this fact, and came hither to establish commercial agencies. Now—with all the energy of Boston—Boston is beginning to emigrate to New York. Her thrifty people, keen to appreciate and swift to seize compulsory destiny, no longer content themselves by diminishing their profits in loss of commissions, but abandon their opulent agents, and establish in that commercial metropolis, commercial houses directly and originally concerned in manufactures. Gradually their progress will be further southward, until reaching our city, as the true centre of national commerce they will find that Baltimore is the best market in which the varied products of the plantation, the farm and the factory can meet for profitable interchange.

Baltimore is nearest the north, nearest the south, nearest the west;—so central, in fact, as to be nearest all. It is nearest the manufacturer of the north—the producer of the south and west,—the speculator of Europe, and purchaser everywhere.

These inducements of geographical position, ease of communication, and rapid centralization of future trade, might be sufficient to turn your kind attention to Baltimore as a home market, but there are other views and interests we must not neglect to touch on briefly.

Our city, gentlemen, is already one of the largest commercial ports of the Union. Our state is a small one, but its people are industrious, thrifty and energetic. We are blessed by a genial healthful climate, and while our laws are just in their operation among ourselves, they are not unfavorable to the personal welfare of the stranger who may sojourn among us. I have already noticed the surprising decennial augmentation of our numbers. Maryland, accordingly, possesses within herself the material elements of wealth, adequate to build up a great capital, and assure the commercial safety and supply of all who deal with her.

The manufactures of Maryland, in every branch of industry, must thrive, increase and prevail. The geological features of our section are peculiarly favorable to factories. The tide water of the Chesapeake washes the eastern base of that formation which runs parallel with the Atlantic coast, while

abundant streams from that elevated ridge precipitate themselves in a succession of falls to the rivers from an elevation generally amounting to 600 feet, within a distance around Baltimore comprised in a radius of 25 miles. It has been calculated that within 10 miles of the city there is water power sufficient for near half a million of spindles, a large portion of which is still unapplied to any kind of manufacture.

If water is abundant, coal and iron is not less so. —Our Cumberland region is known throughout the world as producing the best "evaporative material," in its semi-bituminous coal, hitherto discovered: and the capitalists of the north are eagerly grasping those mines which must control so much labor and navigation. Hard by these mines iron is stacked up in mountains, awaiting the developement of time and industry; while by railways and the Susquehanna canal, anthracite coal is brought from a region which Pennsylvania has been slack in opening.—Now, who does not know what powerful elements of England's wealth, her coal and iron have been:—but there are multitudes who do not know, that from the abandoned furnaces of old revolutionary days in our state, whose ruins may still be traced,—that very England was supplied to some extent, with "pig iron which was in high repute!"

* * * * * * * * *

The tie of the west to us is unquestionably natural, historical and actual;—our productions are alike, and we have both sought to develop and dispose of them. The south, too,—our old colonial ally,—has a deep concern in our welfare, which is evident in the history of our state—the characteristic habits and tastes of our people, and the nature of a large portion of our agriculture. Why should not the south garrison our bulwark state with the irresistible element of commercial supremacy? We have a mutual stake in the security of our labor. We think it would be impugning the intelligence of that south,—of which we regard ourselves an integral part,—to address it argument in support of Baltimore as a great common mart of production and trade near the north. All its staples will find a ready sale in our city. Sugar, rice and an increased supply of cotton will always be demanded through Baltimore for our trade with the west, north west, and north, as well as for our exports and our domestic consumption. In return, we are ready to furnish, speedily, cheaply and faithfully, all your personal necessaries and luxuries, as well as the supplies for your plantations. From our own wants, we know and justly sympathise with yours. We are disposed,—not in a sectional spirit,—not with a desire to weaken the Union—to join you in freeing the American mind from that unhappy subserviance—that colonial obedience,—which is so rapidly making us dependent on the north. The northern capitals feel the danger of this fact, for they do all they can to encourage the absorbing metropolitan sentiment, and to fix the vassalage of the south and west by that commercial lien of extravagance and debt, which may ruin sections as it often has ruined individuals. Steam and electricity are rapidly consolidating us; yet New York and Boston ignore the existence of any commercial capitals but themselves, while their presses diffuse information as to their own allurements alone, and rarely mention a rival city save to disparage its worth.

But these matters are not to be judged mainly by feeling and sentiment. We are addressing men alive to their interests, but who know no interests that conflict with honor. We have opened our views, and expressed our welcome, briefly, but with honest cordiality. We believe that Baltimore, as the mart for the best coal used in the propulsion of ocean steamers, and lying on the sea-like Chesapeake, will soon, with your countenance, build up a steam fleet to carry the commerce which our combined farming, planting and manufacturing interests will supply or demand. Already a regular steamer plies between Baltimore and Charleston, and the increased trade she has begotten demands the speedy launching of another. Savannah, Mobile and the Texan ports have shown an anxiety to confirm a direct trade with us. If it shall be assured, we have capitalists among us who will not shrink from the discreet enterprise. This will ensure regular Southern ocean lines to the south; and will fringe our coast with our own steamers from the Chesapeake to the remotest borders of our territory. It is a well known fact, that previous to 1817, cotton, though not a staple of Maryland, entered largely into the commerce and consumption of Baltimore. If the British possessions in the West Indies, can be supplied with provisions from the Baltimore market, in return for their colonial produce, why cannot the south pursue the same course? Does not our whole southern country,—whose correspondence and productions furnish probably one-half of the postage on foreign mail intercourse by steam,—feel the neglect of government, when it remembers that, with the exception of the Isabel, hardly a dollar has been given from the national treasury to build or maintain a southern steamer? Why should not a regular line, carrying the mail, depart from this great central mart and coasting the whole south, supply its people swiftly and surely, not only with news, but personal transportation?

* * * * * * *

All this is very fine; a little high seasoned to be sure, but with-all, appropriate to the occasion, which was partly convivial in its character, and which admitted of a style of hyperbole not allowable in ordinary matters. In every new movement an extravagance of statement is necessary, as a means of inspiring confidence on the part of the timid and doubting.

We profess to be entirely willing to see all these anticipations realized. We wish to see right, and we are content to see, in commercial matters, *might* prevail. If Baltimore has the winning card, we are as much pleased as if it were held by Boston, New York or Philadelphia. We see nothing, however, in the results of the Convention to justify such an opinion.

If Baltimore possesses all the advantages claimed, if her position be so entirely superior in all respects to all her roads, it is certainly singular that she made so little use of her real strength. She is decidedly inferior to all her rivals in population, wealth, and extent of her commerce. Is not her past history better evidence of the real relations she sustains to the commerce of the country than conjecture as to the future?

The statement, that the population of Baltimore increased in greater ratio than any other Atlantic city, is far wide of the truth. The increase of the former was exactly 65 per cent, while the increase of New York was 67, and including Brooklyn and Williamsburgh, which are really parts of the city, as much as are one of the wards of Baltimore a part of that, the increase is very nearly 100 per ct. Boston, including its suburbs, increased much faster from 1840 to 1850 than Baltimore with its suburbs.

Again the Address says "*that Baltimore was in truth the original and natural terminus of our great internal trade, indicated by nature herself in the geography of our country.*"

This is a very convenient way of disposing of matters that involve the topography and geography of the country. The real question to be decided is, which is the cheapest route, *seaward*, for the great commercial depots of the interior, Cincinnati, St. Louis, Louisville, Chicago, Cleveland, etc. Take the one having the most favorable position in reference to Baltimore—Cincinnati. To which city, New York or Baltimore, can a ton of flour be forwarded at the lowest cost? There can be no doubt that the advantage is in favor of New York, provided the rates recently promulgated by the Baltimore and Ohio company represent the minimum figure on that road. Heavy freights are now sent from New York to Cincinnati, for less than $7 per ton, and rates will be reduced to $5, and still lower even, should such a figure be necessary to retain the business. Can the Baltimore and Ohio road compete at this figure? this is the question to be answered. But this is not all; for western produce is worth more in New York than in Baltimore, by the cost of transportation and expenses between the two places.

Again: "Baltimore is nearest the North, nearest the South, nearest the West:—so central, in fact, as to be nearest all. It is nearest the manufacturer of the North—the producer of the South and West—the speculator of Europe, and purchasers everywhere."

This puts our pipe entirely out. We had always supposed it a pretty hard task to prove a city to be nearer the west and Europe, at the same time. This would appear to involve a contradiction in terms. Baltimore is 200 miles inland, and its ships, to get to sea, must run some 400 miles south of New York, and again cross the latitude of that city, on their way to Europe. But this is a matter that we will not reason about, as it seems to have become a question of *opinion*, not *fact*.

Again: "We are disposed to join you in freeing the American mind from that unmanly subserviance—that colonial obedience—which is so rapidly making us dependent on the North. The northern capitals feel the danger of this fact, for they do all they can to encourage the absorbing metropolitan sentiment, and to fix the vassalage of the South and West by that commercial lien of extravagance and debt which may ruin sections as it has often ruined individuals. Steam and electricity are rapidly consolidating us; yet New York and Boston ignore the existence of any commercial capitals but themselves, while their presses diffuse information as to their own allurements alone, and rarely mention a rival city save to disparage its worth."

If there be any subserviance of the South upon the North it is certainly unmanly, but it reflects as much credit upon the latter as discredit upon the former. What is this superiority complained of, but the result of superior industry and enterprise? The South are not *compelled* to come North to trade, but if its people want shoes, paper, cotton cloth, ready made clothing, etc., they are compelled to come north for them, for the simple reason, that they do not manufacture those articles at home. If the people of the north charge their own price and make money by so doing, who has a right to complain. If such relations beget a vassalage, the only way to be freed from it, is to become self-dependent. To this the north does not object, but would aid such efforts by protecting domestic industry against foreign competition.

So with the tendency toward centralization. The northern cities are the importers of foreign merchandize, and exporters of most of our domestic products. Why? Because the South will neither build ships, nor sail them. If the maintenance of our commerce depended upon that portion of the country, it would dwindle away to nothing. Witness the commerce of Virginia at the present time, "the sea is lost to Virginia" says the Richmond Whig, Why? only because she will not use it. It is pretty nearly lost to Maryland. Two little and apparently insignificant ports in Maine, with only a few thousand people, build and own more tonnage than the States of Maryland and Virginia together. And where do they get their timber for their ships? Not at home, but from Virginia and Georgia, the oak from one, and the hard pine from the other. In neither of these States will they make any domestic use of their magnificent forests, which would grow, and decay upon the soil, but for northern enterprize. If it be unmanly for Southern planters to send their cotton to Liverpool in northern ships,

they should refuse to employ them, and build for themselves.

The idea that New York cherishes any jealousy, or fears the rivalry of Baltimore, exists only in the mind of the writer of the address, and those in the same category. The Philadelphians are constantly making similar charges, at the same time that our good natured citizens are furnishing them money in abundance to carry out the projects that are to cripple the trade of this city. If any fears are felt of being supplanted by Baltimore and Philadelphia in the trade of the West, New York would not let these cities tap her works in the western part of this State. We are not discussing the question as to whether any real danger exist, but the feeling in New York is, that every work of internal improvement in the United States must inur to her benefit. This feeling is shared by the entire press in this city; consequently all works looking toward those cities are as much encouraged, as are those running into New York.

How is Baltimore to become the convenient point of exchange of the products of our industry and commerce, so long as the people of the State and the surrounding country are entirely devoted to agriculture? The point of convenience is on the *boundary line* between the producing and consuming, or manufacturing and commercial, and the agricultural, divisions of the country. New York, more than any other city, occupies this boundary line, hence its superiority to all, in commerce, wealth and population. Suppose a southern or western merchant to come north to procure an assortment of goods? Where does he go? To Boston and Philadelphia for domestics, and New York for imported merchandize. He goes direct to the manufacturer and importer. Baltimore cannot expect to become the depot of a large trade, until she surrounds herself with a manufacturing population, and possesses a large foreign commerce. But will her people change their habits, and become sailors, shoemakers, tailors, weavers, etc., etc? *The answer to this question determines the future destiny of that city.*

The committee on resolutions, to whom was referred the address of the board of trade, after discussion and consultation with the different interests south, south-west, north and north-west, reported the following resolutions:

Resolved, That we highly approve the admirable address by which we have been welcomed to Baltimore, and that we sympathise with the noble efforts which the city of Baltimore has made, and is yet making, to secure the trade and commerce of the states to the south, and in the valley of the west.

Resolved, That the prosperity and permanency of the Union will be greatly promoted by the multiplication of the means of commercial and social intercourse to the several states, and that this convention recommends that every effort should be made consistent with our obligations to the whole, to increase the intercommunication between the cities and States of the South, West, and South-west.

Resolved, That the Atlantic cities and states of the south are on the great natural highways of commerce—the Gulf stream—and these states should improve the facilities offered by nature by resorting to all the aids of science and art.

Resolved, That among these facilities we hail the speedy completion of the Baltimore and Ohio railroad with great satisfaction, and look to it as opening a new channel of trade greatly beneficial to the interior states of the Union, and especially those bordering on the Ohio river.

Resolved, That the question of a great commercial centre of commerce for national exchanges will necessarily depend upon the cheapness of transportation, and that it is of great importance to the west and south, and south-west, to ascertain the prices of freight and transportation to Baltimore, and from Baltimore to Liverpool, and other important points of Europe.

Resolved, That a committee of —— be appointed by the chairman to ascertain and publish, after the completion of the Baltimore and Ohio railroad to Wheeling, the rates of transportation on that road of all important articles of commerce.

Resolved, That it is recommended to the merchants of Baltimore as a means of securing the trade of the west, southwest and south, to establish a line or lines of steamers between Baltimore and Liverpool, and other important parts of Europe.

Resolved, That while we disdain the slightest prejudice or hostility to the welfare and prosperity of any particular section or city, north or south, we would promote, as we think we reasonably might, consistent with the laws of trade, and its great central position, the commercial interests and prosperity of Baltimore as being well calculated to excite a wholesome and beneficial competition with more northern Atlantic cities, which could not fail to be peculiarly advantageous to the south, south-west and west, and in fact to the nation at large.

The resolutions are excellent, but they by no means embrace all that should have been the objects of the convention. We think the following would have been an improvement upon the foregoing:

Resolved, That one great obstacle to the prosperity of Baltimore, is the high rates of fare upon all the artificial avenues leading into that city, which operate to check the movement of persons and property, and throw them upon other routes by which the city is avoided, and a trade to which she is entitled, lost.

Resolved, That the charge of 5 cents per passenger per mile, on the Washington branch of the Baltimore and Ohio railroad, is in violation of enlightened principles of commercial policy, and prejudicial to the interests of the stockholders of the road.

Resolved, That the high rates of fare, and low speed, upon southern railroads, are the want of a healthy competition, which is now discouraged by legislative enactments; and that we earnestly request the members of this convention to use all the efforts in their power to secure the passage, throughout the southern States, of *General Laws*, allowing the direction and routes of railroads to be determined by private enterprize, and the commercial and business wants of the people.

Resolved, That we generally approve of the liberal policy adopted by the State of New York, in reference to railroads, which renders their construction the common right of all its citizens, and that we see in this policy the cause of the extraordinary progress of these works, and the low rates to which cost of transportation has been reduced in that State.

Resolved, That *southern* timber shall be used in the construction of *southern* ships, and that we will no longer consent to our raw materials being taken north to be returned to us in a shape prepared for use, and that we will sever, by our own industry and enterprise, that unmanly relation we now sustain to the northern States.

Resolved, That whereas the sandy and barren peninsula of Cape Cod, in Massachusetts, is the nursery of the maritime greatness of that State, and the seat of many of the most important branches of her manufacturing industry, the *Eastern Shore* of Maryland, in the same manner, can be made to become the seat of a great *southern* commercial marine, and the theatre of a dense, active and wealthy manufacturing community.

Resolved, That to attract the trade of the country to Baltimore, that city must offer to buyers a greater assortment, both of foreign and domestic merchandise, than can be found anywhere else; and this can only be secured by a greater variety of manufacturing establishments located within, or near, that city; and by the establishment of lines of steam and sailing vessels, which shall render her the point of cheapest access from foreign ports, than any other Atlantic city.

The interpolated resolutions will, we hope, receive attention at the adjourned session of the convention to be held in Memphis, Tennessee.

We go in for Baltimore, we approve of the convention, the spirit displayed, its action, and the results. We believe it well calculated to promote its objects. It is a start in the right direction. But as we learn more from those who censure, than those who commend, we have made free to suggest some important matters overlooked, but which are necessary to accomplish the object proposed. We hope our suggestions will be received in the spirit in which they are offered, which is a sincere desire to place that city in the path to the greatness at which she is aiming.

American Railroad Journal.

Saturday, December 25, 1852.

Railroads in Western New York.

We believe that no *agricultural* portion of the United States of equal extent, will be so well supplied with railroads, when the works in progress shall be completed, as western New York. In that portion of the State, west of a line drawn north and south through Syracuse, and embracing in an area of about 10,000 square miles, the following lines of road are either in operation, or progress.

	Miles.
Syracuse and Rochester	104
Straight Line between do	80
Syracuse and Oswego	35
Rochester and Niagara Falls	76
Syracuse and Binghamton	80
Cayuga and Susquehanna	35
Lake Ontario, Auburn and Southern	73
Buffalo and Rochester	68
Chemung	19
Canandaigua and Niagara Falls	150
Buffalo, Corning and New York	132
Buffalo and New York City	92
Sodus Bay and Southern	35
Erie	245
Lake Shore	69
Buffalo and Niagara Falls	22
Little Valley and Erie	50
Genesee Valley	85
Buffalo and Olean	75
Rochester and Erie	30
Corning and Blossburgh	15
Total	1,575

Other projects are maturing which will carry this aggregate to over 1,600 miles, or about one mile of road to every 6 square miles of territory.—Supposing these roads to run parallel to, and at an equal distance from each other, every acre of land would be brought within 3 miles of a line of railroad, averaging only 1¼ miles from one. In a year or two more, every farmer in Western New York, will have a line of railroad running by his very door.

When we take into consideration the facts, that this portion of the State is entirely devoted to agriculture, and that the roads have been mainly constructed by the means of those living upon the lines, certainly no portion of the country can come up to this, for the extent of its railroads, or the enterprise displayed in their construction, what is better, the

aggregate investment is a very profitable one, yielding large returns to stockholders, at the same time, proving an inestimable benefit to the country traversed by them.

New Railroad Project in New York.

A railroad mreting was held at Gowanda a few days since, of which R. Plumb, Esq., was chosen chairman. and C. C. Torrance, Esq., secretary. A route was recommended which would follow the line of the Buffalo and State line road, from Buffalo as far as the Eighteen Mile creek, and from thence branch off south through the towns of Evans and Eden, passing a little west of Kerr's Corners, thence through the west part of Collins on nearly a natural level till it reaches the Cattaraugus creek, opposite the mouth of the Point Peter creek, thence crossing the Cattaraugus and following up the Point Peter creek, proceeding so as to reach the line of the New York and Erie railroad at the north end of Maple Hill, thence following the line of the New York and Erie road, which is in a direct course, till opposite the mouth of Tuncangaunt. Ralph Plumb, Porter Welch, James Locke and C. C. Torrance, were appointed a committee for the purpose of procuring a survey of the proposed line, and taking such other measures in respect to the matter as they should deem advisable.

A new railroad company was organized at Rochester, Dec. 1st, called the Rochester and Erie railroad company, for the purpose of connecting that city by a broad gauge, with the Canandaigua and Niagara Falls railroad, and with the Coshocton Valley railroad. The proper articles of association were adopted, stock subscribed and payment made. The first directors are John M. French, Rufus Keeler, Oliver Culver, N. Osborn, S. P. Ely, C, A. Jones, G. D. Stilson, G. H. Ely, J. W. Bissel, O. L. Angevine, O. Gaffney, M. Loder, F. A. Whittlesey. The officers are John M. French, president, Nehemiah Osborn, vice president, J. W. Bissel, secretary and treasurer.

Debt of the United States.

The following is a statement of the Public Debt on the 1st of Jan. 1851 and 1852:

Denominations of stock.	1851.	1852.
Old funded and unfunded debt, old treasury notes and Mississippi certificates, and unclaimed dividends.	$119,585 98	$116,716 99
Debt of the corporate cities of the District of Columbia, assumed by Congress.....	840,000 00	780,000 00
Treasury notes.....	192,561 64	161,961 64
Loan of 1842, redeemable Jan. 1, 1863....	8,198,686 03	8,198,686 03
Loan of 1843, redeemable July 1, 1853.....	6,468,231 35	6,222,931 35
Loan of 1846 redeemable Nov. 12, 1856.....	4,999,149 45	4,999,149 45
Loan of 1847, redeemable Jan. 1, 1868.....	27,299,650 00	26,265,300 00
Loan of 1848, redeemable Juiy 1, 1868.....	15,740,000 00	15,740,000 00
Texan indemnity 5 per cent stock....	5,000,000 00	5,000,000 00
Mexican indemnity stock.....	303,573 92	
	$59,161,438 37	$67,484,745 26

This does not include a debt owed the Smithsonian Institute for Arkansas bonds, (about $500,000) nor the additional five millions unissued stock owed for the Texas debt; nor the trust funds owed the Indians under various Indian treaties, which are over $6,000,000.

The President in his last annual message says of this debt, there had been discharged the fiscal year ending June 30, principal and interest..$9,455,815
Since that time principal purchased.... 2,456,547

Total.....$11,912,362

New York.

Dansville and Burns Railroad.—The people of Dansville held a meeting a few days since in reference to a railroad from that place to Burns, to connect with the New York and Erie. The distance is a trifle over nine miles, and the estimates of cost by an engineer is about $230,000.

Stock and Money Market.

The money market continues easy, with the exception of the slight temporary pressure usual at the close of the year.

The bond market is also active, with a limited supply of securities most in demand. There seems to be no doubt that the supply of money for some time to come, will be fully up to the demand for our public works.

The principal public sales during the week have been the bonds of the Covington and Lexington railroad, which are reported as follows:

5,000, 90; 5,000, 89; 5,000, 88½; 10,000, 87½; 10,000, 87.38; 10,000: 87½; 10,000, 87.13 120,000, 87.

Railway Share & Stock List;

CORRECTED WEEKLY FOR THE

AMERICAN RAILROAD JOURNAL.

NEW YORK, DECEMBER 25, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	100½
U. S. 6's, 1856	108½
U. S. 6's, 1862	113½
U. S. 6's, 1862—coupon	114
U. S. 6's, 1867	119½
U. S. 6's, 1868	120
U. S. 6's, 1868—coupon	120½
Indiana 5's	102
Indiana 2½	59½
" Canal loan 6's	97
" Canal preferred 5's	47
Alabama 5's	98
Illinois 6's, 1847	86½
Illinois 6's—interest	158
Kentucky 6's, 1871	112
Maryland 6's	111½
New York 6's, 1854-5	108
New York 6's, 1860-'61-'62	119
New York 6's, 1864-'65	120
New York 6's, ½ y., 1866	122
New York 5½'s, 1860-'61	113½
New York 5½'s, 1865	113
New York 5's, 1854-'55	108
New York 5's, 1858-'60-'62	109½
New York 5's, 1866	115
New York 4½'s, 1858-'59-'64	101
Canal certificates, 6's, 1861	—
Ohio 6's, 1856	105½
Ohio 6's, 1860	109½
Ohio 6's, 1870	114
Ohio 6's, 1875	114
Ohio 5's, 1865	106
Ohio 7's, 1851	105½
Pennsylvania 5's	99½
Pennsylvania 6's, 1847,-'53	101
Pennsylvania 6's, 1879	99½
Tennessee 5's	93
Tennessee 6's, 1880	109
Virginia 6's, 1886	111

CITY SECURITIES—BONDS.

Brooklyn 6's	105
Albany 6's, 1871-1881	107½
Cincinnati 6's	104
St. Louis	97½
Louisville 6's 1880	97½
Pittsburg 6's, 1869-1871	103½
New York 7's, 1857	108
New York 5's, 1858-'60	103½
New York 5's, 1870-'75	103½
New York 5's, 1890	105
Fire loan 5's, 1886	—
Philadelphia 6's, 1876-'90	106½
Baltimore 1870-'90	107
Boston 5's	102

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1867	114½
Erie 2d mortgage, 7's, 1859	107½
Erie income 7's, 1855	101½
Erie convertible bonds, 7's, 1871	102½
Hudson River 1st mort., 7's, 1869	109½
Hudson River 2d mort., 7's, 1860	100½
New York and New Haven 7's, 1861	105
Reading 6's, 1870	93
Reading mortgage, 6's, 1860	99½
Michigan Central, convertible, 8's, 1860	10½
Michigan Southern, 7's, 1860	100½
Cleveland, Col. and Cin. 7's, 1859	123
Cleveland and Pittsburg 7's, 1860	102
Ohio and Pennsylvania 7's, 1865	108
Ohio Central 7's, 1861	98

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

	Dec. 23.	Dec. 16.
Albany and Schenectady	112½	113
Boston and Maine	107½	110
Boston and Lowell	109	109½
Boston and Worcester	105	106½
Boston and Providence	91½	92
Baltimore and Ohio	95½	98
Baltimore and Susquehanna	34	34
Cleveland and Columbus	129	132
Columbus and Xenia	—	—
Camden and Amboy	150	—
Delaware and Hudson (canal)	130	130
Eastern	100	99½
Erie	95½	95½
Fall River	—	—
Fitchburgh	103½	106½
Georgia	—	—
Georgia Central	—	—
Harlem	72	73½
" preferred	115	111½
Hartford and New Haven	129	129
Housatonic (preferred)	35	35
Hudson River	75½	75½
Little Miami	120	120
Long Island	36½	47
Mad River	99	99
Madison and Indianapolis	109	111
Michigan Central	111½	113½
Michigan Southern	132	134½
New York and New Haven	115½	115½
New Jersey	132	131
Nashua and Lowell	—	—
New Bedford and Taunton	117	117
Norwich and Worcester	53½	53½
Ogdensburgh	27½	27½
Pennsylvania	49⅜	49⅜
Philadelphia, Wilm'gton & Balt.	39½	39½
Petersburg	—	—
Richmond and Fredericksburg	105	105
Richmond and Petersburg	35	35
Reading	98	100½
Rochester and Syracuse	125	125½
Stonington	57½	56½
South Carolina	122½	122½
Syracuse and Utica	133	133
Taunton Branch	115	115
Utica and Schenectady	143	14
Vermont Central	17½	17
Vermont and Massachusetts	20	22½
Virginia Central	40	40
Western	102	105½
Wilmington and Raleigh	57½	57½

Railroad Lanterns.

Our readers will find an advertisement of every variety of railroad Lanterns in another page

The Railroad System beyond the Mississippi.

The oldest and richest State beyond the Mississippi is Missouri, and the shaping of her policy with respect to railroads must exert an important influence on the entire system. St. Louis will undoubtedly be the first centre of railroad operations, looking westward and southward, the crystalizing nucleus of the iron tracks in the far west, and it is of vast importance that the energies of the State should be exerted in the right direction. An article on this subject has been published in a late number of the "Western Journal," setting forth the advantages of the four leading projects of Missouri and their probable resources for a speedy commencement. These roads are the North Missouri, the Pacific, the South Western and the Iron Mountain roads.

The North Missouri road after crossing the Missouri at or near St. Charles, follows the level and fertile ridge between that river and the Mississippi and the counties on its line are among the richest in the State. The St. Joseph and Hannibal road, the construction of which is already secured by the grant of lands on its line may be considered its branches east and west. The resources applicable to this line of about 250 miles in length and a total cost of $4,500,000, are as follows: The estimated resources of the road are county subscriptions in the 10 counties through which the road passes, at an average of $100,000 from each, amounting in all to $1,000,000. Individual subscriptions in St. Charles and the richer counties $500,000. In St. Louis the same amount, and with a State credit of a million and a half, less 15 per cent. for interest to be paid on the whole sum for 2½ years, at 6 per cent. the means will amount to $3,275,000, leaving only $1,225,000 for the credit of the road to furnish.

The route of the Pacific road is only approximately located—but in carrying out the system it may be assumed that the Pacific road proper will be directed along the shortest route to the mouth of the Kansas river, with the Southwest. The estimate subscriptions are according to the writer in the Western Journal as follows:

The distance, it is believed, will be about 280 miles, and the highest estimate $6,500,000. The means for building this road may be stated as follows:

Present subscription	$1,500,000
County subscription that may be easily procured from Franklin county $50,000; Gasconade 25,000, Osage 50,000; Cole 50,000; Moniteau 50,000; Pettis 100,000; Johnson, additional, 100,000; Jackson, additional, 150,000	575,000
Private subscriptions through same counties	150,000
State credit at present granted	$2,000,000
State credit, additional	1,000,000
Deducting 15 per cent interest	$2,550,000
	$4,875,000

Leaving $1,625,000 to be made up by additional subscription in St. Louis, and by stock to contractors (that so far has been 10 per cent.,) or by the credit of the road, that would doubtless furnish it.

To secure the payment of interest on State credit, the road has only to earn about $640 per mile.

The Southwest road will branch from the Pacific about 40 miles from St Louis, its length is estimated a 300 miles, and cost at $6,600,000. The route is rich in mineral wealth, iron, lead, copper and coal. The trade of North Western Arkansas with its coal and salt will be drawn to this route.—Its means are as stated in the Journal:

County subscription from Franklin $25,-Crawford $50,000; Pulaski $50,000; Camden $25,000; Laclede $50,000; Dallas $25,000; Wright $25,000; Green $200,000; Lawrence $100,000; Jasper, Newton and Barry $50,000...	$600,000
This route opening a new section of country, would draw subscriptions from the neighboring counties, which, with the private subscription that can be obtained, would probably amount to	400,000
St. Louis city, county, and private	500,000
Credit of the State $1,000,000, which, deducting 15 per cent. interest, would yield	850,000
Between 1,000,000 and 1,300,000 acres of land, say worth	2,500,000
	$4,850,000

Leaving to make up by stock or credit of road about $1,750,000. With the credit to the stock of the bonus of land this could easily be procured when needed. To pay interest on State bonds, the road need only earn $200 per mile.

The Iron Mountain road, according to recent surveys, show a practicable route, 70 miles long, and costing about $1,750,000. The mineral riches of this line are well known. Its means are stated as follows:

Subscription of counties and individuals on the line of road	$450,000
St. Louis city, county and individual	300,000
State credit $750,000, deducting 15 per cent	637,000
	$1,387,000

Leaving but $363,000 to be got on the credit of the road. Here are 900 miles of railroad, the estimated cost of which is $19,350,000, and the means, independent of the credit of the road and contractors stock are estimated at $14,387,000. The amount proposed to be advanced by the State on her credit is $4,250,000, which, added to the amount already loaned to the Pacific, and the St. Joseph and Hannibal roads, makes a total of $7,750,000, State loan secured by mortgage on the roads, and advanced equally with the stock subscriptions.

Of these roads collectively and the future course of the State, the following are the concluding observations of the article from which we have drawn the previous facts and estimates.

"The four roads mentioned are the trunk lines of the State, *and of the West*. Each one may bear the closest examination, and stand on its own merits, and yet from the peculiarities of circumstances and the jealousies of legislation, all may have to act and pass together. The credit from the State can only be applied within the next five years, and is not at once thrown into the money market to the extent granted. The credit is dollar for dollar with private capital, and applied only to main trunk roads, that a man running can see are all good in themselves. The foreign capitalist, looking as he does closely, will quickly see that *each of these roads adds to the wealth of the State ten-fold what she lends*; and seeing at the same time that this credit is only applied to the main lines, and does not extend itself, for the time being, to the numerous branches that, for local benefit, will extend from each line—some good and some bad—will feel safe in his investment. The very combination of these interests at this time can prevent, for their own defence, (all being interested in the safety of the State credit,) the extension of that credit to the local branches of the State; *and herein is one element of safety in acting together in the State Legislature.*"

Public opinion, we may add, is being awakened throughout the State, and the enterprise and wealth of St. Louis will not fail to be energetically put forward to advance these her western sources to commercial importance. The advantages of the avenues connecting her with the east, she shares with other cities, but in her western enterprises she has no rivals nor partners. Between her and the Pacific is no competing depot, and the attractions of a finished line of several hundred miles will infallibly draw to her the possession of the trade and travel of the Indies, China and California. These are prizes that it is true are distant both in space and time, but they are no less certain to be secured in part or entirely by the first and most active community that reaches forth for them.

New Railroad from Whitehall to Plattsburg.

A company was organized at Keeseville on the 16th inst., to build a railroad to connect the existing Montreal and New York railroad, at Plattsburg, with the Washington and Saratoga railroad at Whitehall, passing along the west shore of lake Champlain. A board of directors was chosen among whom are Gouverneur Morris and George L. Schuyler of this city.

Philadelphia Trade With Canada.

Having noticed the project of a railroad from lake Ontario to a point of intersection with the Cayuga and Susquehanna road, we deem it appropriate to insert an article on the subject of Canada trade, from the Philadelphia North American and United States Gazette. It is mainly an appeal to Philadelphians; yet it sets forth many facts which will be interesting to the reader concerning the projected line.

"PHILADELPHIA TRADE WITH CANADA."

It appears from the public journals of Canada and western New York, that the spirit of enterprise which constructed the Erie canal in New York state, several years ago pushed its way across the lines in quest of fields for similar achievements in Canada, and that upon reaching them it aroused Canadians from a drowsy inactivity, and infused into them new life. It at first supplied them with labor-saving machines, adapted to nearly every trade and occupation, and taught them how to raise crops, how to rear horses, cattle and sheep, how to manufacture and how to trade. And for the last 15 years, Canada West has been increasing in population, in wealth, and in commerce. It appears further, that since the Canadians were thus aroused into activity, they have, with the aid of the Imperial government, connected Lakes Erie and Ontario with a ship canal, 28 miles in length, at a cost of £954,823 sterling; that they have opened a canal through Burlington Bar, and made the city of Hamilton approachable with steamers and small craft; that they have commenced a railroad from Toronto to lakes Simcoe and Huron, and also another from Hamilton to Windsor, and that they have constructed a large number of steamers which are now traversing the lake which washes their southeastern shore.

And it appears from their last census reports that Hamilton has become a city of about 15,000 inhabitants, Toronto a city of about 26,000, and Kingston a city of about 11,000, and that little villages are growing up all along the shores of lake Ontario and in the interior. It also appears from the reports of their custom houses and ours on the frontier, that the Canadians are carrying on a large import and export trade across the lake, but that they have been embarrassed in this considerably by the lack of safe and commodious harbors on our shore at points from which there were any modern thoroughfares to the principal markets.

From a report of several gentlemen residing at or near the city of Auburn, in Central New York, lately published, it seems that this whole subject was investigated by them with a view to the improvement of harbor advantages on the southern shore of lake Ontario, and the construction of a railroad southward therefrom.—Those gentlemen were a committee appointed to investigate the whole subject of the nature and amount of the trade of Canada and its tendency. In their report they give the following as the entries at certain Canadian ports during the years 1848, 1849 and 1850:

	1848. £ s. d.	1849. £ s. d.	1850. £ s. d.
Kingston	75,947 8 9	96,011 12 10	124,760 10 10
Bath	34.059 19 3	3,949 10 5	4,314 16 10
Belleville	11,182 8 8	21.296 5 8	23,910 4 4
Picton	3,029 17 1	7,509 3 11	7,915 6 4
Colborne	435 9 11	172 11 4	1.014 2 4
Grafton	262 8 5	672 9 7	1,291 8 0
Cobourg	13,067 10 8	17,105 19 7	21,811 1 1
Bondhead	817 2 2	760 6 3	937 0 11
Toronto	197,225 5 3	326,863 16 9	634,722 17 2
Oakville	6,914 15 0	7,768 18 1	10,391 7 10
Wellington	302 9 10	676 17 8	4,383 2 5
Hamilton	235,344 13 5	280,758 5 4	396,782 14 10
Dalhouse	6,253 2 7	6,684 2 1	14,394 10 9

The committee give the exports of 1850, as the same were cleared from the same custom houses:

Kingston	£87 562 7s 1d
Bath	9,028 5 9
Belleville	50,484 16 6
Picton	3,502 4 0
Colborne	552 11 0
Grafton	1,208 0 0
Cobourg	13,646 8 5
Bondhead	9,971 8 9
Toronto	67,557 4 11
Oakville	44,651 8 0
Wellington	13,469 7 6
Dalhousie	79,528 1 9

Having ascertained where the exports cleared from, the committee came upon this shore of the lake to see where they were entered, in order to determine which way they were tending. They found the entries to be as follows:

Port of Buffalo creek	$446,900
Port of Lewiston	61,807
Port of Rochester	100,189
Port of Oswego	2,087,622
Port of Sacketts Harbor	26,137
Port of Cape Vincent	53,079
Port of Ogdensburg	211,925

This indicated clearly, that the tendency of that trade was southerly or southeasterly to the seaboard.

Now, it seems that the harbor of Oswego is only the mouth of a river, emptying into the lake at a protruding point of land, and that the harbor, so called, is not large enough nor safe enough for lake commerce: but that some fourteen miles west of that point there is an indentation or cove in the lake, which, with a little improvement, would be safe and spacious; and that besides this, there is a bay putting up into the land, with low, bold shores, which serve as natural wharves for lumber, etc., brought there. This place, now called Fair Haven, (formerly Little Sodus) appears to have been selected as the proper port to be opened for the growing trade of the lake; and then they pursued their investigations in relation to the trade at the port next to this, (Oswego) for the ensuing year. They give the result of importations, exportations, and coastwise trade for 1851, at $22,595,246. They then proceed to demonstrate that this harbor at this bay (Fair Haven) will command the trade of the lake, in case there shall be constructed a railroad therefrom southward toward the city of New York.

A railroad company, styled "The Lake Ontario, Auburn and New York railroad company," thereupon organized to construct a railroad from Fair Haven, to a point of intersection with the Cayuga and Susquehanna railroad, a distance of 73 miles, and the grading and masonry thereof has been put under contract, to be completed in one year. The capital stock of that company is published at $1,500,000, and is being subscribed for liberally by the towns along the line. Auburn, in her corporate capacity, has taken stock to the amount of $100,000. Meanwhile congress has appropriated in the River and Harbor bill, just passed, a sum nearly sufficient to defray the expenses of opening and improving the landing at *Fair Haven*.

Having been made acquainted with the foregoing details of operations in progress to open a new harbor on the southern shore of lake Ontario, and to construct a railroad therefrom, southward, via Auburn, Oswego, Scrantonia, and the Delaware Water Gap, to N. York city, it has seemed proper to make these facts public.—The distances are claimed to be as follows;

From Fair Haven to Owego	94 miles
" Owego to southern end of Legget's gap road	70 "
" thence to Delaware Water Gap	45 "
" thence to New York	84 "
Total from lake Ontario to N. York,	293 "

We have been told that it does not exceed 75 miles from Philadelphia to the Water Gap. If it does not exceed that distance, the trade that is pushing its way to New York, may be divided with that city by the construction of a railroad which shall be of the same gauge as the New York railroad down the river to this city. The distances in that event would stand very nearly as follows:

From Lake Ontario, via Auburn to Owego	94 miles.
" Owego to Delaware Water Gap	115 "
" Delaware Water Gap to Philadelphia	75 "
Total from Lake Ontario to Philadelphia	284 "

Thus giving the advantage of nine miles in our approximation to Canada over New York, allowing the distance from Philadelphia to the Delaware Water Gap to be 75 miles, which is probably less.

Having presented these important facts we have but few words more to say. It is very apparent that the Canada trade, now and prospectively, is a rich field of Mercantile Adventure.—The commerce of the north-west is seeking an outlet through lake Ontario, and this new harbor and railroad. It is destined for New York, but comes within 75 miles, or thereabouts, of us, on its way there. We may command that trade if we will.

Again, the two railroads in Canada, above mentioned, constitute a thoroughfare which is to be brought into line with the lake Ontario, Auburn and New York railroad for the transportation of passengers. If it can also be brought into line with the Philadelphia and Baltimore railroad, it will constitute a line of railway from Lake Huron to Simcoe, in Canada, to Toronto and after a steamboat transit laterally across Lake Ontario to Fair Haven will resume again, to be continued to the Gulf of Mexico. Such a stupendous line cannot fail to draw into it an amount of business and travel unequalled in the United States, and yield a heavy profit to the stockholders. Will the capitalists of Philadelphia consider this subject with a view to some immediate action in relation to a speedy connection with the Northern road at the Water Gap?

Railroads in Arkansas.

Gov. Roane of Arkansas, in his recent message at the opening of the Legislature, urges the introduction of railroads into that State. He proposes the construction of roads, as follows: 1, a central road from a point opposite Memphis, on the Mississippi, to Fulton, on the Red river; 2, a road from Helena, on the Mississippi, to Fort Smith, on the Arkansas river—running through the State from east to west, Fort Smith being on the western boundary line of Arkansas; 3, a road running north and south through the State, to constitute a part of the proposed road from St. Louis to New Orleans. The first mentioned road is designed ultimately to be extended to the Pacific, the Governor esteeming this to be the most feasible route for such a great national highway. He thinks the State has ample resources for building these roads, and that they will be sure to yield six per cent. interest on the cost. The resources on which he counts are: the proceeds of the sale of the 500,000 acres of land devoted to internal improvements; the increased revenue to be derived from the increased value given to real estate by the railroads and the influx of population, and the large amount of lands which will certainly be granted to the State for railroad purposes. All these, he thinks, will yield to the State a fund but little short of $3,000,000. From the city of Memphis, he expects $500,000 more, in subscriptions of stock; that counties shall be allowed to take stock; that the State shall become honest, and make an effort to restore her credit, by funding her debt, estimated at some two millions, and issuing new securities, payable in 1890. He is assured that a favorable arrangement can be made and more funds obtained by this means. When individual subscriptions, and the subscriptions of railroad companies, east of the Mississippi, are added, he thinks ample means will be provided to complete the three great roads proposed and their branches.

New York.

Geneva and Ithaca Railroad.—The engineer reports the length of this proposed road, as the line has been traced, to be something over forty miles; the highest grade is forty-five feet to the mile, and for thirty miles the rise is less than forty feet. The estimated cost of building and equipping the road is $798,164. Amount to be raised, $383,991. The distance from Geneva to Scranton and the coal mines by this road will be 156 miles. The distance to New York will be twenty-one miles less than by any present route, and to Philadelphia 106 miles less. It is proposed to extend the road northwardly from Geneva to Sodus Bay, on Lake Ontario.—This is an enterprise that appears likely to be carried out. People in Ontario, Seneca and Tompkins counties are interesting themselves in it, and considerable sums have already been subscribed.

Ohio.

We copy the following notice of a new railroad from the Xenia Torch Light:

Cincinnati, Lebanon and Xenia Railroad.—We published, week before last, a call for a meeting of the stockholders in the above road, at Lebanon for the purpose of organising. We did not then, nor do we now, know much about the proposed road, or the intentions of its projectors. The Lebanon Star of last week says, that at the meeting advertised, the following gentlemen were elected directors:—J. P. Gilchrist, R. G. Corwin, Jacob Egbert, Chas. Elliott, John A. Dodds, J. Q. Lamb, David Evans. The directors elected J. P. Gilchrist, President; E. B. Stevens Secretary, and David Evans Treasurer. These officers, we believe, are all Warren county men. The Star says: "The charter under which this company is organised, is one of the best in the State. The required amount necessary to secure it, $100,000, has already been secured, and in a few days, we understand, the books for the reception of additional stock will be opened. The object of the company is to construct a railroad from Sharon, via Lebanon, to Springfield, and to form such connections with other companies as may be expedient."

Franklin and Warren Railroad.—The Ravenna Whig says that a permanent organization of the company was effected at a meeting of the directors, held at Franklin on the 25th and 26th of November. The officers are:—Marvin Kent, President; Zenas Kent, Treasurer; J. W. Tyler, Secretary; Thos. Earl, Corresponding Secretary; J. P. Rezner, of Cincinnati, General Financial Agent. Directors: Marvin Kent, Zenas Kent, and Thomas Earl, of Franklin; Bela B. Clark, of Ashland; L. J. Iddings, of Warren; Wm. Porter, of Newton Falls; and Daniel Upson, of Tallmadge.

We learn that reliable cash subscriptions and pledges to the company to the amount of $800,000 have been secured, and that arrangements have been made for opening books of subscription in New York, Boston and Cincinnati. The board have now two efficient parties of engineers on the line, and the Star says, "lettings of the road will be made as soon as the line can be properly prepared for it." The movers in this enterprise expect to make this route a trunk road between the

east and west, by extending it through Pennsylvania and connecting with the New York and Erie road, and with the southwestern, northwestern and western railways.

Texas.

Western Railroad.—The San Augustine (Texas) Herald, of the 30th ultimo, publishes a report of the meeting of the board of Commissioners of the Texas Western railroad company, held at San Augustine on the 25th. A report was read from the engineer Mr. West, giving an account of his survey of the Sabine river, and the following preamble and resolution were adopted:

Whereas, This board has been officially informed that the corps of engineers of the New Orleans and Opelousas railroad had accepted our invitation and would be at the Sabine river in a few days for the purpose of joining the engineer of this company in fixing the crossing point on said river, therefore.

Resolved, That the engineer of this company with himself in readiness to meet and to co-operate hold the engineers of the New Orleans and Opelousas road, at such time as may suit their convenience.

Railroads in Spain.

The Government of Spain, hitherto behind all other European governments in the progress of civilization and commerce, is now contemplating a grand system of railways. A wealthy company of Spaniards and Englishmen have originated the scheme, but the Government is relied upon to afford the necessary facilities for carrying it into execution. Railroads from Madrid to Valencia, from Madrid to Barcelona, and from Alar to Santander, are nearly completed. A railroad has been graded fifteen leagues from Seville on the route to Cordova. A Prussian engineer is engaged in laying out a road from Alicant to Almanasa. These roads all pass through productive regions, are said to be planned with great judgment and science, and will open a communication between Madrid and the most fertile parts of the Peninsula, and at the same time connect those regions with the Mediterranean, France and the Atlantic—and will thus, if successfully accomplished, open new channels of trade, and give a new and important impulse to the commerce of neglected Spain.

Vicksburg, Shreveport and Texas Railroad.

We learn from the Ouachita Register that the corps engaged in the survey of the Vicksburgh, Shreveport and Texas railroad are now within a mile of that place, and the account given of the route by the Chief Engineer is, indeed, highly flattering—flattering, not because we had for a moment doubted the practicability of the construction of a railroad across the country between that point and the Mississippi, a portion of which country has so unjustly been termed an "impenetrable swamp," but because the predictions, nay the assertions of some of our best informed delegates in the Convention, "That a railroad over this section of the country could not only be constructed, but with less money per mile than any railroad that has ever been constructed within the limits of the United States," has been corroborated by the report of the Engineer, who says that he has never yet seen a route that presented so many advantages and so few obstacles to the construction of a road; thus proving that the delegates were not mere enthusiasts, but men of foresight and experience, which is one of the best guarantees we could ask that the road will not only be completed, but speedily and with the least amount of money possible.—We understand from the statement of the able Engineer, Mr. Tournadre, that the highest embankment between that point and Bayou Mason will not exceed six feet, and that the cost of the road between that point and the Mississippi will not exceed ten thousand dollars per mile.—*Vicksburg Sentinel.*

Mills, John B., Civil Engineer,
Address to care of Wm. Churchill, Jr., New York.

To Civil Engineers and Surveyors.

A CIVIL ENGINEER and Surveyor of very great experience in every detail of loncating designing and constructing Public Works, especially Railroads, is desirous of a situation, he has been engaged practically for the past sixteen years, and can produce the most satisfactory testimonials.
Address D. F. care of Geo. Gilchrist.
1 m-52 432 Washington-st. N. Y.

Lawrence Scientific School.

HARRARD UNIVERSITY.

The next term of this institution will open on the first day of March, 1853, and continue 20 weeks.

Instruction by recitations, lectures and practical exercises, according to the nature of the study, will be given in:

Astronomy,	by	Messrs.	Bond.
Botany,	"	Prof.	Gray.
Chemistry, Analytical & Practical,	"	"	Horsford.
Comparative Anatomy & Physiology,	"	"	Wyman.
Engineering,	"	"	Eustis.
Mathematics,	"	"	Pierce.
Mineralogy,	"	"	Cooke.
Physica,	"	"	Lovering.
Zoology and Geology,	"	"	Agassiz.

For further information concerning the School, application may be made to Prof. E. N. Horsford, Dean of the Faculty,
December 21, 1852

ASSIGNEES' SALE
AT AUCTION, OF
BOSTON IRON TUBE WORKS,
AT MALDEN, WEDNESDAY, FEB. 23, 1853.
AT 11 O'CLOCK, A. M.
UNLESS PREVIOUSLY DISPOSED OF AT PRIVATE SALE.

The Boston Iron Tube Co's Works, in Malden, four miles from Boston, at the Edgeworth Depot, of the Boston and Maine R. R.

A Side Track from the Railroad runs into the works, and Coal is delivered within thirty feet of the Mill, at the Company's Wharf, on the Malden River.

The property consists of six acres of land with the following buildings and machinery, viz:

A Mill 165 by 90 with an addition 90 by 38, and out buildings covering 4,000 square feet, containing one double skelp furnace, and five welding furnaces, and amply provided with the best machinery for manufacturing 20,000 feet of finished ¾ inch pipe per day.

A Boiler House 30 by 29 feet, a Brick Machine Shop 155 by 50, two stories and an attic, fully stocked with lathes, planing machines, drills, etc., all of the most approved description and in perfect order, suitable for the manufacture of Steam, Water, and Gas fittings, or other machine works.

Also, a Pattern Shop with every modern convenience, and a Smith's Shop with 7 forges, a trip hammer, punching press, etc.

The Works are driven by a Tuft's engine 18 by 3 6 They are warmed throughout by steam; all the Forges and Furnaces lead by underground flues to the large chimney, 15 feet at the base, 140 feet high. There is an abundant supply of water from an Artesian well on the ground.

At the same time will be sold a very large and complete assortment of small Tools and Patterns needed for carrying on the works, all of the best quality.

☞ Terms of Sale; ¼ cash, remainder in three months.

For further particulars, apply to
CHARLES JACKSON, Jr. } *Assignees of the*
CHARLES O. WHITMORE, } *Boston Iron*
GARDNER G. HUBBARD. } *Tube Company.*
At their Office, No. 5 Liberty Square.
Boston, December 15, 1852.

Notice to Contractors.

Alleghany Valley Railroad Lettings.

SEALED Proposals will be received at the Company's Office, in Fourth street, Pittsburg, until the 22nd day of February, 1853, for doing the Grading, Masonry and Bridging on the portion of said road, between Pittsburg and Kittaning, Armstrong County, a distance of 42 miles. The line will be divided into Sections of about one mile in length, and bids may be made for one or more or all of said sections.

Plans, Profiles and Specifications will be ready for inspection on and after the fifth day of February.

Proposals will be received for the Grading, Masonry and bridging, and also for the *superstructure*, and finishing said 42 miles, complete, (except furnishing iron.)

Bids will be received and considered, for the entire work, (except furnishing iron,) from Pittsburg to the New York State line.

Satisfactory references will be required from bidders not personally known to the Company.

For further information, application may be made personally, or by letter, to Hon. William F. Johnston, President of the Company, or to George R. Eichbaum, Esq., Associate Engineer, or to the subscriber,

W. MILNOR ROBERTS, Chief Engineer.
By order of the Board of Managers.
Office of the Alleghany Valley Railroad Company, Pittsburg, December 20th, 1852.

Heavy Forgings.

THE undersigned are now prepared to manufacture all kinds of Heavy Forgings, such as,
STEAMBOAT & SUGAR-MILL STRAPS,
BEAM STRAPS,
CRANK & CAR AXLES.
LOCOMOTIVE FRAMES,
WROUGHT IRON DRIVING WHEELS, &c., &c., &c., at the lowest market prices.
READING STEAM FORGE CO.,
N. & A. MIDDLETON. Sole Agents,
Ridge Road & Callowhill-sts.,
Philadelphia.

N. B. Particular attention paid to the Manufacture of LOCOMOTIVE TIRE, which is warranted equal to any manufactured in the country.
December 17, 1852.

Edge Tools.

THE Underhill Edge Tool Company manufacture from the best of Steel, and Warrant every variety of Edge Tools for the New England, Southern and Western trade, includiug Axes, Adzes Picks and Chisels; all of which are constantly kept on hand at their Warehouse, 53 Kilby street, Boston.
WM. S. SAMPSON, Agent.
December 18, 1852.

I. Dennis, Jr.,
WASHINGTON, D. C.,

ATTORNEY for Inventors, and Agent for Procuring Patents—Practical Machinist, Manufacturer and Draughtsman, of 20 years' experience. Circulars containing important information, with a map of Washington, sent to those who forward their address, and enclose a stamp. 31tf

Huger, T. P.,
Northeastern Railroad, Charleston, S. C.

Railroad Iron.

5000 TONS, weighing about 55 lbs. per yard, now on the way from Great Britain to New Orleans, for sale by
P. CHOUTEAU, Jr., SANFORD & CO.,
No. 51 New street.
December 4, 1852. 4t

Railroad Iron.

5000 TONS Railroad Iron, weighing about 59 lbs. per yard, "Erie" pattern of G L and "Crawshay" manufacture, now on the way from the shipping ports in Great Britain to this port, for sale by
P. CHOUTEAU, Jr., SANFORD & CO,
No. 51 New street.
December 4, 1852. 4t

Change of Hours.

MONTREAL & NEW YoRK AND Plattsburgh and Montreal RAILROADS.

☞ *Open through from Plattsburgh to Montreal.* ☜



FALL AND WINTER ARRANGEMENT.



ON and after Monday, November 1st, 1852, and until further notice, Passenger Trains

LEAVE MONTREAL FOR PLATTSBURGH at 11·45 A M. and 4·15 P. M.
Arrive at 2·46 and 7·37 P. M.
" " FOR OGDENSBURGH at 11·45 A. M.
Arrive 7 15 P M.
" PLATTSBURGH FOR MONTREAL at 12·45 and 7·15 P. M.
Arrive at 3 50 and 9·57 P. M.
" " FOR OGDENSBURGH at 7·30 A. M. and 12·45 P. M.
Arrive at 1·15 and 7·15 P. M

Trains connect at Montreal with Steamers for Quebec, and the St. Lawrence and Atlantic Railroad for Sherbrooke and intermediate stations.

Trains connect at Mooers Junction with Northern (Ogdensburgh) Railroad for Ogdensburgh and Lake Ontario Steamers for Lewiston, Niagara Falls and Upper Canada, and all ports on the Western Lakes.

Trains connect at Plattsburgh by Steamer to Burlington with Rutland and Burlington Railroad and connecting lines for Troy, Albany, New York and Boston, and all intermediate stations. Also with steamers for Whitehall to the Saratoga and Washington Railroad, and connecting lines of road to Troy, Albany and New York.

Passengers will find this route unequalled for comfort and dispatch, and attended with less fatigue and delay than any other. It possesses moreover the advantage of a short Ferriage of only *fifteen minutes* across the River St. Lawrence at Caughnawaga, which has never been known to freeze, and can be confidently relied upon at all seasons of the year.

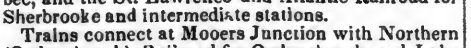
☞ Freight Trains run daily each way.

For particulars see Freight and Passenger Tariff.

BAGGAGE *checked through.*

ISAAC B. CULVER, Superintendent.

Notice to Contractors.



OHIO AND MISSISSIPPI RAILROAD,

FROM CINCINNATI TO ST. LOUIS.

SEALED PROPOSALS will be received at the Office of the Company, in the City of Cincinnatt, until Thursday, the *Sixth day of January next*, for the *Grading, Masonry and Bridging* of 115 miles of the OHIO AND MISSISSIPPI RAILROAD, extending from the intersection with the Jeffersonville and Columbus Railroad, in Jackson county, to Vincennes, in Knox Co., Indiana, comprising all the work on the Road not at present under Contract.

The above contains a large amount of heavy work, including two Tunnels and five large Bridges.

Profiles, Plans and Specifications will be exhibited on and after the 20th inst., at the office in Cincinnati, for the entire line, and in Vernon and Vincennes for the respective divisions, and all necessary information will be given by Mr. D. Hardenbergh and Mr. N. A. Gurney, Division Engineers on the line.

The right is reserved of accepting such proposals as shall be deemed best calculated to secure the prompt and faithful execution of the work. Contractors will be required to commence work immediately.

Proposals will also be received at the same time aud place, for the furnishing and delivery of the Cross Ties required between Aurora and Vincennes, and laying Track from Cincinnati to Vincennes.

O. M. MITCHEL, *Consulting Eng. & Com'r.*
DANIEL MORTON, *Chief Engineer.*
H. C. SEYMOUR & COMPANY.
Cincinnati, Dec. 10th., 1852.

To Railroad Contractors.



SEALED PROPOSALS, addressed to either of the undersigned, will be received at Hillsborough, Highland county, Ohio, until the 1st day of February next, at noon.

For the Graduation and Masonry of the Middle Division of the Cincinnati, Hillsborough and Parkersbugh Railway, extending from Hillsborough, Highland county, to a point near Jackson, Jackson county, Ohio, about 56 miles.

The line will be ready for examination early in January, and Profiles and Specifications of the work will be exhibited at the Engineer's office, in Hillsborough, for one week prior to the 1st day of February.

This Railway forms the recognized continuation across Ohio, of the Baltimore and Ohio, and North Western Virginia Railways, and being located as a link, in the great through line between Baltimore and St. Louis, will be found in every way worthy of the attention of able and enterprising contractors.

The remainder of the line to the Ohio river will be ready for contract about the 1st day of May next. JAMES M. TRIMBLE, President.

ELWOOD MORRIS, Chief Engineer.

RAILROAD CAR AND COACH TRIMMINGS.

Doremus & Nixon,

No. 21 PARK PLACE,

AND

18 MURRAY STREET,

IMPORTERS

OF PLAIN AND FIGURED MOHAIR PLUSH;

Printed and Uncut do. do. entirely new designs;

ALSO GERMAN OIL CLOTHS FOR HEAD LININGS,

Enameled with Gold and Silver and Velvet Printed.

☞ These Headings are the most beautiful ever shown, having been made expressly for **American Cars.** D. & N. are sole Agents.

ALSO, PATENT PARIS COTTON FELT.

☞ This is a patented article, makes a better and more desirable cushion than hair; retains its elasticity longer, and is free from vermin.

It is being extensively used by Car and Omnibus builders, and is sold at about half the price of curled hair.

ALSO, BROCATELLES and MOQUETTS.

ALSO, CURLED HAIR.

N. B.—We have the Plush and Linings *in bond for exportation.*

DOREMUS & NIXON.

November, 1852.

Superior Cast Iron Gas and Water Pipes.

THE Subscriber is prepared to contract for the supply of CAST IRON PIPES required by Gasu or Water Companies, Corporations, etc., delivered in any Seaport in the Union, on reasonable terms. These Pipes are caat on the most improved principle by the best Founders in Scotland, from a superior quality of Pig Iron remelted, are guaranteed to resist a pressure of 300 lbs. to the square inch, or greater if necessary, and to be soft enough to drill easily and freely. Full information regarding price, and references to parties in the United States now using the Pipes, can be obtained on application to the Agent in New York.

WILLIAM ROY, Junr.,
21 Renfield st., Glasgow, Scotland.

J. M. EADIE, Agent,
26 Front st., New York. 1y50

Locomotive Engines.

DANFORTH, COOK & CO, Patterson, N. J., having erected an extensive shop, with the most approved machinery and tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various tools suitable for furnishing repair shops.

The business of machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1y49

Volcano Quartz Mining Co.

VOLCANOVILLE, EL DORADO COUNTY, CALIFORNIA.

BOOKS for subscription to $75,000 of the stock of this company are now open at the office of the company, 78 BROADWAY, New York.

The uncommonly rich claims of this company hold out inducements, to those who are disposed to invest capital in quartz mining in California, not surpassed, if, indeed, *equaled*, by those of any other company in that state.

The extraordinary richness of our quartz, as was witnessed by *thousands* at the late *Fair of the American Institute*, and the extent of our claims, together with the peculiarly favorable location for economical working upon a large scale, will ensure the *most ample* and *satisfactory* returns upon the investment.

It is well understood by practical men that, with machinery working *twenty tons* of quartz, paying *two cents* per lb., large profits will be realized upon each day's work. It is the intention of the company to obtain machinery sufficient to work *fifty* tons per day, and to work it in the most economical manner, by which they feel confident of being able, from their stock which will yield from *two cents* to *twenty dollars* to the lb., to make returns to their shareholders which will not only satisfy, but surprise them.

It will be seen, by reading the pamphlet, containing the *charter*, the laws of California, and the details of our plans of operation, that our estimates are based upon *two cents* per lb., and the expenses of working the mill are but, at present *high prices* for labor, while it is well known to all who reflect upon the matter that, as the cost of labor shall be reduced, the income will be materially enhanced.

If we work 40 tons per day, and yet *two cents* per lb., it will yield $16, while *three, four, or five* cents per lb., would give a proportionate increase of receipts, the expenses of working the mill would not be increased a dollar, and will be less than $470 a day.

Subscriptions can be made by mail, enclosing, *ten* per cent on the amount, of the balance, *twenty* per cent to be paid on the 29th of Nov. inst., and *seventy* per cent on the 29th day of December next, when certificates of stock will be issued.

Pamphlets, containing the statute of California in relation to corporations, the rules and regulations of our locality, the charter and by-laws of the Co., together with much other interesting and useful matter, including a map of a portion of the northern mining regions may be had gratis at the office of the company, No. 78 Broadway, or by mail on application, (postage paid.)

TRUSTEES OR DIRECTORS.

NICHOLAS DEAN,
ROBERT M. STRATTON, } of New York.
NATHANIEL CONKLING,
D. K. MINOR,
JOB S. HEARN,
SUMNER WHITNEY,
BENJAMIN C. DONNELLAN, } of California.
JAMES CLOWDSLEY
JAMES ALLEN,

D. K. MINOR, President,
JAMES CLOWDSLEY, Vice President.
NICHOLAS DEAN, Treasurer.
NATHANIEL CONKLING, Secretary.
New York, Oct. 25, 1852.

To Railroad Co's, Locomotive Builders and Engineers.

THE undersigned having taken the Agency of Ashcroft's Steam Gauge, would recommend their adoption by those interested. They have been extensively used on Railroads, Steamers and Stationary Boilers, where, from their accuracy, simplicity, and non-liability to derangement, they have given perfect satisfaction. In fact, for Locomotives, they are the only *reliable* Gauge yet introduced.

CHAS. W. COPELAND,
Consulting Engineer, 64 Broadway.

Aug. 28, 1852 6m*

Dudley B. Fuller & Co.,

IRON COMMISSION MERCHANTS,
No. 139 GREENWICH STREET,
NEW YORK.

LOW MOOR AXLES,

A SUPERIOR Article for Railroad Cars, supplied by the Manufacturers' Agent—WM. BAILEY LANG, 9 Liberty Square, Boston.

To the Owners of Furnaces, Forges and Rolling Mills,

ENGAGED IN THE MANUFACTURE OF IRON IN NEW JERSEY AND ADJOINING STATES.

THE Subscriber proposes to sell, or lease for a term of years, his well known Iron Mine, at Suckasunny, in Morris County, State of New Jersey, situated nine miles from Morristown, and three from Dover.

Offers to purchase or lease the same will be thankfully received at the mine, till the first day of December next, by the subscriber.

MAHLON DICKERSON,
Suckasunny, N. J.

September 9, 1852. 2m

LOW MOOR IRON.

WM. BAILEY LANG, 9 Liberty Square, Boston, Sole Agent in the United States and Canadas for the Low Moor Iron Co., is prepared to receive orders for this justly celebrated Iron, and offers for sale an assortment of the Round sizes which he now has in store, and which for strength, soundness and uniform quality, stands without a rival.

Griffith's Patent Double Machine for making Wrought Iron Railroad Chairs.

THE undersigned, in calling the attention of the public to the superiority of his Patented Machine for making Wrought Iron Chairs, desires to point out the following advantages which it possesses over all others:

First. It adds to the lips of the chair very considerable strength, which cannot be obtained by any other machine with the same size of plate; and it renders the chair perfect without the aid of a hammer to fit the cross tie, so that it can be firmly united with a rail of any required size now in use.

Secondly. These machines are got up cheap and strong, and are so constructed as to make two sorts or sizes of chairs at the same time, with the same amount of labor as though working a single machine; so that, double the amount of labor is obtained with the same number of hands, besides the saving of coal in the furnace. These facts demonstrate the great advantage and superiority of my Patent Double Machine over all others yet introduced.

All letters, and orders for machines, patent rights, etc., will meet with immediate attention.

Please address ROBERT GRIFFITH,
1m39 Newport, Kentucky.

Gerard Ralston,

21 TOKEN HOUSE YARD, LONDON,
OFFERS HIS SERVICES FOR THE
PURCHASE AND SALE OF
AMERICAN SECURITIES,
COLLECTION OF DIVIDENDS,
DEBTS, LEGACIES, ETC.,
And for the Purchase and Inspection of
Railroad Iron, Chairs, or
any kind of Machinery.

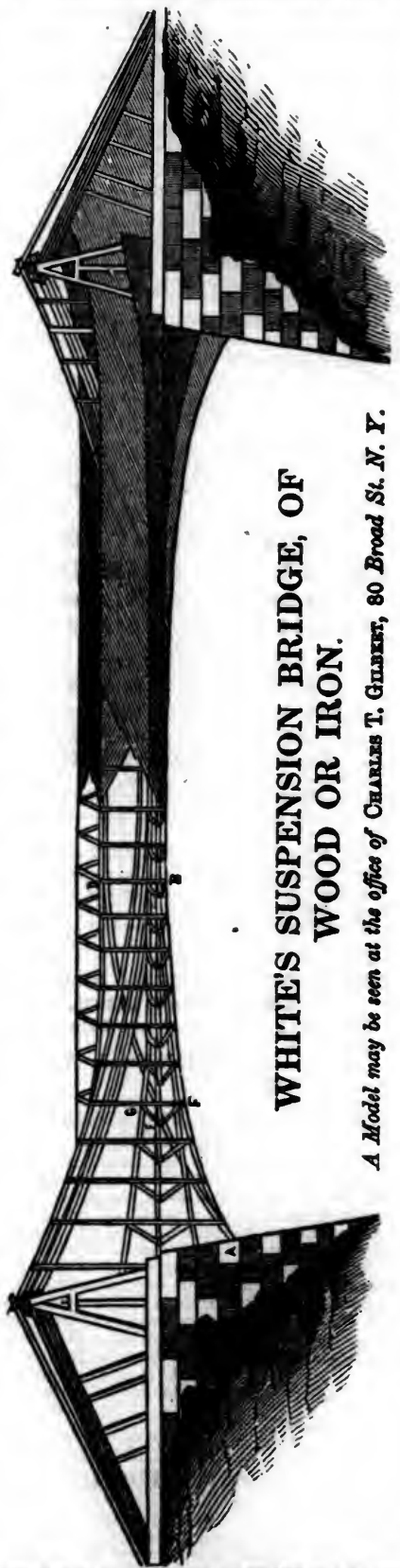
REFERENCES:

Messrs Palmer, McKillop, Dent & Co., London.
" George Peabody & Co, London.
" Curtis, Bouve & Co, Boston.
Richard Irvin, Esq., New York.
Robert Ralston, Esq, Philadelphia.
C. C. Jamieson. Esq., Baltimore. 39

Smith & Tyson,,

IRON COMMISSION MERCHANTS,
BALTIMORE.

REFINED Juniata Charcoal Billet Iron for Wire.
Do. for Bridging, of great strength.
Flat Rock, Boiler and Flue Iron, rolled to pattern.
Elba, Wheel Iron of great strength and superior chilling properties. Elba Forge Iron, American Shoe Iron, Cut Nails, Spikes and Brads, Nail and Spike eds, Railroad Spikes of superior quality, Wrought Chair plates of any pattern, punched or plain.



WHITE'S SUSPENSION BRIDGE, OF WOOD OR IRON.

A Model may be seen at the office of CHARLES T. GILBERT, 80 *Broad St. N. Y.*

Length of span, anything short of 1,500 feet with perfect safety for every kind of travel. The above cut represents a Wooden Bridge with a roof. The arrangement for the Iron Bridge is such as to avoid all the bad effects of changes of Temperature. For a full description, see pamphlets; for further information, respecting models, rights, &c., apply, by letter or otherwise, to AMMI WHITE, or JOSHUA P. THAYER, Proprietors, *Cambridgeport, Mass.*

Office next door to the Athenæum.

The Cambria Iron Company,

ORGANIZED under the laws of Pennsylvania, with a capital of $1,000,000, propose embarking in the manufacture of Railroad Iron, at *Johnstown, Pennsylvania.* The location they have secured offers advantages superior, it is confidently believed, to any other in this country. Iron Ores, semi-bituminous Coal, Limestone, and nearly every article required for the manufacture of Iron, exist, in inexhaustible quantities, on the spot; and these deposits are now worked, and the minerals delivered, cheaper than at any other known point now occupied for the manufacture of Iron. The Pennsylvania Canal and Central Railroad pass through the property, and cross each other at the spot where the mineral veins are most thoroughly opened out; and which location, for its other advantages for facility of manufacturing, and vicinity to a populous borough, has been selected for the establishment of Railroad Iron Works, and for the erection of other Blast Furnaces, in addition to those now in operation.

The attention of capitalists disposed to embark in an enterprise which offers a remunerating profit, even on the low prices of iron current before the rise of the last six months, and which promises to be very lucrative while anything like present rates prevail, and also of Railroad Companies desirous of making arrangements for Iron Rails to be delivered in 1853, is called to this enterprise.

Out of the capital named above, the sum of $360,000 has been devoted to the purchase of about 30,000 acres of land, upon which there are six blast furnaces, which cost, including the personal property accompany them, $350,000. Three of these furnaces are now in successful operation, and by next spring, with an outlay of about $6,000, the other three can go into blast; and at the present price of pig iron, these six charcoal furnaces would realise a net profit of six per cent on $1,000,000 capital.

The company contemplate erecting four more blast furnaces, for smelting with coke the iron ores at Johnstown, and also works for manufacturing railroad iron. To do this, they will require subscriptions in all to the amount of $600,000, and to carry on most profitably the manufacture and disposal of rails, the whole chartered capital should be raised. Subscription lists, providing that no subscription shall be binding unless *bona fide* subscribers for the amount of $600,000 are obtained by the 1st January next, and pamphlets descriptive of the advantages of the locality and estimates of costs, can be had of the undersigned.

D. M. WILSON, Newark,
EDWARD F. GRANT, New York,
SAMUEL H. JONES, Philadelphia,
JOHN HARTSHORN, Boston,
T. F. SECOR, New York,
G. S. KING, Johnstown,
P. SHOENBUGER, Pittsburg,
RHEY, MATHEWS & CO., Pittsburg,
or at the office of the Provisional Committee, at
SIMEON DRAPER'S, 46 Pine st.

The subscriber is prepared to enter into contracts to deliver RAILROAD IRON to Companies requiring it in 1853. SIMEON DRAPER.

Iron.

200 Tons Fishkill Charcoal Iron for sale on reasonable terms, also from 1000 to 5000 tons Fishkill Hematite Ore—delivered at Poughkeepsie or New York. Samples of the ore may be seen at the store of Messrs. Hoffman, Bailey & Co., No. 62 Water st., New York. Enquire by letter to

NORMAN M. FINLAY,
Poughkeepsie, Dutchess county, N. Y.
July 10, 1851.

A. Whitney & Son,

PHILADELPHIA, PA.,

MANUFACTURERS of Chilled Railroad Wheels for Cars and Locomotives. Also furnish Wheels fitted complete on best English and American Rolled and American Hammered Axles. 31tf

Fire Bricks.

SCOTCH Patent—for sale in lots to suit purchasers, by G. O. ROBERTSON,
135 Water street, corner of Pine,
November 19, 1852. New York.

SIMEON DRAPER, No. 46 Pine-st., offers for sale, a variety of RAILROAD BONDS and STOCKS; also CITY, TOWN and COUNTY BONDS, among which are—

1st Mortgage Convertible—
7 per ct. bonds of Canandaigua and Corning R.R., payable in.....New York, 1860
Do. Buffalo, Corning and New York do....1867
Do. Western Vermont Railroad.....do.1861-71
Do. Evansville and Illinois..... do....1862
8 do. Michigan Central.....Boston, 1860
Do. Peoria and Oquawka,.....New York, 1862
1st Mortgage—
7 per ct. bonds, Corning & Blossburg do.....1871
Do. Mansfield and Sandusky.....do.....1860
10 New Albany and Salem.....do..1858-62
7 per ct. Vermont Valley.....do.....1860
6 do. East Tennessee and Georgia...do.....1880
7 do. Seaboard and Roanoke.....do.....1860
Do. Troy and Bennington.....Troy, N. Y.1861
Do. New Jersey Central.....New York, 1860-70
Do. Dauphin and Susq. Coal Co. do.....1871
Do. Brunswick Canal Co.....do.....1857
Also, second mortgage bonds of many of the above companies, and—
7 per ct. bonds Saratoga and Wash. N. York, 1862
Do. Troy and Boston.....do....1864
Do. Muscogee Railroad.....Savannah, 1862
Do. Huron and Oxford.....N. York, 1862
Also, Georgia 7 per ct. State stocks, interest payable semi-annually.....do....1872
City of Savannah 7 per cent. bonds, interest payable semi-annually.....do..1870-76
7 per ct. bonds of the Town of Huron, Erie county, Ohio.....do....1861
Do. Township of Waynsfield.....do....1862
10 per ct. City of Keokuk, Iowa, Keokuk, 1863
6 per cent, City of Memphis..Philadelphia, 1880
10 per cent. City of San Francisco, San Fran. 1870
12 " " Benicia, California, N.Y. 1855
12 " " Sacramento, do. Sacramento.
7 per cent. Atlantic Steamship Co..N. York, 1855
12 per cent. Improvement Scrip of the State of Wisconsin for improvement of Fox River.....do....1862
6 per cent. State of Illinois Liq. Bonds, issued 1849, interest paid semi-annually by J. Wardsworth.....N. Y. city, due 1865
2½ per cent. State of Indiana Bonds.....1866

Troy and Rutland railroad Stock, with guarantee of 4 per cent. dividend and one half surplus profits of this and Rutland and Wash. R. R.

Rutland and Whitehall Stock, with guarantee of 4 per ct. div'd by Saratoga and Washington R. R.

Also, Stock in the Cumberland Coal and Iron Co.
Stock of the Cambria Iron Company.
Stock in the Western Vermont R. R. Co.
Stock in the Junction R. R. Co. of Ohio.
Stock in the Mad River R. R. Co.
Stock in the Mansfield and Sandusky R.R. Co.
Stock in the Southern Bank of Kentucky.
Stock in the Mechanic's Bank of N. Y.
Stock in the East River Insurance Co.

The Cold Spring Iron Works,

INCORPORATED IN 1848.

IN the Town of Otis, County Berkshire, Massachusetts, manufactures CAR AXLES, and all kinds of WROUGHT IRON used in the manufacture of LOCOMOTIVES and CARS; also, BAR IRON of all descriptions. Particular attention is paid to the manufacture of CAR AXLES, and the Works being situated in a region of WOOD and CHARCOAL, with which their Axles are exclusively made, the Company feel confident they can furnish an article equal, if not superior, in quality and finish to any in the market. They solicit the orders of RAILROAD CORPORATIONS and CAR BUILDERS, and promise they shall be promptly attended to: and executed on terms as advantageous as can be had elsewhere.

They refer to—
John Kinsman, Esq., Superintendent Eastern Railroad, Salem, Mass.
A. T. Peirce, Esq., Car Builder, Norwich, Conn.
E. T. Osborn, Esq., Superintendent of the Mad River and Lake Erie Railroad, Sandusky City, Ohio.
W. W. Wetherell, Car Builder. " "

Address HENRY MELLUS, Agent,
Boston, Mass.
or, GEO. W. PRESCOTT, Sup't.
Otis, Mass.

November, 12, 1852. 1y

Anthracite and Charcoal Pig Iron.

800 Tons No. 1 Glenden Anthracite Pig Iron.
1000 " No. 2 " " "
1000 " Forge " " "
200 " No. 1 Stockbridge Charcoal "
100 " No. 2 " " "
500 " Forge Katahdin " "

For sale by
GEORGE W. A. WILLIAMS,
5 Liberty Square, Boston.

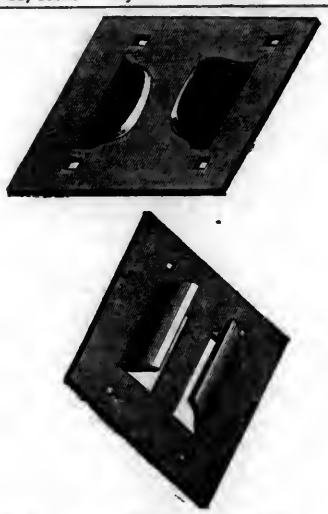
December 11, 1852. 3m

Oxford Furnace, N. J.

ESTABLISHED A. D. 1743.

THE Subscriber manufactures and keeps constantly on hand for sale, every variety and size of Railroad Wheels made from the celebrated Oxford Iron. All orders addressed to CHAS. SCRANTON, Oxford Furnace P. O., will be attended to promptly.

Sept. 11, 1852. 1y*



Patent Wrought Iron Railroad Chair.

THE undersigned are now prepared to manufacture their Patent Wrought Iron Railroad Chair, at the rate of fifteen tons per day. They are made exclusively from best Trenton Iron, which received the prize medal for strength at the World's Fair at London.

The patent is for the CHAIR itself—which is formed by raising the lip out of the plate sufficiently high to receive the rail. It is obvious that while the strain upon the lip is so slight as to remove all danger of its breaking, it becomes less the more tightly the lip is made to clasp the rail. The cheapness and durability of the chairs, and the facility with which the track can be adjusted, commend them to public favor.

SIZES AND PRICES.

A Chair 8 by 7½	inches	3-8	inch	thick,	costs	25	cents.
"	"	7-16	"	"		27	"
"	"	1-2	"	"		29	"
"	"	5-8	"	"		33	"

Other sizes are made to order at equivalent rates. Sample Chairs will be forwarded, free of charge, on application to COOPER & HEWITT,
17 Burling Slip, New York.

December 1, 1852.

LOCOMOTIVE, TENDER, & RAILROAD CAR SPRING Manufactory.

THE undersigned, manufacturers of Locomotive, Tender and Railroad Car Springs, beg leave to inform Railroad Companies, Locomotive and Car Builders, that we have enlarged our Works, and are prepared to execute,

ON THE MOST REASONABLE TERMS, any orders for LOCOMOTIVE, TENDER AND CAR SPRINGS, they may favor us with, OF THE BEST OF STEEL, all of which we have manufactured to order from SWEDE STEEL IRON.

McDANEL & HORNER,
Wilmington, Delaware.

December 1, 1852.

We respectfully call attention to testimonials in favor of our Springs from the following well-known gentlemen connected with Railroads:

Locomotive Works, Philadelphia, 1st Sept., 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

Gentlemen: In reply to your letter of yesterday, with regard to the character of the springs which you have made for the locomotives and tenders constructed by us, we have much pleasure in stating that they have given entire satisfaction, and we have found them, upon trial with those made by others, to be superior in the essential qualities of elasticity and durability, combined with lightness, the result of employing the best material only, and having it properly manufactured.

We are using them exclusively under our locomotives and tenders, and can with confidence recommend them as being superior to any we have yet met with.

Yours respectfully,
NORRIS, BROTHERS.

—

This is to certify that we have for a number of years been using steel springs manufactured by McDanel & Horner, under our locomotives, tenders, passenger and freight cars on the Philadelphia, Wilmington and Baltimore railroad, I take pleasure in saying that they have always given entire satisfaction. Their durability and elasticity are superior to any others that we have used, and can confidently recommend their make of springs to all railroad companies, and others who may want a good article. I. R. TRIMBLE,
Gen'l Sup't P. W. and B. R. R.

Wilmington, Sept. 20, 1852.

—

Superintendent's Office Central Railroad, Savannah, Ga., Oct. 15, 1852.

Messrs. McDanel & Horner,
Wilmington, Del.

I have much pleasure in certifying to the superiority of your steel springs.

This company have for upwards of two years had in constant use your locomotive, tender and railroad car springs, (the latter in large numbers), and we have found them uniformly well finished, properly tempered and durable. Our orders have always been promptly filled, and your terms have been moderate.

Very truly yours,
MACPHERSON B. MILLER,
General Superintendent.

—

A considerable number of engine and car springs were furnished the Philadelphia and Reading railroad several years since, by Mr. John McDanel, before the company made such articles in their own workshops. These springs proved invariably of excellent quality, elastic and durable, and equal to the best in use during the above period.

G. A. NICOLLS,
Engineer, etc., Philad. and Reading R. R.

Reading, Pa., Sept. 9, 1852.

—

Macon and Western Railroad, Macon, Oct. 11, 1852.

Messrs. McDanel & Horner,

Gents: This company have purchased and used car and engine springs of your manufacture. They have been tested under the same cars with springs from other approved makers, and, so far as appears to us, have proved themselves fully equal to any we have used.

Yours very respectfully,
EMERSON FOOTE, Supt.

—

Macon and Western Railroad,
Macon, Oct. 14, 1852.

Messrs. McDanel & Horner,

Dear Sirs: This company have used the springs made by your firm for several years under engine, baggage and freight cars, and have found them superior to any I have seen.

Yours respectfully,
THOS. DOUGHERTY,
Master Machinist M. and W. R. R.

—

Richmond, Va., Nov. 1, 1852.

Messrs. McDanel & Horner,

It affords me much pleasure to say, after some seven or eight years use of your steel car springs, I find them equal to any we have used, and have given entire satisfaction.

I am very respectfully yours,
THOS. SHARP,
Sup't R. F. and P. R. R.

—

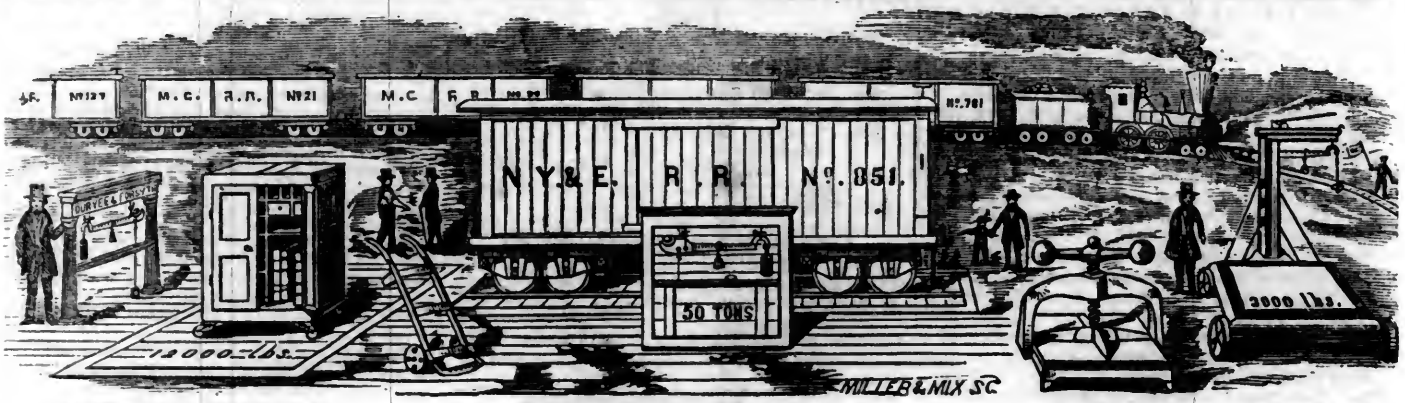
Petersburg, Va., Sept. 18, 1852.

Messrs. McDanel and Horner,

Dear Sirs: I have been for several years past using steel springs of your manufacture under a large portion of the cars that I have built for the different railroads in this vicinity, and I consider them as good in every respect as any steel springs I have ever used.

Very respectfully yours, etc.,
URIAH WILLS,
per Jas. J. Lillx.

ROCHESTER SCALE WORKS.



DEPOT SCALE, 6 TONS, AND FIRE KING SAFE. **TRACK SCALE, 100,000 LBS.** **RAILROAD MANIFEST PRESS.** **IRON SCALE, 1 1-2 TONS.**

DURYEE & FORSYTH, MANUFACTURERS, ROCHESTER, N. Y.

THE Subscribers are prepared to furnish upon order, RAILROAD SCALES of superior quality at *reduced rates*; Warehouse Trucks: Manifest Presses and Books; also, COVEAT'S FIRE KING SAFES.

It has been decided by Scientific Gentlemen, that our Scales are preferable to all others, from the fact of their being made stronger and more substantial, more material used in the construction of the Levers, which renders them much safer and more durable.

OUR MOTTO is, to excel in the articles we manufacture; *therefore the best materials are used. The best model and plans are adopted*, to make them the most desirable for the market.

All the Scales manufactured at this establishment are made under the immediate supervision of our Mr. DURYEE, who is a practical mechanic of long experience in the manufacture of weighing machinery, and can be relied upon as being as '*Durable and Accurate*' as any scales in the market; the bearing edges are made of the best *Cast Steel*, well tempered, and great care taken in their adjustment.

A large majority of the Track, Depot and Portable Scales in use by the New York and Erie Railroad Co. were furnished by us. Also, the Michigan Central Railroad is furnished exclusively with our Scales.

The facilities that we have for manufacturing with new and improved machinery, and the central position we occupy for shipping to the different markets, enables us to undersell other makers of similar scales from 10 to 15 per cent.

All orders will receive prompt attention.

DURYEE & FORSYTH.

GENERAL DEPOTS:

Wm. T. Pinkney, Jr.,	Agent,	166 Pearl st., N.Y.
Raymond, Ward & Co.,	"	Chicago, Ill.
Mumford & Hosken,	"	Lafayette, Ind.
Crawford & Reynolds,	"	Cleveland, Ohio.
Joseph E. Elder,	"	St. Louis, Mo.
Byram, Miller & Shreve,	"	Louisville, Ky.

The following Railroads have been furnished with our Scales and Wares, exclusively or nearly so:

New York and Erie,	Cleveland and Columbus,
New York and Harlem,	Michigan Central,
New York and N. Haven,	Mad River and Lake Erie,
Sandusky, Mansfield and Newark,	Paterson and Hudson R.,
Indianapolis and Bellefontaine,	Cincinnati, Hamilton and Dayton,
Syracuse and Utica,	Buffalo and Rochester,
Columbus and Xenia,	Rochester and Syracuse,
Lexington and Frankfort,	Louisville and Frankfort,
Hillsboro' and Cincinnati,	Chicago and Galena,
Greenville and Miami,	Dayton and Western,
Cayuga and Susquehanna,	Central Ohio,
Rome and Watertown,	Chemung,
Rutland and Washington,	Illinois Coal Company,
Erie and State Line,	Buffalo and State Line,
Rochester, Lockport and Niagara Falls,	Cleveland and Pittsburg,
	Michigan Southern,
	American Express Co.,

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

—

Michigan Central R. R. Office,
Detroit, May 10th, 1852.

MESSRS. DURYEE & FORSYTH,
Rochester, N. Y.,

Gentlemen: We have in use upon our road nearly one hundred of your Scales, comprising most of the sizes ordinarily in use upon railroads, many of which have been in service four or five years.

They have kept in adjustment well, retain their sensitiveness, and we regard them as strong, accurate, reliable, and in every respect satisfactory.

Respectfully yours,
J. W. BROOKS, Supt.

—

New York and Erie Railroad,
Supt's Department Gen'l Freight Office,
New York, June 21st, 1852.

To MESSRS. DURYEE & FORSYTH,
Rochester,

Gents: This company have had in use on their road for three years past about fifty of your Railroad Track, Depot and Portable Scales. It affords me much pleasure to assure you that I consider them fully equal to any scale in use on the road, in point of strength, durability, accuracy and finish.

I am very respectfully, your ob't serv't,
SAM. BROWN, Gen'l Freight Ag't.

—

The following Report was made by the Hon. Canal Commissioners of the Erie Canal Enlargement, to the Legislature of the State of New York, Feb. 3d, 1852.

WEIGH LOCK SCALE.

It is but justice to say that the new Weigh Lock at Rochester abundantly sustains the reputation claimed for it by its worthy and scientific builders.

Messrs. Duryee & Forsyth have constructed for this lock, scales of superior power, and may well challenge comparison with any similar work in or out of the State. The mode of adjustment is so easy and simple, that great certainty is secured in determining large or small weights.

Report on Duryee & Forsyth's Weigh Lock Scale, by the Committee of the State Agricultural Society.

The Committee appointed to examine the Weigh Lock Scale in the City of Rochester, manufactured by Messrs. DURYEE & FORSYTH, of said city, have performed the duty assigned them, and report that they regard it as an admirable piece of mechanism, which reflects great credit on the builders. Length of Scale, 80 feet; width, 20 ft.; height, 32 ft.; weight of scale, 75 tons; capacity of weighing 400 tons.

Considering the weight and strength of the materials used, the delicacy and accuracy of this apparatus for weighing loaded canal boats of the largest class, this scale excites universal admiration. One of the committee tested it when under the pressure of a weight of 219 tons 900 lbs., and it clearly indicated a small additional weight within five pounds.

Any description of this Scale would hardly be intelligible without drawings, which the committee have not at command. It has no equal known to the committee. They recommend that a GOLD MEDAL be awarded to DURYEE & FORSYTH, for the manufacture of an article so important to the protection of the revenue of the Erie canal, and to the accurate weighing of an incalculable amount of private property.

C. DEWEY,
DANIEL LEE.

Rochester Sept. 20th, 1851.

—

We have received the Society's FIRST PREMIUMS, DIPLOMAS AND SILVER MEDALS, annually, since 1848, for the best Scales and exhibition. We have also received the DIPLOMAS and SILVER MEDAL of the American Institue, New York, and DIPLOMA of the Mechanics' Fair in Boston. Also, the HIGHEST PREMIUMS IN MONEY and DIPLOMAS of the Provincial Fairs, Canada, and State Fairs in Ohio and Michigan.

$200,000 SEVEN PER CENT. CONVERTIBLE BONDS OF the NEW-CASTLE and RICHMOND RAILROAD.—The undersigned offer for sale TWO HUNDRED SEVEN PER CENT CONVERTIBLE BONDS for $1,000 each, of the NEW-CASTLE and RICHMOND RAILROAD COMPANY, with Interest Coupons attached, payable semi-annually at the office of the Ohio Life Insurance and Trust Company, in New York. The Bonds are payable at the same place in fifteen years and are convertible into the stock of the company within five years.

These Bonds are secured by a mortgage executed by the Company to George Carlisle, of Cincinnati, and Joseph B. Varnum of New York, Trustees of the road from Richmond in Wayne County, to New-Castle in Henry County, including the superstructure, iron rails, depots, tolls, privileges and franchises of the Company. This mortgage is the FIRST AND ONLY LIEN upon this section of the Road, which is a part of the great Trunk Railroad from Cincinnati to Chicago.

The New-Castle and Richmond Railroad extends from Richmond to Logansport, 103 miles, the whole of which is under contract, and about one thousand hands are now employed on the road.

The total amount of stock subscribed upon the whole road is $509,400. The stock applicable to the construction of the road from Richmond to New Castle is $250,900.

This railroad passes through the most fertile, populous and highly improved part of Ohio and Indiana, and it must become the great route for freight and travel between Cincinnati and Chicago and the Northwest.

The local business alone would be sufficient to make the road profitable. The counties of Indiana through which it runs produce annually more than two millions of bushels of wheat, five millions of bushels of corn, one hundred and fifty thousand hogs, and fifteen thousand cattle, a large part of which must be transported to market on this road.

The iron rails for more than fifty miles of the road have been purchased. Ten miles of the road, from Richmond to Washington, will be completed and in operation in November next, which will make a continuous railroad of about 70 miles from Cincinnati, by way of Hamilton, Eaton and Richmond.

The holders of the bonds will have for their security the obligations of the company, with subscriptions of stock to the amount of more than half a million of dollars, and a mortgage upon the road from Richmond to New Castle, with the iron rails, superstructure, tolls and franchises of the company.

CARPENTER & VERMILYE, 44 Wall-st.
CAMMANN WHITEHOUSE & Co. 56 Wall-st.

BOUND BY HM